



THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION



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Victoria F. Sheehan
Commissioner

William Cass, P.E.
Assistant Commissioner

His Excellency, Governor Christopher T. Sununu
and the Honorable Council
State House
Concord, New Hampshire 03301

Bureau of Bridge Design
November 9, 2021

REQUESTED ACTION

Authorize the Department of Transportation to enter into an agreement with the firm of Greenman-Pedersen, Inc., Portsmouth, NH, Vendor #174805, for an amount not to exceed \$244,428.98, for preliminary design for the rehabilitation of the red list bridge (Br. No. 075/113) carrying North Road over the Androscoggin River in the Town of Shelburne, effective upon Governor and Council approval, through June 30, 2024. 100% Federal Funds.

Funds to support this request are available in the following account in State FY 2022 and FY 2023, and are contingent upon the availability and continued appropriation of funds in FY 2024, with the ability to adjust encumbrances between State Fiscal Years through the Budget Office if needed and justified:

Table with 4 columns: Account Number, FY 2022, FY 2023, FY 2024. Rows include Consolidated Federal Aid and Gen Consultants Non-Benefit.

EXPLANATION

The Department requires consulting engineering, environmental, and public involvement consulting services to rehabilitate the bridge (NHDOT Br. No. 075/113) carrying North Road over the Androscoggin River in the Town of Shelburne. The five-span bridge was constructed in 1900 and rehabilitated in 1959. It consists of four steel-girder spans and one concrete arch span for a total bridge length of 180 feet. The total bridge width is 24 feet with a 20-foot wide roadway. This bridge is on the Department's Red List of structurally deficient bridges. The purpose of this agreement is to study, develop and evaluate design alternatives, prepare preliminary engineering plans suitable for a Public Information Meeting(s) and to develop a NEPA document. This project will require both Part "A" (Preliminary Design) and Part "B" (Final Design) services. This agreement is for Part "A" only. Upon completion of Part "A" services, and assuming a successful Public Hearing, if required, the Department reserves the right to either negotiate a scope and fee for Part "B", or terminate the contract. This project is included in the State's Ten-Year Transportation Improvement Plan (Shelburne 40551) with an advertising date in Fiscal Year 2026.

The consultant selection process employed by the Department for this qualifications-based contract is in accordance with RSAs 21-I:22, 21-I:22-c, 21-I:22-d, 228:4 and 228:5-a, and all applicable Federal laws and the Department's "Policies and Procedures for Consultant Contract Procurement, Management, and Administration" dated August 25, 2017. The Department's Consultant Selection Committee is a standing committee that meets regularly to administer the process and make determinations. The Committee is comprised of the Assistant Director of Project Development (Chair), the Chief Project Manager, the Administrators of the Bureaus of Highway Design, Bridge Design, Environment, and Materials and Research, and the Municipal Highways Engineer.

The consultant selection process for this qualifications-based contract was initiated by a solicitation for consultant services for Shelburne, rehabilitation of Br. No. 075/113 carrying North Road over the Androscoggin River. The assignment was listed as a "Project Soliciting for Interest" on the Department's website on September 17, 2018 asking for letters of interest from qualified firms. From the list of firms that submitted letters of interest, the Committee prepared a long and then short list of Consultants on November 29, 2018 for consideration and approval by the Assistant Commissioner. Upon receipt of that approval, three shortlisted firms were notified on December

14, 2018 through a technical "Request for Proposal" (RFP). Committee members individually rated the firms on February 14, 2019 using a written ballot to score each firm on the basis of comprehension of the assignment, clarity of the proposal, capacity to perform in a timely manner, quality and experience of the project manager and the team, previous performance, and overall suitability for the assignment. (A compilation of the completed individual rating ballots and the ranking summary form is attached.) The individual rankings were then totaled to provide an overall ranking of the three firms, and the Committee's ranking was submitted to the Assistant Commissioner for consideration and approval. Upon receipt of that approval, the short listed firms were notified of the results and the highest-ranking firm was asked to submit a fee proposal for negotiations.

The long list of sixteen (16) consultant firms that were considered for this assignment, with the three (3) short-listed firms shown in bold, is as follows:

<u>Consultant Firm</u>	<u>Office Location</u>
AECOM	Manchester, NH
Becker	Portland, ME
BETA Group	Manchester, NH
CME Associates, Inc.	Nashua, NH
DuBois & King	Bedford, NH
Gill Engineering	Needham, MA
GM2	Concord, NH
Greenman-Pederson, Inc.	Portsmouth, NH
Hardesty & Hanover	Bedford, NH
Hoyle, Tanner & Associates, Inc.	Manchester, NH
Jacobs	Manchester, NH
TEC Engineering Corp.	Hampton, NH
Thornton & Tomasetti	Boston, MA
VHB	Bedford, NH
Weston & Sampson Engineers, Inc.	Manchester, NH
WSP	Manchester, NH

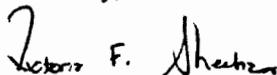
The firm of Greenman-Pedersen, Inc. was recommended for this contract. This firm has an excellent reputation and has demonstrated their capability to perform the required services. Background information on this firm is attached.

Greenman-Pedersen, Inc. has agreed to furnish the professional engineering services for an amount not to exceed \$244,428.98. This is a reasonable fee and is commensurate with the complexity of the project and the scope of the engineering and technical services to be furnished. This project funding is 80% Federal Funds with 20% State match. Turnpike toll credit is being utilized for New Hampshire's match requirement, effectively using 100% Federal Funds.

This Agreement has been approved by the Attorney General as to form and execution. The Department has verified that the necessary funds are available. Copies of the fully-executed Agreement are on file at the Secretary of State's Office and the Department of Administrative Services, and subsequent to Governor and Council approval will be on file at the Department of Transportation.

It is respectfully requested that authority be given to enter into an Agreement for consulting services as outlined above.

Sincerely,



Victoria F. Sheehan
Commissioner

Attachments

PROJECT: Shelburne 40551

DESCRIPTION: This Project includes preliminary design, public involvement process, final design, and associated environmental & cultural services for rehabilitation (anticipated to be a superstructure replacement) of the existing bridge carrying North Road over the Androscoggin River in the town of Shelburne. Constructed in 1900 and rehabilitated in 1959, this five-span, 182 foot long, four steel girder spans and one arch span bridge with a total width of 24 feet and a curb-to-curb width of 20 feet. This bridge is on the Department's Red List of deficient structures and has a target advertising date in fiscal year 2026 in the current 10 year plan. Scope of work may include: Perform an in-depth inspection of bridge, including superstructure and substructure; Design a replacement of the existing bridge deck; Design a superstructure replacement; Core and test the abutment and pier concrete; Replace bridge rail and approach rail; Design replacement of bridge bearings; Design replacement of expansion joints; Design concrete repairs to substructure; Environmental investigations to prepare and complete all appropriate environmental documentation and all necessary permitting; Roadway Design associated with the bridge rehabilitation effort; Traffic Control evaluation and design; Provide "as inspected" bridge load rating; Provide final bridge load rating, including NHDOT Bridge Rating Form 4; Public Involvement support services; Construction support services. No change in lane capacity is anticipated with this effort. Environmental efforts are needed to prepare and complete all appropriate environmental documentation including cultural resource investigations and permitting to satisfy Federal and State requirements. The Consultant will also be required to assist the Department in the public involvement process.

Services Required: BRDG, STRC, RDWY, ENV, HIST, TEST, INSP, TRAF, PINV

SUMMARY

AECOM Technical Services, Inc.	2	1	2	2	2	2	11
Greenman-Pedersen, Inc.	1	2	1	1	1	1	7
Weston & Sampson Engineers, Inc.	3	3	3	3	3	3	18

EVALUATION OF TECHNICAL PROPOSALS

Rating Considerations	WEIGHT	Scoring of Firms		
		AECOM Technical Services, Inc.	Greenman-Pedersen, Inc.	Weston & Sampson Engineers, Inc.
Comprehension of the Assignment	20%	18	20	14
Clarity of the Proposal	20%	18	16	14
Capacity to Perform in a Timely Manner	20%	18	18	18
Quality & Experience of Project Manager/Team	20%	18	18	18
Previous Performance	10%	8	9	6
Overall Suitability for the Assignment	10%	8	8	8
Total	100%	88	89	78

Ranking of Firms:
 1. GPE
 2. AECOM
 3. W+S

Rating Considerations	WEIGHT	Scoring of Firms		
		AECOM Technical Services, Inc.	Greenman-Pedersen, Inc.	Weston & Sampson Engineers, Inc.
Comprehension of the Assignment	20%	19	18	14
Clarity of the Proposal	20%	19	18	15
Capacity to Perform in a Timely Manner	20%	20	20	20
Quality & Experience of Project Manager/Team	20%	18	17	17
Previous Performance	10%	10	10	7
Overall Suitability for the Assignment	10%	9	9	7
Total	100%	95	92	80

Ranking of Firms:
 1. AECOM
 2. Greenman-Pedersen
 3. Weston & Sampson

EVALUATION OF TECHNICAL PROPOSALS (continued)

Rating Considerations	Scoring of Firms			
	WEIGHT	AECOM Technical Services, Inc.	Greenman-Pedersen, Inc.	Weston & Sampson Engineers, Inc.
Comprehension of the Assignment	20%	18	20	15
Clarity of the Proposal	20%	18	20	15
Capacity to Perform in a Timely Manner	20%	17	18	15
Quality & Experience of Project Manager/Team	20%	16	18	16
Previous Performance	10%	7	8	5
Overall Suitability for the Assignment	10%	8	9	6
Total	100%	84	93	78 72

- Ranking of Firms:
1. GPI
 2. AECOM
 3. W+S

Rating Considerations	Scoring of Firms			
	WEIGHT	AECOM Technical Services, Inc.	Greenman-Pedersen, Inc.	Weston & Sampson Engineers, Inc.
Comprehension of the Assignment	20%	20	20	10
Clarity of the Proposal	20%	18	19	10
Capacity to Perform in a Timely Manner	20%	18	18	10
Quality & Experience of Project Manager/Team	20%	19	19	10
Previous Performance	10%	9	9	5
Overall Suitability for the Assignment	10%	10	10	2
Total	100%	94	95	47

- Ranking of Firms:
1. GPI
 2. AECOM
 3. WESTON & SAMPSON

Rating Considerations	Scoring of Firms			
	WEIGHT	AECOM Technical Services, Inc.	Greenman-Pedersen, Inc.	Weston & Sampson Engineers, Inc.
Comprehension of the Assignment	20%	17	17	15
Clarity of the Proposal	20%	16	19	16
Capacity to Perform in a Timely Manner	20%	18	18	16
Quality & Experience of Project Manager/Team	20%	17	19	10
Previous Performance	10%	9	10	8
Overall Suitability for the Assignment	10%	9	9	6
Total	100%	86	92	76 71

- Ranking of Firms:
1. GPI
 2. AECOM
 3. W+S

(KTM)

Rating Considerations	Scoring of Firms			
	WEIGHT	AECOM Technical Services, Inc.	Greenman-Pedersen, Inc.	Weston & Sampson Engineers, Inc.
Comprehension of the Assignment	20%	18	19	17
Clarity of the Proposal	20%	19	19	17
Capacity to Perform in a Timely Manner	20%	18	18	17
Quality & Experience of Project Manager/Team	20%	15	15	17
Previous Performance	10%	8	9	8
Overall Suitability for the Assignment	10%	9	9	8
Total	100%	91	93	84

- Ranking of Firms:
1. GPB
 2. AECOM
 3. W+S

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- A. SPECIAL CONTRACT PROVISIONS FOR COVID-19
- B. **SCOPE OF SERVICES FOR PART A FINAL DESIGN** Prepared by Greenman-Pedersen, Inc. dated January 27, 2020

AGREEMENT EXECUTION ATTACHMENTS

- 1. CERTIFICATION WITH REGARD TO THE PERFORMANCE OF PREVIOUS CONTRACTS OR SUBCONTRACTS, ETC.
- 2. CONSULTANT DISCLOSURE STATEMENT FOR PREPARATION OF ENVIRONMENTAL EVALUATIONS
- 3. CERTIFICATION OF CONSULTANT/SUBCONSULTANT
- 4. CERTIFICATION OF STATE DEPARTMENT OF TRANSPORTATION
- 5. CERTIFICATION FOR FEDERAL-AID CONTRACTS EXCEEDING \$100,000 IN FEDERAL FUNDS
- 6. SIGNATURE PAGE
- 7. CERTIFICATION OF GOOD STANDING
- 8. CERTIFICATION OF AUTHORITY / VOTE
- 9. CERTIFICATION OF INSURANCE

SHELBURNE
40551
X-A004(430)
(PART A)

**AGREEMENT
FOR PROFESSIONAL SERVICES**

PREAMBLE

THIS AGREEMENT made this 4th day of November in the year 2021 by and between the STATE OF NEW HAMPSHIRE, hereinafter referred to as the STATE, acting by and through its COMMISSIONER OF THE DEPARTMENT OF TRANSPORTATION, hereinafter referred to as the COMMISSIONER, acting under Chapter 228 of the Revised Statutes Annotated, and Greenman-Pedersen, Inc., with principal place of business at 325 West Main Street, in the City of Babylon, State of New York, and a local branch office at 21 Daniel Street, in the City of Portsmouth, State of New Hampshire, hereinafter referred to as the CONSULTANT, witnesses that:

The Department of Transportation, State of New Hampshire, hereinafter referred to as the DEPARTMENT, proposes to rehabilitate the Red List bridge (Br. No. 175/113) carrying North Road over the Androscoggin River in the Town of Shelburne.

The DEPARTMENT requires professional engineering and environmental services for said project for the preparation of environmental documents, bridge plans and reports, and other project plans as needed to progress through the permitting and public outreach process for this project. These services are outlined in the CONSULTANT'S Scope of Services dated January 27, 2020 and Fee Proposal dated March 19, 2021. The Scope of Services is included in this AGREEMENT as Attachment B. The Fee Proposal is hereby adopted by reference and considered to be part of this AGREEMENT.

This AGREEMENT becomes effective upon approval by the Governor and Council.

ARTICLE I

ARTICLE I - DESCRIPTION OF PROFESSIONAL SERVICES TO BE RENDERED

NOW THEREFORE, in consideration of the undertakings of the parties hereinafter set forth, the DEPARTMENT hereby engages the CONSULTANT, who agrees to render services to the DEPARTMENT which shall include, but not be restricted to, the following items, in accordance with conditions and terms hereinafter set forth:

A. LOCATION AND DESCRIPTION OF PROJECT

This project involves the rehabilitation of the bridge (NHDOT Br. No. 175/113) carrying North Road over the Androscoggin River in the Town of Shelburne. The bridge was constructed in 1900 and rehabilitated in 1959. It consists of four steel girder spans and one concrete arch span for a total bridge length of 180 feet. The total bridge width is 24 feet and the curb-to-curb width is 20 feet. This bridge is currently No. 42 on the DEPARTMENT'S 2020 Red List of deficient structures and has an advertising date in FY 2026.

B. SCOPE OF WORK (GENERAL)

The purpose of this project is: 1) Part "A", to study and prepare preliminary engineering plans suitable for a Public Information Meeting(s), Design Public Hearing (if needed), and completion of NEPA documentation; and; 2) Part "B", to prepare final plans, specifications and estimates for the bridge and associated roadway improvements. This contract is for Part "A" services.

Part B is not included in this scope of work. Assuming a successful Public Hearing, the DEPARTMENT reserves the right to either negotiate a scope and fee for Part B or proceed with a new solicitation.

The project is anticipated to rehabilitate the structure to maintain 2-lanes of traffic (one in each direction), remove the structure from the Red List, and be able to carry legal loads.

Designs shall consider temporary and permanent erosion-control measures, traffic control measures, utility coordination, drainage, and treatments to minimize environmental impacts. Coordination may be required between the DEPARTMENT and the Town of Shelburne, NH. The CONSULTANT shall be prepared to support such efforts as required. Responsibilities of the CONSULTANT team shall include attendance at meetings when requested, preparation of minutes reflecting meeting commitments, and preparation of illustrative plans and exhibits for the meetings, as directed by the DEPARTMENT.

The following general tasks are included in Part "A":

- 1.) Evaluation of the existing bridge structure;
- 2.) Evaluation of bridge preservation, rehabilitation and/or replacement alternatives;
- 3.) Review and compare Traffic Control alternatives for each design alternative that are acceptable and economical for travelers;
- 4.) Consideration of construction phasing, constructability and construction access;

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- 5.) Complete an Engineering Report summarizing concepts and recommendations;
- 6.) Identify all impacted natural and cultural resources potentially affected by the proposed action, and investigate means of minimizing or mitigating the impacts;
- 7.) Prepare an environmental document for the proposed action to comply with the National Environmental Policy Act (NEPA) (including Cultural Resource investigations in accordance with Section 106 of the National Historic Preservation Act) and the identification of any permitting requirements;
- 8.) Assistance to the Department with public involvement support services, including attendance at meetings, preparation of minutes, and preparation of illustrative plans and exhibits for any meetings, as directed by the DEPARTMENT;
- 9.) Support such efforts as required in the coordination between the DEPARTMENT and the Town, including preparation of illustrative plans and exhibits for any meeting; and
- 10.) After Department approval of the preferred option, develop the roadway design for the Preferred Alternative, through line & grade, roadway template, pavement layout, traffic control plan, and conceptual surface drainage.

C. SCOPE OF WORK (SPECIFIC)

The CONSULTANT shall be responsible for developing engineered plans through an iterative process of design and review involving the DEPARTMENT, STATE, and Federal environmental resource agencies, regional planning commissions, the local community, and the public.

The CONSULTANT shall be responsible for the preparation of complete designs, including all plans, specifications for work not included in the current specifications of the DEPARTMENT, computations, estimates, and documents for required submissions to the DEPARTMENT, the Federal Highway Administration, and/or any other STATE or Federal agency, that may be required.

The engineering design shall take into consideration all factors affecting the cost of the construction, such as site-specific foundation considerations; earthwork quantities; erosion and sedimentation control; traffic control; water-quality-treatment issues; construction phasing and complexity; utilities affected; right-of-way needs; environmental issues and commitments; cost; construction materials; etc.

The CONSULTANT shall, when requested by the DEPARTMENT, render such assistance as required, including the preparation and explanation of sketches and plans for, or at, any meetings or conferences held by the DEPARTMENT. Meeting notes and conference memos shall be the responsibility of the CONSULTANT.

Designs shall conform to the current standards, specifications, policies and guidelines enumerated in the Federal Aid Policy Guide, Subchapter G, Part 625, or to 23 Code of Federal Regulations, Part 625 and

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the DEPARTMENT'S Design Manuals, and most current Standard Plans for Road Construction, except as approved.

All plotting, drafting, and calculations performed by the CONSULTANT shall be independently checked by members of the CONSULTANT'S staff other than those who performed the original work. The work of each stage submission (including quantity estimates) shall have been appropriately checked. The PS&E submission and final paper plans shall have had complete final and "three-way" checking.

The CONSULTANT shall verify all computations and design calculations. The CONSULTANT shall furnish one (1) permanent, legible copy and one electronic format (PDF) copy of the design calculations, suitably bound, and when directed, all study plans, work plans, alternate studies, and estimates indexed in accordance with DEPARTMENT procedures.

The CONSULTANT'S Licensed Professional Engineer stamp for the State of New Hampshire shall appear on the construction plans, reports, and any other documents that will be submitted to the DEPARTMENT. Stamps shall be those of the professional engineers who prepared them or under whose direct supervisory control they were prepared.

The work shall be as described in the CONSULTANT's Scope of Services, Attachment B, and requires the development and refinement of engineering plans and technical documentation in accordance with the following criteria and involving the following work efforts:

1. Preliminary Engineering

Preliminary Engineering for Preliminary Design shall consist of all efforts needed to collect data, prepare base plans, develop a range of reasonable alternatives, evaluate alternatives and investigate their consequences to allow the Department to select a proposed action, in accordance with the policy and procedures of the DEPARTMENT and the provisions of this AGREEMENT. This includes the Tasks under Preliminary Engineering include the following:

- a. Existing Conditions Data Collection and Field Reviews
- b. Bridge Inspection
- c. Topographic Survey and Base Plan Preparation

The development of base plans drafted by the CONSULTANT using updated ground survey, if applicable.

- d. Right-of-Way – Not included
- e. Traffic Data Collection and Analysis – Traffic data will be collected by the DEPARTMENT.
- f. Crash Data Collection and Analysis – Not included
- g. Development of Engineering Criteria

The CONSULTANT shall follow appropriate engineering criteria based on the latest AASHTO Policy on Geometric Design of Highways and Streets, AASHTO LRFD Bridge Design

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Specifications, NHDOT Highway Design Manual, and NHDOT Bridge Design Manual, as amended. Engineering shall take into account the functional classification of the roadways being addressed; volumes of traffic; methods of construction; erosion control; traffic control; cost; right-of-way needs and impacts to private property; and environmental constraints and the need to avoid or minimize impacts to environmental resources.

h. Alternatives Development and Evaluation

Each alternative will be developed to an equal level of detail and presented in a plan package.

i. Roadway Plans

j. Structural Design Calculations and Plans

k. Traffic Control Plans and Construction Phasing

l. Drainage Design and Stormwater Treatment – Not included

m. Aesthetics and Landscaping Plan – Not included.

n. Lighting – Not included.

o. ITS Features – Not included.

p. Constructability Reviews – The project will be reviewed for constructability with information being provided to support the design, environmental document and/or permit applications, and public outreach.

q. Cost Estimates

The Cost Estimates shall be prepared with each submission. Construction Engineering and environmental mitigation costs shall also be included. Estimates shall be submitted with a narrative explaining all major cost and/or quantity changes.

r. Technical Reports

The CONSULTANT shall prepare Technical Reports to address engineering issues that, to varying degrees, will be incorporated into the Draft Environmental document and Engineering Report. Technical support and writing shall be required to address the engineering aspects of the study as required to supplement and complete environmental documentation.

The CONSULTANT shall prepare an Engineering Report to document the existing conditions within the corridor, and to summarize all pertinent issues, recommendation, design decisions and engineering details relative to the proposed action. Any rejected alternatives should also be documented to explain the justification for their rejection and for inclusion in the Environmental document.

s. Design Narrative

The CONSULTANT shall prepare a brief narrative, to be submitted with each submission, explaining any changes to design criteria and controls, the design issues addressed in that

ARTICLE I

submission, the design rationale, specific items and issues of interest, and documenting any major changes. In addition, the narrative shall include anticipated or outstanding issues and the CONSULTANT'S recommendations.

t. **Project Team Meetings**

Project team meetings will be held periodically over the course of project. These informal meetings will take place when needed to discuss project issues that may include resource constraints, impacts of alternatives, and cost issues. These meetings will involve CONSULTANT and DEPARTMENT staff, but may also include representatives of the municipality, local Planning Commission, state or federal agencies, or others as appropriate.

2. **Public Participation**

The CONSULTANT shall provide a public participation program involving public and private stakeholders and the general public in the decision-making process to aid in the determination of the proposed action and to provide updates throughout the design process. The CONSULTANT shall prepare presentation graphics, handouts and support displays for public participation and posting to the DEPARTMENT's project webpage, be available to make presentations and draft meeting minutes. Specific types of meetings include:

- a. Public Advisory Committee Meetings – Not included in this contract
- b. Public Officials Meetings
- c. Public Informational Meetings
- d. Stakeholder Meetings – Not included in this contract
- e. Public Hearing – Not included in this contract

3. **Environmental Documentation and Permitting**

The NEPA Documentation task covers the documentation needed to comply with the National Environmental Policy Act (NEPA) (including Cultural Resource investigations in accordance with Section 106 of the National Historic Preservation Act). The CONSULTANT shall develop a formal Purpose and Need statement, identify and document impacts of the alternatives to all relevant natural and cultural resources, and identify any permitted requirements.

Resources and impacts to be identified and evaluated include, but are not limited to:

- a. **Water-Based Resources**: including Groundwater, Surface Waters, Floodplains, Wetlands and wetland mitigation, and Stream Crossings.
- b. Stormwater treatment requirements
- c. **Land-Based Resources**: Soils, Active Farmlands, Parks, Recreation areas, Public and Conserved Lands, Section 4(f) Resources and Section 6(f) Resources.
- d. **Land Use**

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- e. Wildlife: Wildlife and Habitat, Fisheries, and Threatened and Endangered Species.
- f. Cultural Resources (Historic and Archaeological) The CONSULTANT shall conduct all necessary phases of Section 106 public outreach.
- g. Visual Resources
- h. Social and Economic Resources
 - i. Noise
 - j. Air Quality
 - k. Invasive Species
 - l. Hazardous Materials or Contaminated Properties
 - m. Limited Reuse Soils
 - n. Environmental Justice (provided by the DEPARTMENT)
 - o. Construction Impacts
 - p. Section 4(f)
 - q. Section 6 (f)

4. Geotechnical

The preparation of geotechnical recommendations and analysis are not anticipated as part of this contract. Recommendations and analysis prepared by others will be furnished for use in designing the foundations, retaining walls, and other appurtenances as required.

5. Utilities

The utility coordination for this project will be performed by the DEPARTMENT. The CONSULTANT shall incorporate utility information into the contract plans.

D. MATERIAL FURNISHED BY THE DEPARTMENT OF TRANSPORTATION

The DEPARTMENT will furnish the following data to the CONSULTANT:

- 1. Electronic files in US Customary units of the following information in accordance with the DEPARTMENT'S CAD/D Procedures and Requirements for incorporation into the plans by the CONSULTANT:
 - a. Any available electronic topographical mapping within the project area shall be provided along with any pertinent electronic supporting information (survey field notes, ASCII point file, SDR data files, etc.).
 - b. Any additional topographic surveys of adjacent parcels, mitigation sites, wetland boundaries, or other pertinent items deemed necessary by the project team will be undertaken and processed by the DEPARTMENT. Incorporation of this information into the topographic baseplan shall be the responsibility of the CONSULTANT.

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- c. Electronic drawings in MicroStation format of roadway typical cross-sections and other detail sheets shall be provided, when available from the DEPARTMENT'S CAD/D library, upon request by the CONSULTANT, in accordance with the current DEPARTMENT CAD/D Procedures and Requirements.
 - d. Electronic drawings in MicroStation format of the existing utilities, if provided to the DEPARTMENT by the utility. The CONSULTANT shall be prepared to provide an electronic copy of the preliminary base plans to the DEPARTMENT for submission to and use by the utilities. The CONSULTANT shall be responsible for the incorporation of this utility information (either in paper or electronic format) into the plans, in accordance with the current DEPARTMENT CAD/D Procedures and Requirements.
2. Prints of the following information:
 - a. Any information outlined in Article I.D.1.a thru d. above (electronic information) both existing and proposed, when available, for verification by the CONSULTANT.
 - b. Any additional information not available electronically (e.g., utilities) for the CONSULTANT to incorporate into the plans in accordance with the DEPARTMENT'S CAD/D Procedures and Requirements.
 3. Right-of-Way data: Any additional information collected or prepared by the DEPARTMENT that could supplement the Right-of-Way Boundary (e.g., existing right-of-way layout per record plans, property lines to a tax map level, parcel owners, title abstracting, etc.) will be provided by the DEPARTMENT in MicroStation format for incorporation into the plans by the CONSULTANT.
 4. Plans of prior highway and bridge construction projects within the project limits, as available.
 5. Latest structural inspection and underwater inspection of the bridge.
 6. The location of all existing and proposed utilities through direct contact with the various utility companies.
 7. Geotechnical investigations and recommendations, if available.
 8. Electronic files of the Environmental resource data collected in previous studies, if applicable
 9. Crash data and Safety Analysis within the study area, if applicable.
 10. Ground survey, as needed, within the study area to supplement the digital surface model. The DEPARTMENT will process the raw survey data and incorporate into the digital surface model.
 11. The DEPARTMENT's latest high-resolution color aerial photography (which is geo referenced and ortho-rectified).
 12. Conceptual design and layout of highway lighting (temporary and permanent) if available and deemed necessary.
 13. Conceptual design and layout of ITS features, if deemed necessary.

ARTICLE I

E. WORK SCHEDULE AND PROGRESS REPORTS

The CONSULTANT shall begin performance of the services designated in the Contract promptly upon receipt from the DEPARTMENT of a Notice to Proceed and the material to be furnished as herein described. The CONSULTANT shall complete these services without delay unless unable to do so for causes not under the CONSULTANT's control.

The CONSULTANT's sequence of operation and performance of the work under the terms of this AGREEMENT shall be varied at the direction of the DEPARTMENT in order to give priority in critical areas so that schedules and other STATE commitments, either present or future, can be met.

The CONSULTANT shall report progress to the DEPARTMENT in conjunction with DEPARTMENT'S Standardized Invoicing process. Invoices shall be submitted for each month that there has been more than \$10,000 in cumulative billable work since the last invoice, and at least quarterly. For months with no progress or less than \$10,000 cumulative work since the last invoice, a status report briefly describing the reasons for little or no progress shall be submitted.

F. SUBMISSION OF REPORTS, PLANS, AND DOCUMENTS

The submissions shall be as necessary in accordance with Attachment B. Each submission shall be supplemented with such electronic copies of MicroStation drawings, illustrations, and descriptive matter as are necessary to facilitate a comprehensive understanding and review of proposed concepts and designs.

The CONSULTANT will be expected to support their design proposals and any issues resulting from review by the DEPARTMENT or in the public participation phase (including agency coordination), with alternative studies and reasonably itemized cost comparisons for alternate concepts.

The CONSULTANT, with each submission, shall submit a transmittal or memorandum describing the "design issues" addressed in that submission. In addition, the transmittal/memorandum shall include anticipated or outstanding issues and the CONSULTANT'S recommendations to resolve these issues. All issues shall be noted as to whether the CONSULTANT feels that the issue is within the scope of work described in Article I. Meetings between the CONSULTANT and the DEPARTMENT shall be held prior to submissions to discuss design issues and recommendations.

Electronic Transfer of Data: The DEPARTMENT requires the following to ensure compatibility with software used by the DEPARTMENT and to ensure the efficient and timely exchange of computer files between the DEPARTMENT and the CONSULTANT.

All files submitted must be fully compatible with the formats listed in this document without any conversion or editing by the DEPARTMENT. Any files requiring conversion and/or editing by the DEPARTMENT will not be accepted. All files shall be virus free. All files shall use the DEPARTMENT'S file naming convention.

ARTICLE I

Computer Aided Design/Drafting (CAD/D) files: All CAD/D files shall be in accordance with the Deliverable Requirements described in the DEPARTMENT'S CAD/D Procedures and Requirements in effect at the time this AGREEMENT was executed, or any later version. All plan drawings, including size of sheets, lettering, symbols, and scale of said drawings, shall conform to the requirements and standards of the DEPARTMENT. All files submitted must be fully compatible with the current version of MicroStation being used by the DEPARTMENT. (The DEPARTMENT'S CAD/D Procedures and Requirements document can be found on the CAD/D website by following the "Downloads" link at www.nh.gov/dot/cadd/.)

Word Processing, Spreadsheet, and Database Files: For each Phase, all relevant files shall be provided in a format fully compatible, as appropriate, with the following:

Word Processing: Microsoft Word 2010 or NHDOT compatible version
Spreadsheets: Microsoft Excel 2010 or NHDOT compatible version
Databases: Microsoft Access 2003 or NHDOT compatible version

These specifications will be updated as necessary to reflect changes in DEPARTMENT software such as adding new software or updating to new versions of existing software. In such instances, the CONSULTANT will be promptly notified.

Computer File Exchange Media: Electronic files shall be exchanged between the DEPARTMENT and the CONSULTANT using the following media as appropriate for Windows Operating Systems:

FTP: Files posted to the DEPARTMENT'S FTP site can be actual size or compressed. Contact the Project Manager for instructions for accessing the FTP site.

Compact Disc (CD): Files on CD(s) should be actual size, not compressed.

DVD: Files on DVD(s) should be actual size, not compressed.

Email: Files 20 MB or smaller may be transferred via Email. If compressed, the files should be self-extracting and encrypted based on content.

Copies: The CONSULTANT shall provide hard (paper) and electronic copies of the deliverables for each Phase of Work. For all deliverables, provide electronic copies in two electronic versions; an electronic version in the original electronic file format (i.e., MicroStation (*.dgn), Microsoft Word (*.docx), Microsoft Excel (*.xlsx), etc.) and an electronic version in Adobe Acrobat (*.pdf) file format.

Website Information:

- a. Website Content: All external NHDOT websites created for this project shall meet the ADA Section 508 requirements as stated in the NH DoIT Website Standards. Those standards are outlined in <https://www.nh.gov/doit/vendor/documents/nh-website-standards.pdf>.
- b. Website Documents: All documents posted to a website created for this project, or that are submitted to be posted to a NHDOT website, shall meet ADA Section 508 accessibility requirements. A

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checklist for document compliance is provided in <https://www.section508.gov/content/build/create-accessible-documents> (go to second link down under "Checklists").

Upon completion of the AGREEMENT, the CONSULTANT shall turn over all documentation.

Bridge Design Submissions: The plan submissions for bridge structures shall follow, in general, the NHDOT Bridge Design Manual and the "Instructions for Consulting Engineers Concerning Routine Procedures on Bridge Design Projects" formats prepared by the DEPARTMENT.

G. DATE OF COMPLETION

In accordance with the Governor and Council Resolution authorizing this AGREEMENT, the date of completion for the Part A professional services rendered under this AGREEMENT is June 30, 2024.

ARTICLE II

ARTICLE II - COST PLUS FIXED FEE COMPENSATION OF CONSULTANT

A. GENERAL FEE

In consideration of the terms and obligations of this AGREEMENT, the STATE, through the DEPARTMENT, hereby agrees to pay and the CONSULTANT agrees to accept as full compensation for all services rendered to the satisfaction of the DEPARTMENT under this AGREEMENT, an amount equal to the sum of the following costs:

- 1) Actual salaries* approved by the DEPARTMENT paid to technical and other employees by the CONSULTANT, including salaries to principals, for the time such employees are directly utilized on work necessary to fulfill the terms of this AGREEMENT.

* In accordance with DEPARTMENT policy, the maximum direct-labor rate allowed for all positions under this AGREEMENT, including subconsultants, shall be \$60.00 per hour unless a waiver to the salary cap has been specifically approved for specialty services. A waived rate shall remain fixed at that rate for the life of the AGREEMENT unless a subsequent waiver is requested and approved.

An overtime premium of one and one half times the direct labor rate for non-exempt employees working beyond the standard 40 hours per workweek may be allowed for special circumstances when approved by the DEPARTMENT in writing in advance. The overhead portion of non-exempt employees' salary rates shall not be adjusted. Engineers are not eligible for overtime premium rates.

Direct salary costs are estimated at: \$55,404.41

- 2) Overhead costs applicable to the direct salary costs. The audited indirect cost rate, as submitted to and approved by the DEPARTMENT, will be applied to the direct salary costs. The CONSULTANT'S audited indirect cost rate for fiscal year ended December 31, 2019, which expires June 30, 2021, 153.75%, shall be used for invoicing for the life of the AGREEMENT.

Overhead costs are estimated at: \$85,184.28

- 3) A fixed fee for profit and non-reimbursed costs (10% of 1+2).

The fixed fee is: \$14,058.87

- 4) Reimbursement for direct expenses, including, but not limited to, subconsultants with a subcontract value of less than \$200,000, printing, reproductions and travel not included in normal overhead expenses. The

ARTICLE II

reimbursable costs for mileage and for per diem (lodging and meals) shall be that allowed by the CONSULTANT'S established policy but shall not exceed that allowed in the Federal Acquisition Regulations (Subpart 31.205-46) and in the Federal Travel Regulation. Mileage and per diem costs shall be subject to approval by the DEPARTMENT. Subconsultants with a subcontract value of less than \$200,000 shall be invoiced as direct expenses and do not require individual invoices, unless the subcontract is more than 25% of the contract total.

Direct expenses are estimated at: \$18,500.00

5) Reimbursement for actual cost of subconsultants is estimated as follows:

McFarland Johnson	<u>\$37,104.42</u>
Preservation Company	<u>\$16,845.00</u>
IAC, LLC.	<u>\$17,332.00</u>

AGREEMENT NOT-TO-EXCEED TOTAL \$244,428.98

The amount payable under categories 1), 2), 4), and 5) may be reallocated within the not-to-exceed total upon mutual agreement of the DEPARTMENT and the CONSULTANT. Reallocations shall be properly documented for Final Audit purposes, but do not require a formal amendment.

The total amount to be paid under this AGREEMENT shall not exceed \$244,428.98, the sum of the amounts shown in Article II, Section A (which amount is based on the CONSULTANT'S fee and manhour estimates of March 19, 2021, except by agreement of all parties made after supplemental negotiations and documented by a formal amendment to the AGREEMENT. Should circumstances beyond the control of the CONSULTANT require extension of the time of completion more than one (1) year, the general fee may be renegotiated and documented by a formal amendment to the AGREEMENT; however, the fixed fee (b) shall not change for reasons of work duration alone. The fixed fee (b) shall only change when there has been a significant increase or decrease in the scope of work outlined in this AGREEMENT.

B. LIMITATION OF COSTS

1. Costs incurred against this AGREEMENT shall not exceed the total amount specified in Article II, Section A unless otherwise authorized. The CONSULTANT shall give the DEPARTMENT a ninety (90)-day written notice when it appears that this limit will be exceeded.
2. It is expected that the total cost to the STATE shall be the not-to-exceed amount specified in Article II, Section A, and the CONSULTANT agrees to use best efforts to perform the work specified in the AGREEMENT and all obligations under this contract within this not-to-exceed amount.

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3. The STATE shall not be obligated to reimburse the CONSULTANT for costs incurred in excess of the not-to-exceed amount specified in Article II, Section A.
4. Changes to the scope of work shall not be considered an authorization to the CONSULTANT to exceed the not-to-exceed amount specified in Article II, Section A.

C. PAYMENTS

Monthly payments on account of services rendered under this AGREEMENT may be made upon submission of invoices by the CONSULTANT to the DEPARTMENT. The CONSULTANT shall follow the DEPARTMENT'S Standardized Invoicing format. The fixed fee shall be invoiced during the billing period based upon the overall percent complete calculated within the approved progress report found in the DEPARTMENT'S Standardized Invoicing. Invoices shall be submitted for each month that there has been more than \$10,000 in cumulative billable work since the last invoice, and at least quarterly.

Actual salaries paid and the indirect cost rate shown in Article II, Section A, shall be used until such time as true costs of salary burden and overhead are fixed by Final Audit. At that time, payments shall be adjusted to agree with the indirect cost rates as determined by Final Audit for the period in which the work was performed, as approved by the DEPARTMENT.

D. ANNUAL INDIRECT COST RATE SUBMISSIONS

The CONSULTANT and all subconsultants with a subcontract value of \$200,000 or greater shall submit their audited indirect cost rate and related documents annually for the life of this AGREEMENT as follows:

To comply with the Federal Acquisition Requisitions (FAR), the CONSULTANT'S Indirect Cost Rate Audit must meet the following requirements:

- Be conducted by an independent Certified Public Accountant (CPA), a Federal government agency, or another state transportation agency.
- Be conducted in accordance with Generally Accepted Government Auditing Standards (GAGAS) issued by the U.S. Government Accountability Office (GAO) and with the cost principles and procedures set forth in Part 31 of the FAR.
- Follow the guidance of the most recent American Association of State Highway Transportation Officials Uniform Audit and Accounting Guide for Audits of Architectural and Engineering Consulting Firms (AASHTO Audit Guide).

In addition to the Indirect Cost Rate Audit, CONSULTANTS shall submit the following documentation:

- AASHTO Internal Control Questionnaire (ICQ) for Consulting Engineers form with the required attachments.

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- Certification of Final Indirect Costs as required pursuant to 23 CFR 172.11 and FHWA Order 4470.1A.
- Complete copy of the CONSULTANT'S annual audited financial statements.
- Analysis of reasonableness of executive compensation as outlined in the AASHTO Audit Guide.
- Cognizant letter, if available.
- A listing of all contracts, with dollar amounts, the CONSULTANT has currently with the DEPARTMENT as a prime consultant or subconsultant.

Annual indirect cost rate submissions are due within 6 months of the CONSULTANT'S fiscal year end and shall be submitted to the DEPARTMENT'S Internal Audit Office electronically to DOT-InternalAudit@dot.nh.gov or in writing.

E. RECORDS, REPORTS, AND FINAL AUDIT

The CONSULTANT shall maintain adequate cost records for all work performed under this AGREEMENT. All records and other evidence pertaining to cost incurred shall be made available at all reasonable times during the AGREEMENT period and for three (3) years from the date of final expenditure report for examination by the STATE, Federal Highway Administration, or other authorized representatives of the Federal Government, and copies thereof shall be furnished if requested. Applicable cost principles are contained in the Federal Acquisition Regulations (FAR) in Title 48 of the Code of Federal Regulations (Subpart 31.2 and Subpart 31.105).

The DEPARTMENT shall have the right, at the time of Final Audit, to review all items charged on this project. If, in the opinion of the DEPARTMENT, such payment is unreasonable, the CONSULTANT shall be required to justify such payment or payments before they will be approved as direct or indirect costs.

All costs as described in Article II Section A.1 through A.5 are to be determined by actual records kept during the term of the AGREEMENT, which are subject to Final Audit by the STATE and Federal Governments. The final payment, and all partial payments made, may be adjusted to conform to this Final Audit. In no case will any adjustments exceed the not-to-exceed amount specified in Article II, Section A. All Subconsultant costs may also be subject to Final Audit by the STATE and Federal Governments.

ARTICLE III

ARTICLE III - GENERAL PROVISIONS

A. HEARINGS, ETC.

The DEPARTMENT will make all arrangements for and hold all necessary hearings in connection with the project.

B. CONTRACT PROPOSALS

After the CONSULTANT has furnished to the DEPARTMENT contract drawings, special provisions, specifications, and estimate of quantities by items, the DEPARTMENT will prepare the documents for receipt of proposals from construction contractors and for execution of a construction contract or contracts.

ARTICLE IV

ARTICLE IV - STANDARD PROVISIONS

A. STANDARD SPECIFICATIONS

The CONSULTANT agrees to follow the provisions of the Design Manuals, Standard Specifications for Road and Bridge Construction, and Standard Plans for Road and Bridge Construction of the DEPARTMENT; A Policy on Geometric Design of Highways and Streets and LRFD Bridge Design Specifications of the American Association of State Highway and Transportation Officials (AASHTO), and amendments thereto, and/or other professional codes or standards applicable to the services to be performed under this AGREEMENT. When a publication (including interim publications) is specified, it refers to the most recent date of issue in effect at the time of execution of this AGREEMENT.

B. REVIEW BY STATE AND FHWA - CONFERENCES - INSPECTIONS

It is mutually agreed that all portions of the work covered by this AGREEMENT shall be subject to the inspection by duly-authorized representatives of the STATE and Federal Highway Administration, United States Department of Transportation, at such time or times as the STATE or Federal Highway Administration deems appropriate.

The location of the office where the work will be available for inspection by STATE and Federal Highway Administration representatives is 6 Bedford Farms Drive, Suite 111, Bedford, NH.

It is further mutually agreed that any party, including the duly-authorized representatives of the Federal Highway Administration, may request and obtain conferences, visits to the site, and inspection of the work at any reasonable time.

C. EXTENT OF CONTRACT

1. Contingent Nature of AGREEMENT

Notwithstanding anything in this AGREEMENT to the contrary, all obligations of the STATE, including, without limitation, the continuance of payments, are contingent upon the availability and continued appropriation of funds, and in no event shall the STATE be liable for any payments in excess of such available appropriated funds. In the event of a reduction or termination of those funds, the STATE shall have the right to terminate this AGREEMENT.

2. Termination

The DEPARTMENT shall have the right at any time, and for any cause, to terminate the work required of the CONSULTANT by this AGREEMENT by written notice of such termination provided to the CONSULTANT by the DEPARTMENT, and, in the event of such a termination of this AGREEMENT without fault on the part of the CONSULTANT, the CONSULTANT shall be entitled to compensation for all work theretofore satisfactorily performed, pursuant to this AGREEMENT, such compensation to be fixed, insofar as possible, based upon the work

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performed prior to termination. If no contract or contracts for construction of the project contemplated by this AGREEMENT is (are) entered into within two (2) years after satisfactory completion of the services outlined in Article I, all of the services contemplated by this AGREEMENT shall be deemed to have been completed.

It shall be a breach of this AGREEMENT if the CONSULTANT shall fail to render timely the services required under this AGREEMENT, in accordance with sound professional principles and practices, to the reasonable satisfaction of the DEPARTMENT, or shall be in such financial condition as to be unable to pay its just debts as they accrue, or shall make an assignment for the benefit of creditors, or shall be involved in any proceeding, voluntary or involuntary, resulting in the appointment of a receiver or trustee over its affairs, or shall become dissolved for any cause. In the event of the happening of any one or more of the foregoing contingencies, or upon the substantial breach of any other provisions of this AGREEMENT by the CONSULTANT, its officers, agents, employees, and subconsultants, the DEPARTMENT shall have the absolute right and option to terminate this AGREEMENT forthwith, and, in addition, may have and maintain any legal or equitable remedy against the CONSULTANT for its loss and damages resulting from such breach or breaches of this AGREEMENT; provided, however, that as to all plans, drawings, tracings, estimates, specifications, reports, proposals, sketches, diagrams, and calculations, together with all material and data theretofore furnished to the DEPARTMENT by the CONSULTANT, of a satisfactory nature in accordance with this AGREEMENT, which plans, drawings, tracings, etc., are of use to the DEPARTMENT, the CONSULTANT shall be entitled to a credit, based on the contract rate for the work so performed in a satisfactory manner and of use and benefit to the DEPARTMENT.

D. REVISIONS TO REPORTS, PLANS OR DOCUMENTS

The CONSULTANT shall perform such additional work as may be necessary to correct errors in the work required under the AGREEMENT caused by errors and omissions by the CONSULTANT without undue delays and without additional cost to the DEPARTMENT.

Furthermore, prior to final approval of plans, specifications, estimates, reports, or documents by the DEPARTMENT, the CONSULTANT shall make such revisions of them as directed by the DEPARTMENT, without additional compensation therefor, except as hereinafter provided:

1. If, after its written approval thereof, the DEPARTMENT shall require changes to the plans or documents that revise engineering or other factors specifically approved, thereby necessitating revisions of the contract plans or documents, or,
2. When applicable, if during the term of this AGREEMENT, a revision of the alignment is ordered by the DEPARTMENT to the extent that the revised alignment will lie completely or

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partially outside the limit of the survey data plotted by the CONSULTANT (this does not apply to those adjustments and refinements to the alignments anticipated under the scope of work), or,

3. If, after approval by the DEPARTMENT of the final contract plans or documents, the CONSULTANT shall be ordered in writing by the DEPARTMENT to make revisions, or to perform services other than those necessary to adapt said plans, reports, or documents to conditions observed during field inspections and encountered during construction; the CONSULTANT shall be entitled to compensation therefor in accordance with Article II, Section A, such compensation to be in addition to the fee specified in Article II, Section A, for its original work on the plans, reports or documents.

E. ADDITIONAL SERVICES

If, during the term of this AGREEMENT, additional professional services are required due to a revision in the limits of the project, or it becomes necessary to perform services not anticipated during negotiation, the DEPARTMENT may, in writing, order the CONSULTANT to perform such services, and the CONSULTANT shall be paid a fee in accordance with the provisions of Article II, Section A.

If, during the term of this AGREEMENT, additional professional services are performed by the CONSULTANT due to the fact that data furnished by the DEPARTMENT are not usable or applicable, the STATE will, upon written approval by the DEPARTMENT, reimburse the CONSULTANT for such additional design services in accordance with the provisions of Article II, Section A.

If additional services are performed by the CONSULTANT through its own acts, which are not usable or applicable to this project, the cost of such additional services shall not be reimbursable.

F. OWNERSHIP OF PLANS

All data, plans, drawings, tracings, estimates, specifications, proposals, sketches, diagrams, calculations, reports, or other documents collected, prepared, or undertaken either manually or electronically by the CONSULTANT under the provisions of this AGREEMENT, immediately shall become the property of the DEPARTMENT, and, when completed, shall bear the CONSULTANT'S endorsement. The CONSULTANT shall surrender to the DEPARTMENT, upon demand at any time, or submit to its inspection, any data, plan, drawing, tracing, estimate, specification, proposal, sketch, diagram, calculation, report, or document which shall have been collected, prepared, or undertaken by the CONSULTANT pursuant to this AGREEMENT, or shall have been hitherto furnished to the CONSULTANT by the DEPARTMENT. The CONSULTANT shall have the right, with the written approval of the DEPARTMENT, to use any of the data prepared by it and hitherto delivered to the DEPARTMENT at any later stage of the project contemplated by this AGREEMENT.

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G. SUBLETTING

The CONSULTANT shall not sublet, assign or transfer any part of the CONSULTANT'S services or obligations under this AGREEMENT without the prior approval and written consent of the DEPARTMENT.

All subcontracts shall be in writing and those exceeding \$10,000 shall contain all provisions of this AGREEMENT, including "Certification of CONSULTANT/Subconsultant". A copy of each subcontract shall be submitted for the DEPARTMENT'S files.

For subconsultants working on design, hazardous materials, geotechnical services, etc., the minimum limits of their professional liability (errors and omissions) insurance coverage shall be not less than \$2,000,000 in the aggregate, with a deductible of not more than \$75,000. For subconsultant contracts with less risk, e.g., wetland evaluations, materials inspection and testing, structural steel fabrication inspection, underwater bridge inspection, research, bridge deck condition surveys, land surveying, mapping, noise studies, air-quality studies, etc., the minimum limits of their professional liability (errors and omissions) insurance coverage shall be not less than \$1,500,000 in the aggregate, with a deductible of not more than \$50,000. For subconsultant contracts with no risk, e.g., archaeology, cultural resources, data gathering, traffic counting etc., professional liability insurance shall not be required. Subconsultants completing field exploration for geotechnical, hazardous materials/environmental, and subsurface exploration shall also have pollution liability insurance coverage not less than \$2,000,000 in the aggregate, with a deductible of not more than \$75,000. If coverage is claims made, the period to report claims shall extend for not less than three years from the date of substantial completion of the construction contract.

H. GENERAL COMPLIANCE WITH LAWS, ETC.

The CONSULTANT shall comply with all Federal, STATE, and local laws and ordinances applicable to any of the work involved in this AGREEMENT and shall conform to the requirements and standards of STATE, municipal, railroad, and utility agencies whose facilities and services may be affected by the construction of this project. The services shall be performed so as to cause minimum interruption to said facilities and services.

I. BROKERAGE

The CONSULTANT warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTANT, to solicit or secure this Contract, and that it has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the CONSULTANT, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this Contract. For breach or violation of this warranty, the STATE shall have the right to annul this Contract without liability, or,

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at its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

J. CONTRACTUAL RELATIONS

1. Independent Contractor

The CONSULTANT agrees that its relation to the STATE is as an independent contractor and not as an agent or employee of the STATE.

2. Claims and Indemnification

a. Non-Professional Liability Indemnification

The CONSULTANT agrees to defend, indemnify and hold harmless the STATE and all of its officers, agents, and employees from and against any and all claims, liabilities, or suits arising from (or which may be claimed to arise from) any (i) acts or omissions of the CONSULTANT or its subconsultants in the performance of this AGREEMENT allegedly resulting in property damage or bodily injury, and/or, (ii) misconduct or wrongdoing of the CONSULTANT or its subconsultants in the performance of this AGREEMENT.

b. Professional Liability Indemnification

The CONSULTANT agrees to indemnify and hold harmless the STATE and all of its officers, agents, and employees from and against any and all claims, liabilities, or suits arising from (or which may be claimed to arise from) any negligent acts or omissions of the CONSULTANT or its subconsultants in the performance of professional services covered by this AGREEMENT.

c. These covenants shall survive the termination of the AGREEMENT. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the STATE, which immunity is hereby reserved by the STATE.

3. Insurance

a. Required Coverage

The CONSULTANT shall, at its sole expense, obtain and maintain in force the following insurance:

1. Commercial or comprehensive general liability insurance, including contractual coverage, for all claims of bodily injury, death, or property damage, in policy amounts of not less than \$250,000 per occurrence and \$2,000,000 in the aggregate (STATE to be named as an additional insured); and
2. Comprehensive automobile liability insurance covering all motor vehicles, including owned, hired, borrowed, and non-owned vehicles, for all claims of bodily injury, death,

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or property damage, in policy amounts of not less than \$500,000 combined single limit; and

3. Professional liability (errors and omissions) insurance coverage of not less than \$2,000,000 in the aggregate. If coverage is claims made, the period to report claims shall extend for not less than three years from the date of substantial completion of the construction contract. No retention (deductible) shall be more than \$75,000; and
4. workers' compensation and employer's liability insurance as required by law.

b. Proof of Insurance

The policies described in paragraph (a) of this section and Section G shall be in the standard form employed in the STATE, issued by underwriters licensed or approved by the Department of Insurance of the STATE. Each policy shall contain a clause prohibiting cancellation or modifications of the policy earlier than 30 days, or 10 days in cases of non-payment of premium, after written notice thereof has been received by the STATE. The CONSULTANT shall provide to the STATE a certificate of insurance evidencing the required coverages, retention (deductible), and cancellation clause prior to submittal of the AGREEMENT to Governor and Council for approval and shall have a continuing duty to provide new certificates of insurance as the policies are amended or renewed.

4. No Third-Party Rights

It is not intended by any of the provisions of the AGREEMENT to make the public, or any member thereof, a third-party beneficiary of the AGREEMENT, or to authorize anyone not a party to this AGREEMENT to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of this Contract. The duties, obligations, and responsibilities of the parties to this AGREEMENT with respect to third parties shall remain as imposed by law. No portion of this AGREEMENT shall be understood to be a waiver of the STATE'S sovereign immunity.

5. Construction of AGREEMENT

This AGREEMENT is executed in a number of counterparts, each of which is an original and constitutes the entire AGREEMENT between the parties. This AGREEMENT shall be construed according to the laws of the STATE.

K. AGREEMENT MODIFICATION

The assignment of the CONSULTANT, generally established by the scope of work in this AGREEMENT, shall not be modified in any way without prior approval of the Governor and Council.

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L. EXTENSION OF COMPLETION DATE(S)

If, during the course of the work, the CONSULTANT anticipates that one or more of the completion dates specified in this AGREEMENT cannot be met, it shall be the CONSULTANT'S responsibility to notify the DEPARTMENT in writing at least ninety (90) days prior to the completion date(s) in question. The CONSULTANT shall state the reasons that a completion date(s) cannot be met and request a revised date(s) for consideration by the DEPARTMENT.

M. TITLE VI (NONDISCRIMINATION OF FEDERALLY-ASSISTED PROGRAMS)

COMPLIANCE

During the performance of this AGREEMENT, the CONSULTANT, for itself, its assignees and successors in interest agrees as follows:

- (1) **Compliance with Regulations:** The CONSULTANT shall comply with Title VI of the Civil Rights Act of 1964 regulations relative to nondiscrimination in federally-assisted programs of the DEPARTMENT, such regulations entitled Title 49 Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the REGULATIONS), and which are herein incorporated by reference and made a part of this AGREEMENT.
- (2) **Nondiscrimination:** The CONSULTANT, with regard to the work performed by it during the AGREEMENT, shall not discriminate on the grounds of race, color, religion, age, sex, handicap, sexual orientation, or national origin in the selection and retention of subconsultants, including procurements of materials and leases of equipment specific to this project. The CONSULTANT shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the REGULATIONS, including employment practices when the AGREEMENT covers a program set forth in Appendix B of the REGULATIONS.
- (3) **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations either by competitive bidding or negotiation made by the CONSULTANT for work to be performed under a subcontract, including procurements of materials or leases of equipment specific to the project, each potential subconsultant or supplier shall be notified by the CONSULTANT of the CONSULTANT'S obligations under this AGREEMENT and the REGULATIONS relative to nondiscrimination on the grounds of race, color, religion, age, sex, handicap, sexual orientation, or national origin.
- (4) **Information and Reports:** The CONSULTANT shall provide all information and reports required by the REGULATIONS or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the DEPARTMENT or the Federal Highway Administration to be pertinent to ascertain compliance with such REGULATIONS, orders and instructions. Where any

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information required of a CONSULTANT is in the exclusive possession of another who fails or refuses to furnish this information, the CONSULTANT shall so certify to the DEPARTMENT or the Federal Highway Administration, as appropriate, and shall set forth what efforts it has made to obtain the information.

- (5) Sanctions for Noncompliance: In the event of the CONSULTANT'S noncompliance with nondiscrimination provisions of this AGREEMENT, the DEPARTMENT shall impose sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
- (a) withholding of payments to the CONSULTANT under the AGREEMENT until the CONSULTANT complies; and/or
 - (b) cancellation, termination, or suspension of the AGREEMENT, in whole or in part.
- (6) The CONSULTANT shall take such action with respect to any subcontract or procurement as the DEPARTMENT or the Federal Highway Administration may direct as a means of enforcing such provisions, including sanctions for noncompliance, provided, however, that in the event a CONSULTANT becomes involved in, or is threatened with, litigation with a subconsultant or supplier as a result of such direction, the CONSULTANT may request the DEPARTMENT to enter into such litigation to protect the interests of the STATE, and, in addition, the CONSULTANT may request the United States to enter into such litigation to protect the interests of the United States.
- (7) 23 CFR 710.405(b) and Executive Order 11246 entitled "Equal Employment Opportunity," as amended by Executive Order 11375 and as supplemented in Department of Labor REGULATIONS (41 CFR Part 60), shall be applicable to this AGREEMENT and any subagreements hereunder.
- (8) Incorporation of Provisions: The CONSULTANT shall include the provisions of paragraphs (1) through (7) in every subcontract, including procurements of materials and leases of equipment specific to the project, unless exempt by the REGULATIONS, or directives issued pursuant thereto.

In accordance with EXECUTIVE ORDER 11246, the DEPARTMENT has the authority and responsibility to notify the Office of Federal Contract Compliance Programs of the United States Department of Labor if they become aware of any possible violations of Executive Order 11246 and 41 CFR Part 60. The Office of Federal Contract Compliance Programs is solely responsible for determining compliance with Executive Order 11246 and 41 CFR Part 60 and the CONSULTANT should contact them regarding related compliance issues.

ARTICLE IV

N. DISADVANTAGED BUSINESS ENTERPRISE POLICY REQUIREMENTS

1. **Policy.** It is the policy of the United States Department of Transportation (USDOT) to ensure nondiscriminatory opportunity for Disadvantaged Business Enterprises (DBE's), as defined in 49 Code of Federal Regulations (CFR) Part 26, to participate in the performance of agreements and any subagreements financed in whole or in part with Federal funds. Consequently, the DBE requirements of 49 CFR Part 26 apply to this AGREEMENT.
2. **Disadvantaged Business Enterprise (DBE) Obligation.** The STATE and its CONSULTANTS agree to ensure nondiscriminatory opportunity for disadvantaged business enterprises, as defined in 49 CFR Part 26, to participate in the performance of agreements and any subagreements financed in whole or in part with Federal funds. In this regard, the STATE and its CONSULTANTS shall take all necessary and reasonable steps in accordance with 49 CFR Part 26 to ensure that disadvantaged business enterprises have the opportunity to compete for and perform work specified in the agreements. The STATE and its CONSULTANTS shall not discriminate on the basis of race, color, religion, age, sex, handicap, sexual orientation, or national origin in the award and performance of agreements financed in whole or in part with Federal funds.
3. **Sanctions for Non-Compliance.** The CONSULTANT is hereby advised that failure of the CONSULTANT, or any Subconsultant performing work under this AGREEMENT, to carry out the requirements set forth in paragraphs 1 and 2 above, shall constitute a breach of agreement and, after the notification of the United States Department of Transportation, may result in termination of this AGREEMENT by the STATE or such remedy as the STATE deems appropriate.

O. DOCUMENTATION

The CONSULTANT shall document the results of the work to the satisfaction of the DEPARTMENT and the Federal Highway Administration. This shall include preparation of progress reports, plans, specifications, and estimates and similar evidences of attainment of objectives called for in this AGREEMENT.

P. CLEAN AIR AND WATER ACTS

If the amount of the AGREEMENT or subcontract thereunder exceeds \$100,000, the CONSULTANT or subconsultant shall comply with applicable standards, orders, or requirements issued under Section 306 of the Federal Clean Air Act (43 U.S.C. 1857(h)), Section 508 of the Federal Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR Part 15), which prohibit the use under non-exempt Federal contracts, grants, or loans of facilities included on the EPA List of Violating Facilities. The CONSULTANT or

ARTICLE IV

subconsultant shall report violations to the FHWA and to the U. S. Environmental Protection Agency Assistant Administrator for Enforcement (EN-329).

ATTACHMENT A

Special Contract Provisions for COVID-19

The CONSULTANT acknowledges and agrees that this AGREEMENT was entered into following the coronavirus disease 2019 (COVID-19) outbreak. The CONSULTANT agrees that to the extent the COVID-19 outbreak, or any federal, state or local orders, regulations, rules, restrictions, or emergency declarations relating to COVID-19, disrupt, delay, or otherwise impact the Scope of Services to be performed by the CONSULTANT as set forth in Article I of this AGREEMENT, any such disruption, delay, or other impact was foreseeable at the time this AGREEMENT was entered into by the Parties and does not excuse the Contractor's performance under this AGREEMENT. The CONSULTANT agrees that any such impact, including any disruption to supply chains, workforce reductions, delays or interruptions in performance, or other effects on businesses, are not the fault of the STATE and the CONSULTANT may not seek damages against the STATE for any such impacts.

If the CONSULTANT experiences or anticipates any such COVID-19-related impacts to this AGREEMENT, the CONSULTANT shall immediately notify the DEPARTMENT'S Contract Manager. In the event of any COVID-19-related impact or anticipated impact to this AGREEMENT, the Contract Manager shall have the right to temporarily modify, substitute, or decrease the services, without the approval of the Governor and Executive Council, upon giving written notice to the CONSULTANT. The STATE'S right to modify includes, but is not limited to the right to modify service priorities, including how and when services are delivered, and expenditure requirements under this AGREEMENT so as to achieve compliance therewith, provided such modifications are within the Scope of Services and cost limitations of this AGREEMENT. By exercising any of the rights described within this subsection, the STATE does not waive any of its right under this AGREEMENT.

In the event that a modification by the STATE under this subsection would result in a permanent reduction of services that cannot be supplemented during the remaining term of this AGREEMENT with either replacement or substituted services of substantially similar value, the Parties shall submit a formal amendment to this AGREEMENT with a commensurate reduction in the price. This amendment will require the approval of the Governor and Executive Council. In order to facilitate reconciliation of services performed under this AGREEMENT, the CONSULTANT shall submit weekly reports detailing the following for any service not fully performed pursuant to the terms of the AGREEMENT:

- 1) The services required to be performed under the terms of this AGREEMENT as written;
- 2) The services actually performed;
- 3) Any replacement or substituted services performed with reference to the associated unperformed contracted services.

SHELBURNE, North Road over Androscoggin River

Scope of Work

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General

This project entails the maintenance and preservation of the Bridge. No. 175/113 that carries North Road over the Androscoggin River in Shelburne. The primary goal of this project is to maximize the service life and minimize the life cycle costs of the bridge, so it may efficiently remain in service in the transportation network.

It is anticipated that there will be two (2) design development meetings with Department staff during the duration of the project. All meetings are assumed to be at the New Hampshire Department of Transportations (NHDOT) Concord office. GPI will prepare associated meeting minutes for each. The meetings are assumed to be one (1) during Preliminary Phase and one (1) during Post Meeting Phase.

This Part A Scope of Work is divided into four (4) Phases to define the overall work requirement, as listed below.

1.0 Study Phase – This phase will focus on data gathering, site investigations, development of alternatives to a 10% design level, which will allow the NHDOT to choose what level of rehabilitation the bridge requires.

Deliverables within this phase will include:

- Bridge Condition Report
- Bridge Materials Testing Plan for Department review
- Bridge Material Testing Results Report
- Draft Engineering Report
- Graphics to support Public Officials/Public Informational Meeting

2.0 Preliminary Phase – This phase will focus on developing the preferred alternative from Study Phase to a 30% design level.

Deliverables within this phase will include:

- 30% Plans (bridge, highway, traffic, traffic control, wetlands and detour plan, etc.)
- Graphics to support a second public informational meeting

3.0 Post Meeting Phase – This phase advances the design after the public meeting to PS&E Plans (80%)

Deliverables within this phase will include:

- PS&E Plans (bridge, highway, traffic, traffic control, wetlands, etc.) and associated specifications, quantities, and estimate

4.0 Environmental Phase – This phase is the environmental effort required throughout all phases of the project. This work is to be performed primarily by McFarland-Johnson, Inc. with GPI oversight.

The scope and fee for 100% design and construction support services will be addressed in Part B of the project.

There are no anticipated Right of Way efforts, hydraulic study efforts, or geotechnical report requirements for this project.

1.0 Study Phase

1.1 Evaluate Available Plans and Data

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Information received from the Department will be reviewed to aid in the full understanding of the project issues.

It is anticipated that the Department will provide the information outlined in Article I.D of the Agreement.

Survey – It is anticipated that electronic field survey of the site will be provided by the Department. However, the consultant will supplement the survey with information from environmental resource flagging operations. The survey provided by the Department will include in-water information sufficient for hydraulic and scour evaluations of the bridge. The Department shall obtain the existing locations of utilities through direct contact with various utility companies. The Department will research the DOT and Town layouts in order to find monuments during the field survey. The Department will send the research (along with property deeds/plans) to the consultant, so that we can review the legacy alignment and right-of-way information on the plans.

Should it become evident that additional field survey is required, GPI will coordinate with the Department as to the best means to obtain. The available existing/record bridge and highway plans will also be utilized to develop the necessary contract documents.

Traffic Data – It will be important to have current traffic count information so that the anticipated detour operations can be conveyed to stakeholders. With this in mind, the following traffic data is requested from the Department:

- 48 HR Weekday ATR along North Road at the bridge over the Androscoggin River (include vehicle classification)
- 48 HR Weekday ATR along Meadow Road at the bridge over the Androscoggin River
- Peak Hour (7-9am, 4-6pm) Weekday TMC at the intersection of Route 2 at North Road
- Peak Hour (7-9am, 4-6pm) Weekday TMC at the intersection of Route 2 at Meadow Road

1.2 Review the Site

On-Site reconnaissance to review completed survey (furnished by the Department) to identify features shown or not shown on the plans. Changes in field conditions will be documented and photographed.

A one-day site visit is anticipated by 3 engineers.

1.3 Bridge Inspection

A bridge inspection will be completed to identify anticipated repair locations. Access to the underside of the superstructure and substructure elements is limited. A low-level inspection is anticipated that consists of hands-on close-up inspection of the deck topside, abutments and walls where accessible. The remaining inspection shall be visual from ground level, where accessible, to determine the condition of the deck underside, beams, diaphragms, abutments, piers and arch. A Bridge Conditions Report will be submitted after the inspection.

Hands-on inspection and sounding of the underside of the deck, abutments, piers and arch may not be possible, however, potential closer inspection methods will be investigated to determine the safest and most

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effective access. Means of access considered shall be determining the lowest river water level that could allow inspectors wearing waders ability to get under the bridge, an under-bridge inspection unit that has a loading imposed by the vehicle that will not exceed capacity of the bridge, or the use of an Unmanned Aerial Vehicle.

Coordination with the powerplant owners may be required to gain access to the arch for both inspection and the materials testing program.

A materials testing program will be required that includes concrete cores, chloride testing, and petrographic analysis for the concrete elements and coupon testing for the structural steel members. The analysis will be developed and submitted to the Department for approval. Cores and material samples will be obtained and tested by a laboratory. The samples will be obtained on a separate visit from the bridge inspection. A Bridge Material Testing Results Report will be submitted after the testing program.

An asbestos testing program is not anticipated.

1.4 Develop Conceptual Rehabilitation

Based on the materials testing results, collected field data and bridge inspection, GPI will develop a list of rehabilitation needs for the bridge that will define the scope of the work required. Provided with the rehabilitation needed will be a construction cost estimate, benefit of the rehabilitation activity, anticipated life span of the repair, and the recommendation to the department.

Anticipated areas of focus are:

- Determine the extent of deterioration of the arch and its composition (i.e., either concrete or stone masonry with concrete façade)
- Investigate the chloride content of the deck to determine if it needs replacement
- Testing of the steel beams to determine its strength and metal composition, if the deck is determined to be sufficient for continued service
- Substructure repairs, as required (not anticipated but if necessary, would be patching and not strength restoration – thus no formal substructure capacity calculations)

The bridge rail is severely substandard; it is anticipated that it will need to be replaced. The type of replacement rail to be recommended is dependent upon the extent of rehabilitation of the superstructure.

The development of rehabilitation will take into account the roadway's functional classification, traffic volume, traffic control, method of construction as well as environmental constraints and the need to avoid/minimize environmental impacts. ROW needs and impacts to private property are not anticipated.

1.5 Develop Detour Plans

Due to the narrow width of the roadway, the bridge will be closed during construction.

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GPI will develop vehicular and Appalachian Trail (AT) pedestrian detour plans for the determined rehabilitation defined under Task 1.4. The pedestrian detour will involve coordination between GPI, the Department and the Appalachian Trail Conservancy and the Appalachian Mountain Club.

1.6 *Develop Conceptual Construction Cost Estimate*

Conceptual costs will be developed for the anticipated rehabilitation needs. The estimate will be based on major construction items and construction contingencies. The result will be an order of magnitude estimate for rehabilitation evaluation.

1.7 *Develop and Submit Draft Engineering Report*

The Draft Engineering Report will be developed and submitted for Department review. The following will be included:

1. Summarized results of the bridge conditions report, materials testing report, inspection photos, rehabilitation study results, rehabilitation options, detours and recommendations.
2. The report will include information on the environmental impacts.
3. The draft report will be submitted prior to the Public Informational meeting.
4. Review comments and public input will be incorporated into the final report.

1.8 *Public Officials Meeting/Public Informational Meeting*

After the Department review of the Engineering Report, a Public Officials/Public Informational Meeting will be held in Shelburne to solicit local input on the project. The goal of the meeting will be to understand the communities' concerns about the project and talk in preliminary terms about that which was developed during the study phase. Presentation materials will be limited to site photographs and conceptual roll plans and possible detours. A PowerPoint presentation is anticipated. In addition, GPI will be responsible for preparing the Front Office Project Information Sheet (FOPIS) for the Directors Briefing prior to the Public Officials/Informational Meeting, take notes at the public meeting, and prepare a Conference Report after the Public Meeting.

2.0 Preliminary Phase (30% Preliminary Plans)

2.1 *Develop 30% Plans for selected rehabilitation*

Preliminary Roadway Plans will include plan work required for the proposed improvements, which include rehabilitation of the bridge, roadway approach and approach rail replacements. No roadway drainage modifications are anticipated. No proposed permanent pedestrian accommodations are anticipated as part of this scope.

The following drawings are anticipated for this submission.

- Cover Sheet,

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- General Notes,
- Standard Symbols,
- Typical Sections
- Construction Details (1 sheet)
- General Plan (1 sheet at 1" = 20' scale)
- Profile
- Cross Sections (2 sheets)

2.2 Develop 30% Detour Plans

It will be necessary to close the bridge during construction. Therefore, Preliminary Detour Plans will be developed. It is anticipated that the vehicular and AT pedestrian detours will be entirely different and will be shown on separate drawings. The Route 2 EB vehicular detour is estimated at approximately 6 miles and will extend east along Route 2 for approximately 2 miles before turning left onto Meadow Road for approximately one mile and then onto North Road westward for another 3 miles. The Route 2 WB vehicular traffic would consist of the same detour route although the traffic would be signed to take an advanced right turn movement onto Meadow Road. The detour for the WB traffic would result in an added 1.3 miles to the driver's trip. There are two options for the AT pedestrian detour, which are not mutually exclusive. Option 1 is anticipated to include a 5-mile detour along Route 2 into the Town of Gorham to an existing pedestrian bridge on the Gorham B&M Railroad Bridge, where the pedestrians will cross the Androscoggin River and then onto a spur of the Appalachian Trail. They will then travel back east mostly along Hogan Road to reconnect with the Appalachian Trail. Option 2 would consist of a canoe ferry just west of the adjacent dam. This would be manned by a professional outfitter for a pre-determined portion of the day. These detour plans will be shown at the appropriate scale to cover the entire detour areas. Close coordination with the Department and the Appalachian Trail Conservancy and the Appalachian Mountain Club will be required.

2.3 Develop 30% Bridge Plans

Upon receiving approval of the Engineering Report, the bridge rehabilitation plans will be further advanced to the 30% level in accordance with the requirements of the Bridge Design Manual in consideration of the following:

1. Arch rehabilitation or replacement
2. Bridge superstructure replacement (deck, beams, if necessary)
3. Bridge rail replacement
4. Substructure repairs, if necessary

2.4 Develop 30% Quantities and Engineer's Estimate

A 30% Engineer's Estimate will be developed utilizing quantities calculated from the 30% design and current NHDOT unit costs. The estimate will include contingency items based on discussion with the Department to arrive at a preliminary construction estimate.

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2.5 Public Officials/Public Informational Meeting

GPI will support the Department at the second Public Officials/Public Informational meeting. The Public Officials/Public Informational meeting will be held in Shelburne and the Department will organize the meeting. GPI will develop graphics consistent with the Highway Design Manual plan requirements and the Study Phase. In addition, GPI will be responsible for preparing the Front Office Project Information Sheet (FOPIS) for the Directors Briefing prior to the Public Officials/Informational Meeting, take notes at the public meeting, and prepare a Conference Report after the Public Meeting.

3.0 Post Public Meeting Phase (80% Plans)

3.1 Develop 80% Plans and Sections

Post-Public Meeting Plans will be developed by addressing the public comments and advancing the design to 80%. Plans will consist of the following:

- Cover Sheet
- General Notes
- Standard Symbols
- Typical Sections
- Quantity Summary Sheets (2 sheets)
- Construction Details (1 sheet)
- General Plan (1 sheet at 1" = 20' scale)
- Sign Text Layout
- Profile
- Cross Sections (2 sheets)

3.2 Develop 80% Detour Plans

Final Detour Plans will be developed by addressing the Meeting comments and advancing the design to 80%. It is anticipated that three plan sheets will be required. Coordination with the Appalachian Mountain Club and the Appalachian Trail Conservancy will be required to address appropriate detour signage and canoe ferry arrangements if this option is to move forward.

3.3 Develop 80% Bridge Plans

Final Design Bridge Plans will be developed by addressing the Meeting comments and advancing the design to 80%. Plans will be cut sheets.

3.4 Develop 80% Quantities and Engineer's Estimate

The 80% Engineer's Estimate will be updated to reflect the quantities calculated from the 80% Plans and current NHDOT unit costs. The estimate will include contingency items based on discussion with the Department to arrive at an 80% Construction Estimate.

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3.5 *Develop 80% Specifications*

Specifications will be developed for the 80% submission. It is anticipated that some specifications will be provided by the Department and revised by GPI to be project specific. A special provision related to Appalachian Trail detour will need to be created to address special detour requirements and specifics of the temporary canoe ferry system if selected.

4.0 Environmental Phase

McFarland-Johnson, Inc. (MJ) will assist GPI to identify and document environmental and cultural impacts associated with the project. See attached MJ scope.

Scope Assumptions

The following additional scope assumptions are provided to clarify the work proposed under this assignment.

1. It is assumed that the project will not require permanent impacts to wetlands or surface waters.
2. The proposed project will entail only rehabilitation of an existing bridge located in a developed area. Impacts beyond the existing footprint of the roadway will be minimal and the footprint of the roadway will not change.
3. Attendance at two NHDOT Natural (2) and three Cultural (3) Resource Agency Coordination Meetings as well as one Floodplain impacts meeting are included in this scope.
4. Sufficient information will be provided to MJ to describe the proposed project in the environmental document.
5. No construction staging is anticipated. All work to be completed under a detour.
6. It is assumed that the project will not require any Right-of-Way plans.
7. It is assumed that any necessary traffic data will be provided by the Department.
8. It assumed that the project qualifies as a NHDES Alteration of Terrain (AOT) Permit-by-Rule activity.
9. No drainage improvements outside of the bridge footprint are anticipated and thus not included in this scope.

Direct Expenses

Travel

Included is travel for two (2) meetings in Shelburne, two (2) meetings in Concord and two (2) site visits.

Printing

Estimated costs for required project printing are included in this cost.

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Material Sampling/Testing Company

Direct expense to subcontract a company to take samples of the bridge concrete and structural steel beams. Through testing, the level of concrete deterioration and steel strength will be determined to establish the scope of repairs or replacements necessary to properly rehabilitate the bridge.

McFarland-Johnson, Inc. (Environmental Tasks)

Direct expense cost for MJ to complete the environmental tasks are included for this project. A separate work hour breakdown is provided for back up.

Preservation Company

Direct expense cost for PC to complete any historical requirements are included for this project. A separate work hour breakdown is provided for back up.

Independent Archaeological Consulting, LLC

Direct expense cost for IAC to complete any archaeological requirements are included for this project. A separate work hour breakdown is provided for back up.

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ENVIRONMENTAL REVIEW AND DOCUMENTATION

June 14, 2019

This project will address Bridge 175/113, which carries North Road over the Androscoggin River. Work is expected to entail superstructure replacement and the rehabilitation or replacement of the concrete arch span.

The deliverable for this task is an environmental document that will serve as a basis for the project to move forward to the final design and environmental permitting phase. It is anticipated that impacts will remain within the existing State right-of-way and that a NHDOT Public Hearing will not be required.

The prime consultant on this project is Greenman-Pedersen, Inc. (GPI).

Task 1 – Resource Identification and Impact Assessment

This task involves identifying resources within the project study area based on available sources of information, resource databases, stakeholder coordination, and field review. GPI and NHDOT staff will be kept informed of resources that are identified. This task also includes assessing the impacts of the proposed work on environmental resources.

The study area will extend 50 feet beyond the existing right-of-way along 500 feet of the southern approach and 250 feet of the northern approach. Environmental resources and related considerations to be identified and assessed include:

1.1 Wetlands and Surface Waters: Wetlands, the Androscoggin River, and tributaries will be delineated within the study area, including ordinary high water and top of bank. Descriptive information, Cowardin classification, site sketches, data forms, and photographs of each jurisdictional area will be collected. Features will be delineated with flags labeled with an alpha-numeric sequence and each flag will be located with a GPS unit with sub-meter accuracy.

The delineation will be completed in accordance with the US Army Corps of Engineers Wetlands Delineation Manual (1987) and Regional Supplement to the Corps Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0, January 2012). Reference standards will include Field Indicators of Hydric Soils in the United States (Version 7.0, 2010), the National List of Plant Species that Occur in Wetlands (on-line), and Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979). Wetland functions and values will be assessed using the methodology described in the Army Corps of Engineers *Highway Methodology Workbook Supplement*. A sufficient number of upland and wetland data points will be completed to confirm wetland boundaries and wetland types. Wetland Determination Data Plot Forms will be prepared at each data point.

The bridge is a Tier 3 stream crossing. MJ will use the USGS Stream Stats webtool to download the drainage area for the crossing and calculate the estimated bankfull width using the regional hydraulic geometry curves. Since the project will entail rehabilitation not replacement, a stream assessment will not be completed in the field.

The Androscoggin River is subject to the Shoreland Water Quality Protection Act. MJ will delineate the reference line and protected shoreland buffer zones based on a review of available survey and field reconnaissance.

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GPS data will be processed using the differential correction tool in Pathfinder Office and checked with aerial imagery in ArcMap. Corrected data will be provided to GPI in a file format compatible with CAD/D and ArcMap GIS in accordance with NHDOT standards.

Preliminary impacts to wetlands and surface waters will be calculated by GPI. MJ will assess preliminary impacts and identify issues of concern and appropriate permitting needs. Permanent impacts to the bank and channel of the Androscoggin River are not anticipated; therefore, mitigation coordination is not included in this scope.

1.2 Threatened/Endangered Species, Wildlife, and Fisheries Habitat: The NH Natural Heritage Bureau DataCheck Tool and the USFWS Information for Planning and Conservation (IPaC) tool will be utilized to identify known or potential occurrences of threatened or endangered species or important habitat in the vicinity of the project. MJ will also seek input from the NH Fish & Game fisheries biologist on potential fish and wildlife concerns. Fish and wildlife habitat will be identified based on the state Wildlife Action Plan and field observations, to be conducted during the wetland delineation.

MJ will coordinate with the NH Natural Heritage Bureau and NH Fish & Game at the NHDOT Natural Resource Agency Coordination Meetings (included in Task 2) and via email regarding records of rare plants or exemplary natural communities identified in the NHB report. It is assumed that no plant surveys will be required.

The Androscoggin River is listed as Essential Fish Habitat for all life stages of Atlantic salmon. GPI will provide MJ with preliminary project plans and preliminary impacts below Ordinary High Water. MJ will prepare an EFH Assessment that will consist of a project description, description of impacts to EFH, location map, photographs, and EFH Assessment Worksheet. MJ will provide this assessment to NHDOT for coordination with the National Marine Fisheries Service and will assist NHDOT in responding to questions.

The project is located within the range of the northern long-eared bat, currently listed as a federally threatened species. It is anticipated that the project will be eligible for review under the *Federal Highway Administration and Federal Railroad Administration Range-Wide Biological Assessment for Transportation Projects for Indiana Bat and Northern Long-Eared Bat Programmatic Consultation*. An acoustic survey is not included in this scope. MJ will review the crossing structure to assess its use or suitability for bat roosting habitat (to be completed with the wetland delineation). The Bridge Assessment Form will be completed. The results of the bridge assessment are valid for two years.

MJ will complete the regulatory review determination key in the USFWS IPaC webtool and upload the Bridge Assessment Form for NHDOT's use in consultation with USFWS. NHDOT will provide MJ with the USFWS concurrence letter for inclusion in the NEPA document.

The project is also within the potential range of Canada lynx. Since impacts to suitable habitat for lynx are not expected, it is assumed that the project will result in no effect to this species and that this determination will be included in the IPaC determination key for northern long-eared bat to satisfy Section 7 consultation requirements.

1.3 Invasive Species: MJ will identify species and approximate limits of invasive plants within the study area. This will be completed with the wetland delineation. Approximate limits of invasive plant populations will be provided to NHDOT in a file format compatible with CAD/D and ArcMap GIS in

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accordance with NHDOT standards. Invasive plant occurrences will be identified as polygon features. Potential disturbance to invasive plants during construction will be assessed and appropriate environmental commitments will be determined.

1.4 Cultural Resources: MJ will prepare a Request for Project Review (RPR) to initiate Section 106 consultation. Preparing the RPR will entail compiling the information provided by Preservation Company; writing a detailed (one to two page) description of the project and potential impacts; and preparing two GIS figures showing the area of potential effect. MJ will submit an administrative draft of the RPR to GPI for review. After incorporating comments, MJ will submit the draft RPR to NHDOT for review and will revise the document for submittal to NHDHR. Two hardcopies of the final RPR will be submitted to NHDOT for transmittal to NHDHR.

Preservation Company (PC) and Independent Archeological Associates (IAC) will contract directly with GPI to provide any necessary historic resource surveys. MJ will provide general oversight of PC's and IAC's schedule and work products and will review reports and findings prior to submittal to GPI and NHDOT.

For the purposes of this scope, it is assumed that the project will alter or replace character defining features of the bridge, resulting in an Adverse Effect determination. MJ will prepare the draft Section 106 Effect Memo for NHDOT's use. MJ will coordinate with Consulting Parties, the local historical society, and NHDOT to identify potential mitigation for the adverse effect and will review proposed mitigation at a Cultural Resource Agency Coordination Meeting (included in Task 2). NHDOT will prepare the Memorandum of Agreement.

MJ will prepare documentation required by 36 CFR 800 for notifying the Advisory Council on Historic Preservation (ACHP) of potential adverse effects following the ACHP Electronic Section 106 Documentation Submittal System (e106) guidelines. This will entail the following:

- Completion of the e106 Documentation Submittal Form;
- Compilation of Section 106 consultation correspondence and meeting minutes;
- Project location map; and
- Photographs.

This information will be submitted to NHDOT in PDF format. NHDOT will coordinate with FHWA on submittal of the documentation to the ACHP.

1.5 Hazardous Materials: This task will consist of the following: 1) review of the NHDES OneStop Database for listed remediation or hazardous materials sites within 1,000' of the project; 2) review of the NHDES OneStop Database for listed landfill sites within 4,000' of the project; 2) review of the NHDES PFAS sampling map for water quality exceedances within 4,000' of the project; and 3) development of a map and narrative summary of the gathered information. MJ will provide the map and summary to the NHDOT Environmental Manager and respond to questions.

GPI will determine if the project will generate excess Limited Reuse Soils (LRS). MJ will coordinate with the NHDOT Contamination Program Manager and provide appropriate language on LRS in the NEPA document.

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MJ will review as-built bridge plans and coordinate with NHDOT to determine if asbestos containing materials are likely to be present on the bridge. Appropriate environmental commitments will be included in the NEPA document.

No detailed analysis, Initial Site Assessments, or population of the RASCAL database will be conducted as part of this scope.

1.6 Water Quality: Aquifers, wellhead protection areas, and drinking water source protection areas will be identified based on existing information from NHDES. The NHDES draft 2018 303(d) list will be reviewed to determine if there are existing surface water impairments within one mile of the project. The potential for the project to affect water quality, including pollutants causing impairments, will be addressed in general terms. It is assumed that permanent stormwater treatment will not be required. Permitting and compliance requirements pertaining to Alteration of Terrain, Construction General Permit, and construction water quality will be identified and the appropriate environmental commitments will be included in the NEPA document.

1.7 Floodplains: Existing FEMA mapping shows that the project is located in a FEMA-mapped 100-year floodplain and regulatory floodway. Floodplain boundaries, as mapped by FEMA, will be shown on project plans. Impacts to the floodplain and floodway will be quantified by GPI.

MJ will schedule and attend one meeting with the NH Floodplain Coordinator, Army Corps of Engineers, NHDOT, and GPI to assist in obtaining concurrence on the proposed alternative. It is anticipated that one MJ staff member will attend this meeting, and that MJ will provide meeting minutes. It is assumed that GPI will provide the technical information for the discussion.

1.8 Public and Conserved Lands: Public and conserved lands will be identified and mapped based on existing information from NH GRANIT. MJ will coordinate with the LCHIP, CLS, and LWCF programs to determine if these groups hold an interest in any properties adjacent to the project. It is assumed that the project will not impact public or protected lands.

The bridge is part of the Appalachian Trail (AT) system. As a National Scenic Trail, the AT is a recreational resource subject to protection under Section 4(f). However, it is assumed that Section 4(f) requirements will not apply to this project since the bridge functions primarily for transportation and trail connectivity will be addressed during construction and will remain unchanged following construction. MJ will coordinate with FHWA and NHDOT to confirm this. GPI previously initiated contact with the Appalachian Trail Conservancy (ATC) and will continue this coordination to address concerns regarding pedestrian accommodations during construction. GPI will provide MJ with applicable correspondence from ATC for inclusion in the NEPA document.

1.9 Summary of Initial Environmental Review: MJ will complete the NHDOT Bureau of Environment's Summary of Initial Environmental Review when resources outlined in Task 1 have been identified. The form will be sent to GPI for review prior to submitting to the NHDOT Environmental Manager.

Task 2 – Meetings and Stakeholder Coordination

2.1 Initial Contact Letters: MJ will send the standard NHDOT initial contact letter to town officials and local organizations. The draft letter will be sent to GPI for review.

**NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION
SHELBURNE, 40551
NORTH ROAD OVER THE ANDROSCOGGIN RIVER**

2.2 Natural Resource Agency Coordination Meetings: MJ will attend up to two NHDOT Natural Resource Agency Coordination Meetings to obtain input on resource concerns and proposed impacts. It is anticipated that one MJ staff member will attend these meetings, and that MJ will provide meeting minutes and prepare presentations detailing resource impacts. The Androscoggin River is not a NH Designated River; therefore, it is assumed that no coordination with a local river group is necessary.

2.3 Cultural Resource Agency Coordination Meetings: MJ will attend three NHDOT Cultural Resource Agency Coordination Meeting. It is anticipated that one MJ staff member will attend these meetings, and that MJ will provide meeting minutes and prepare presentations describing resources.

2.4 Public Meetings

MJ will provide a summary of key environmental resources and issues for inclusion in PowerPoint presentations for GPI's use at public meetings. Attendance at public meetings is not included in this scope.

Task 3 - Environmental Documentation

3.1 Environmental Document:

As defined in 23 CFR 771.117, the project is not likely to have "significant" impacts or substantial controversy and is expected to qualify for classification as a Categorical Exclusion (CE). An Individual CE will be prepared based on the assumption that the project will have an Adverse Effect on a historic resource. The document will include the following components:

- Project Purpose and Need
- Description of the proposed action
- Alternatives considered
- Resources and environmental effects
- Mitigation measures
- Permit requirements
- Coordination and public participation
- Summary of environmental commitments
- GIS figures (up to 6) depicting resources within the study area
- Supporting documents and correspondence

3.2 Section 4(f) Evaluation:

For the purposes of this scope, it is assumed that the project will also require a Programmatic Section 4(f) Evaluation for the use of a historic bridge. It is assumed that the project will not result in a 4(f) use of the Appalachian Trail.

The 4(f) Evaluation will be included as part of the NEPA document. The Programmatic Section 4(f) Evaluation will include the following sections:

- Purpose & Need
- Existing Conditions
- Proposed Action
- Description of 4(f) Properties
- Impacts to 4(f) Properties
- Description of Avoidance Alternatives
- Description of Other Alternatives

**NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION
SHELBURNE, 40551
NORTH ROAD OVER THE ANDROSCOGGIN RIVER**

- Measures to Minimize Harm/Mitigation
- Coordination and Public Participation
- Programmatic Applicability
- Summary Statement

3.3 Document Review and Submittal:

An administrative draft of the CE/Programmatic 4(f) document will be sent to GPI for review. MJ will address comments then provide the draft CE/Programmatic 4(f) document to NHDOT for review. Once comments are received, the draft document will be revised as needed and a final CE/Programmatic 4(f) document will be submitted to NHDOT (five hardcopies and two CDs).

A. SCOPE ASSUMPTIONS

The following additional scope assumptions are provided to clarify the work proposed under this assignment.

1. It is assumed that the project will not result in permanent impacts outside existing right-of-way. Therefore, completion of the NRCS Farmland Conversion Impact Rating Form is not included in this scope.
2. The project will not involve major intersection, travel lane, or alignment modifications, will not alter traffic volumes, and will have only a negligible effect on local air quality; therefore, a conformity analysis, microscale analysis, and noise impact analysis are not necessary. Air quality and noise will be described in the environmental document but in qualitative terms only.
3. Project design plans will be completed by GPI. GPI will provide plans to MJ for the NEPA document.
4. GPI and NHDOT will provide sufficient information to describe the proposed project and purpose and need in the NEPA document.

PRESERVATION COMPANY

1 March 2021

Steve Langevin at GPI
Christine Perron – via email CPerron@mjinc.com
McFarland Johnson
53 Regional Drive
Concord, NH 03301
OFFICE: 603-225-2978 ext. 128

RE: *Shelburne Bridge carrying North Road over the Androscoggin River (NHDOT 075/113)*
Shelburne, X-A004(430), 40551, (PART A)
REVISED updated PROPOSAL

Dear Christine:

Here is our updated proposal with current rates.

Respectfully submitted,



Lynne Emerson Monroe
LEM:tjh

Preservation Company
Sunny Knoll
5 Hobbs Road
Kensington, NH 03833
603-778-1799
PreservationCompany@comcast.net



www.PreservationCompany.com

Project Understanding

The objective of the project is to rehabilitate or replace the existing bridge carrying North Road over Androscoggin River in the Town of Shelburne. The bridge is located immediately east of the Androscoggin River Reservoir Dam. Constructed in 1900 and rebuilt in 1959, it is a five-span, 182'-long structure composed of 4 steel girder spans with a concrete deck and one concrete arch span. This bridge is on the NHDOT Red List of deficient structures and has a target advertising date in fiscal year 2026 in the current 10-year plan. The limits of the project are about 50 feet beyond the end of the bridge joints on the north and south according to the scope of work. The assumption is that this project will entail replacement of the entire superstructure and arch. Impacts to the dam are not anticipated.

History

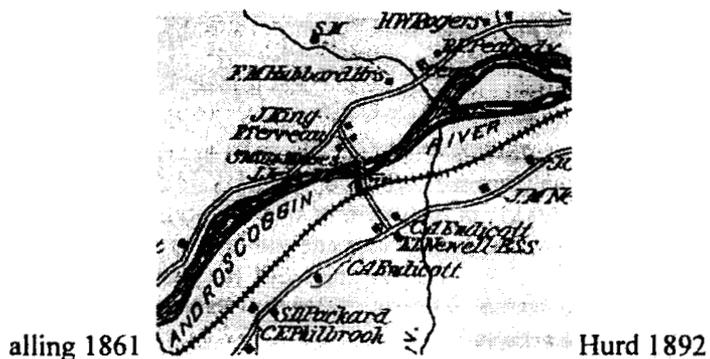
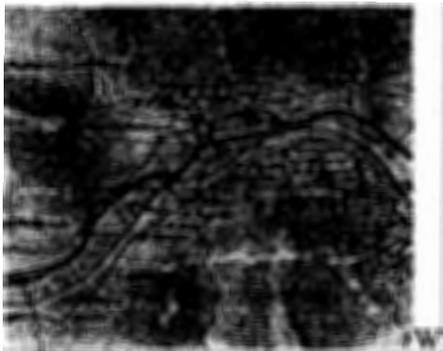
The Shelburne Bridge carrying North Road over the Androscoggin River (NHDOT 075/113) is the northern of two bridges over which North Road crosses the Androscoggin via a small rocky "island." It is a 5-span I-beam bridge with a concrete deck and a concrete deck arch approach span. NHDOT files date it to 1900, rebuilt in 1959. The southern bridge (075/110) was replaced more recently, in 1973. The crossing is located just downstream from and parallel to a dam and early twentieth century brick hydro power plant. This was one of six hydro plants owned by the Brown Company of Berlin, to power the various pulp and paper factories.



The two bridges are structurally separate but function as a single crossing. The adjacent dam and power house are immediately adjacent and even overlapping so the entire complex of two bridges, one dam and the hydro-power plant will be discussed as a historic district on a Historic District Area Form. The larger site including the hydro facility could potentially be eligible for the National Register for engineering significance. The initial date of construction of the bridge (ca. 1900) replacing an older structure, may coincide with the reconstruction of the dam by the paper company.

The road and crossing pre-date the power plant, and there was probably a bridge here early on. There may be information in the Shelburne section of the Pipeline report. The location is one of two river crossings in town connecting the roads on the north and south sides of the river. It is west of the small town center, east of Gorham. The railroad tracks pass to the south, paralleling the river. The bridges and approaches are in the same location as shown on nineteenth century

maps. By the 1890s there was a sawmill and dam on the site of the power plant. There was mill housing nearby that is not extant. Isolated houses on North Road around the corner do not appear to form a connected historic district. On Route 2 near the southern end of North Road is the historic Endicott Estate. The electric power station is shown in a 1917 illustration by Berlin Mills Co. just before the Brown Company name was adopted. It was part of a system of dams and powerplants along the Androscoggin, most of which also appear to be extant though the paper mills have been closed for some time. Research into Brown Company history and operations and investigation of comparable facilities upstream will be needed.



The bridges were replaced and rebuilt multiple times and frequently flood damaged.

Due to the location, terrain and complexity of the structure, fieldwork will need to be scheduled in only the best conditions. *Note. A series of photographs were taken of the complex on April 25, 2019, because of the proximity of a culvert study on Route 16. As the complex is very difficult to photograph, we will request that the DHR one-year guideline for photography be waived to allow use of those photographs. We will shoot a few pictures to show that nothing has changed when photographing the comparable hydro facilities.*

NHDOT files will be the main source of information about the bridges including their Historic Bridge Inventory forms. A cursory glance at Shelburne town reports shows not much detail about bridges or floods unfortunately. Published local histories are limited. There is a historical society locally and the area is covered by the Berlin and Coos County Historical Society in Berlin. There are photographs in the Brown Company Photographs Collection housed at Plymouth State University.

Scope Of Work

Preservation Company will conduct research, fieldwork and photography to produce a Historic District Area Form for the area including the two bridges, dam and power plant.

March 4, 2021

Christine Perron, CWS
McFarland Johnson
53 Regional Drive
Concord, NH 03301



Re: Shelburne Bridge Replacement Project (North Road) (NHDOT
Bridge 075/113) Combined Phase IA/IB Scope of Work

Dear Christine,

Please consider this combined Phase IA archeological sensitivity assessment/Phase IB intensive archaeological investigation scope of work for the Shelburne Bridge Replacement project (NHDOT Bridge 075/113) in Shelburne (Coos County), New Hampshire. The bridge carries North Road over the Androscoggin River and the project area straddles broad alluvial floodplains north and south of the river. Project plans call for potential ground disturbing activity in all four bridge quadrants, extending approximately 60 meters (200 feet) in a northerly and southerly direction from the bridge approach.

The Phase IA archaeological sensitivity assessment provides the first opportunity for an archaeologist to review project effects in relation to a specific location on the ground. It falls to the archaeologist to have a depth of experience in knowing the culture history of New Hampshire and an understanding of the range of resources that may be present in a project area. The objective of the Phase IA assessment is to provide the client with a review of a project area that evaluates whether archaeological resources are *known* to be present, or are *likely* to be present (i. e., is “sensitive”).

The Phase IA study consists of a series of steps, including:

- A site file search of the NH Division of Historical Resources online database EMMIT to identify any known sites within 2.0 km of project area, especially along nearby waterways
- Review of soil maps, surficial geology, USGS topographic quadrangles, to articulate the potential resources – water, well drained soil for camp sites or agriculture, lithic sources for tools, or clay for pottery or bricks.
- Site inspection to view existing conditions of the project area, to identify obvious disturbances or features, such as cellarholes, stone foundations, wells, or surface scatters of artifacts. Soil coring to sample for intactness or disturbance in a project area.
- Report preparation will offer the client a full rendering of background research completed, development of the site predictive model, results of the site inspection, and recommendations about further archaeological survey, if needed.

These elements of research satisfy the requirements of compliance with Section 106 of the National Historic Preservation Act.

The New Hampshire Division of Historical Resources has provided consultants with the option of filing a short-form report, only if *all* parts of project area are found to have no sensitivity (i. e., potential for archaeological resources). If a project area is sensitive, then the archaeologist must file a full Phase IA report, with supporting documentation of the positive results. This Phase IA report can be combined with the results of a Phase IB intensive archaeological investigation. Prior to proceeding with the Phase IB survey, IAC will provide the client with an end-of-field report summarizing areas of sensitivity and a refined Phase IB testing strategy based on the results of the Phase IA assessment.

If portions of the project area are found to be sensitive for Pre-Contact or Post-Contact archaeological resources and the proposed work will impact sensitive locations, archaeologists will conduct a Phase IB intensive archaeological investigation to determine the presence or absence of archaeological resources. If resources are confirmed to be absent, the project can move forward where the Phase IB study has resulted in findings of no archaeological resources.

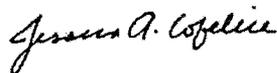
The scope of work for a Phase IB intensive archaeological investigation begins with the mapping of all visible surface features – such as cellarholes, foundations, bridge structures, artifact concentrations – in relation to project limits. The creation of a scaled map in the field is augmented by the collection of UTM metric coordinates using a hand-held Trimble June 3B data collector with a Pro 6H GPS receiver.

Archaeologists confirm the presence or absence of archaeological resources through the hand excavation of shovel test pits, each measuring 0.5 m by 0.5 m (1.8 ft by 1.8 ft), with all soils screened through ¼" mesh for the retrieval of artifacts. Shovel test pits are placed at 8-m intervals along transects, typically aligned at the edge of terraces above the nearest water body, whether this be a river, stream, wetland, or lake. For the Phase IB scope of work for the present project, IAC proposes the excavation of up to 16 shovel test pits (four in each bridge quadrant). In addition to shovel test pits, IAC recommends the excavation of four 1-m-x-1-m test units to identify deeply buried deposits. If artifacts are recovered, these are brought to IAC's laboratory in Portsmouth for their processing, which includes washing, identifying, and quantifying, and entering all results into an Access database.

Labwork continues with the creation of computer-generated site plans, and the analysis of soil profiles and the distribution of artifacts among testholes. The deliverable is a technical report summarizing the result of all findings and recommendations about whether further (Phase II) archaeological survey is advised. If a site is discovered, the scope includes the preparation of a site form to be submitted to the New Hampshire Division of Historical Resources.

Please do not hesitate to contact me with any questions or concerns.

Sincerely,



Jessica Cofelice MA, RPA

Attachment 1

**CERTIFICATION WITH REGARD TO THE PERFORMANCE OF
PREVIOUS CONTRACTS OR SUBCONTRACTS SUBJECT TO
THE EQUAL OPPORTUNITY CLAUSE AND THE FILING OF REQUIRED REPORTS**

The CONSULTANT X, proposed subconsultant _____, hereby certifies that it has X, has not _____, participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Order 11246 and that it has X, has not _____, filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

Greenman - Pedersen, Inc.

(Company)

By: _____

Timothy Letton, P.E. - Executive Vice President
(Title)

Date: November 4, 2021

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by consultants and proposed subconsultants only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime consultants and subconsultants who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such consultant submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

(Revised: June, 1980) **NOTE: TO BE COMPLETED BY CONSULTANT WHEN SIGNING AGREEMENT.**

Attachment 2

**CONSULTANT DISCLOSURE STATEMENT
FOR PREPARATION OF
ENVIRONMENTAL EVALUATIONS**

I hereby affirm that I have read and reviewed the Council on Environmental Quality (CEQ) regulation [40 CFR 1506.5(C)] and related guidance issued by CEQ and that pursuant thereto this firm has no financial or other interest in the outcome of this project.

I further hereby affirm that the information provided herein is true and correct and acknowledge that any knowingly false statement or false representation as to any material part contained herein may subject me to a fine and/or imprisonment, pursuant to pertinent provisions of the United States Code.

November 4, 2021

(Date)



(Signature)

Attachment 3

CERTIFICATION OF CONSULTANT/SUBCONSULTANT

I hereby certify that I am the Executive Vice President and duly-authorized representative of the firm of Greenman - Pedersen, Inc., and that neither I nor the above firm I here represent has:

- (a) employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for me or the above CONSULTANT) to solicit or secure this Contract,
- (b) agreed, as an express or implied condition for obtaining this Contract, to employ or retain the services of any firm or person in connection with carrying out the Contract, or
- (c) paid, or agreed to pay, to any firm, organization or person (other than a bona fide employee working solely for me or the above CONSULTANT) any fee, contribution, donation or consideration of any kind for, or in connection with, procuring or carrying out the Contract:

I/WE do also, under penalty of perjury under the laws of the United States, certify that, except as noted below, the company or any person associated therewith in the capacity of (owner, partner, director, officer, principal investigator, project director, manager, auditor, or any position involving the administration of Federal funds): (a) is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency; (b) has not been suspended, debarred, voluntarily excluded or determined ineligibility by any Federal agency within the past three years; (c) does not have a proposed debarment pending; and (d) has not been indicted, convicted or had a civil judgment rendered against (it) by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three years.

except as here expressly stated (if any):

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted, indicate below to whom it applies, the initiating agency, and dates of action. Providing false information may result in criminal prosecution or administrative sanctions.

I acknowledge that this certificate is to be furnished to the State Department of Transportation and the Federal Highway Administration, U. S. Department of Transportation, in connection with this Contract involving participation of Federal-aid highway funds, and is subject to applicable State and Federal laws, both criminal and civil.

November 4, 2021

(Date)


(Signature)

Attachment 4

CERTIFICATION OF STATE DEPARTMENT OF TRANSPORTATION

I hereby certify that I am the Director of Project Development of the Department of Transportation of the State of New Hampshire, and the above consulting firm or its representatives has not been required, directly or indirectly, as an express or implied condition in connection with obtaining or carrying out this Contract, to:

- (a) employ or retain, or agree to employ or retain, any firm or person, or
- (b) pay, or agree to pay, to any firm, person, or organization, any fee, contribution, donation, or consideration of any kind:

except as here expressly stated (if any):

November 5, 2021

(Date)



(Signature)

Attachment 5

**CERTIFICATION FOR FEDERAL-AID CONTRACTS
EXCEEDING \$100,000 IN FEDERAL FUNDS**

The prospective participant certifies, by signing and submitting this agreement, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower-tier subcontracts which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

Attachment 6

IN WITNESS WHEREOF the parties hereto have executed this AGREEMENT on the day and year first above written.

Consultant

WITNESS TO THE CONSULTANT

By: Mark J. Debowski
Mark Debowski, P.E. - Asst. VP

Dated: 11/04/2021

CONSULTANT

By: Timothy Letton
Timothy Letton, P.E. - Executive Vice President
(TITLE)

Dated: 11.04.2021

Department of Transportation

WITNESS TO THE STATE OF NEW HAMPSHIRE

By: Phyllis C. Jowelakas

Dated: November 5, 2021

THE STATE OF NEW HAMPSHIRE

By: Patricia A. ...
Director of Project Development
for DOT COMMISSIONER

Dated: November 5, 2021

Attorney General

This is to certify that the above AGREEMENT has been reviewed by this office and is approved as to form and execution.

Dated: 12/3/2021

By: Erin C. ...
Assistant Attorney General

Secretary of State

This is to certify that the GOVERNOR AND COUNCIL on _____ approved this AGREEMENT.

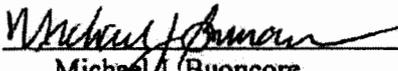
Dated: _____

Attest:
By: _____
Secretary of State

At a meeting of the Board of Directors of Greenman-Pedersen, Inc., at which all the Directors were present or waived notice, it was

VOTED, Timothy Letton, Executive Vice President, of Greenman-Pedersen, Inc., be and he hereby is authorized to execute contracts and bonds in the name and behalf of said Company, and affix its corporate seal thereto; and such execution of any contract or obligation in this Company's name on its behalf by such Executive Vice President, under seal of the Company, shall be valid and binding upon this Company.

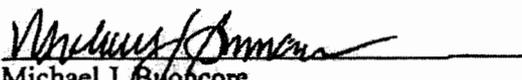
A true copy

ATTEST: 
Michael J. Buoncore
Secretary/Treasurer

Place of Business:
Greenman-Pedersen, Inc.
181 Ballardvale Street, Suite 202
Wilmington, MA 01887
(781) 570-2999

Date of this Declaration: 11.04.2021

I hereby certify that I am the Secretary/Treasurer of Greenman-Pedersen, Inc. and that Timothy Letton is the duly elected Executive Vice President of said Company, and that the above vote has not been amended or rescinded and remains in full force and effect as of this date.


Michael J. Buoncore
Secretary/Treasurer

Corporate Seal

Ref: NHDOT Shelburne
X-A004(430)
40551
(Part A)

State of New Hampshire
Department of State

CERTIFICATE

I, William M. Gardner, Secretary of State of the State of New Hampshire, do hereby certify that GREENMAN-PEDERSEN, INC. is a New York Profit Corporation registered to transact business in New Hampshire on February 13, 2002. I further certify that all fees and documents required by the Secretary of State's office have been received and is in good standing as far as this office is concerned.

Business ID: 397202

Certificate Number: 0005463871



IN TESTIMONY WHEREOF,

I hereto set my hand and cause to be affixed
the Seal of the State of New Hampshire,
this 4th day of November A.D. 2021.

A handwritten signature in black ink, appearing to read "William M. Gardner".

William M. Gardner
Secretary of State



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

11/4/2021

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

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

PRODUCER PG Genatt Group LLC 3333 NEW HYDE PARK RD SUITE 409 NEW HYDE PARK NY 11042	CONTACT NAME: Jeff Kozarsky	
	PHONE (A/C, No, Ext): 516-869-8788	FAX (A/C, No): 516-470-0338
E-MAIL ADDRESS: jkozarsky@genattgrp.com		
INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A: Starr Indemnity & Liability Company		38318
INSURER B: XL Specialty Insurance Company		37885
INSURER C: Merchants National Insurance Company		12775
INSURER D: American Guarantee & Liability Insurance Company		26247
INSURER E: Westchester Surplus Line Insurance Company		10172
INSURER F: Berkley Insurance Company		32603

INSURED
Greenman Pedersen, Inc.
325 West Main Street (Wilmington)
Babylon NY 11702

GREENMAN

COVERAGES

CERTIFICATE NUMBER: 622755663

REVISION NUMBER:

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

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Contractual Liab GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC OTHER:	Y	Y	1000025533201	12/31/2020	12/31/2021	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY	Y	Y	1000198538201	12/31/2020	12/31/2021	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
E C D	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$ 10,000			G71780296002 EXL0001665 AEC 6439062-01	12/31/2020 12/31/2020 12/31/2020	12/31/2021 12/31/2021 12/31/2021	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000 \$
A A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		Y/N N	1000002543 1000002541	12/31/2020 12/31/2020	12/31/2021 12/31/2021	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
B F	Property Professional Liability			UM00082200MA20A AEC-9033899-01	12/31/2020 12/31/2019	12/31/2021 12/31/2021	Valuable Papers \$100,000 Each Claim \$5,000,000 Aggregate \$10,000,000

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

WORKERS COMPENSATION NOT APPLICABLE IN MONOPOLISTIC STATES - OH, ND, WA, WV, WY FOREGOING PER POLICY FORM

RE: MAX-2018156.00 - NHDOT Bridge No. 175/113 - Town of Shelburne

Additional Insured Status Encompasses General Liability and Automobile Coverage as required by written contract. Primary Insurance Status Encompasses General Liability and Automobile Coverage on a Primary and Non-Contributory Basis. Waiver of Subrogation Status Encompasses General Liability, Automobile and Workers Compensation Coverage as required by written contract. New Hampshire Department of Transportation is included as additional insured as required by written contract.
See Attached...

CERTIFICATE HOLDER

CANCELLATION 30 day notice applies

New Hampshire Department of Transportation John O. Morton Building 7 Hazen Drive, P.O. Box 483 Concord, NH 03302	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

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AGENCY CUSTOMER ID: GREENMAN

LOC #: _____



ADDITIONAL REMARKS SCHEDULE

Page 1 of 1

AGENCY PG Genatt Group LLC		NAMED INSURED Greenman Pedersen, Inc. 325 West Main Street (Wilmington) Babyton NY 11702	
POLICY NUMBER		EFFECTIVE DATE:	
CARRIER	NAIC CODE		

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: 25 FORM TITLE: CERTIFICATE OF LIABILITY INSURANCE

Professional Liability no retention Deductible: \$75,000