

## Agenda Summary

January 22, 2025

### Agenda Item No. A4

#### Luce Hill Rd Bridge Hazard Mitigation Grant Program (HMGP) Proposal Award:

##### Application Development and Engineering Design Services

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Summary: In September 2024 the Town was notified by Vermont Emergency Management that the subject project was invited to submit an application under the HMGP. Applications are Due April 30, 2025. If awarded, we are told that this round of HMGP funding would be funded 100% with 75% Federal and 25% State funding.

Public Works used the Vtrans “At-The-Ready” qualifications-based selection process to choose a consultant to recommend. Stantec is recommended as the most qualified firm to provide these services. A significant aspect of presenting a successful Benefit-Cost Analysis (BCA) is to analyze and articulate the functional impacts to traffic circulation and mobility in the event of catastrophic damage to or closure of the Luce Hill Rd Bridge. Stantec’s recently completed the mobility and traffic congestion study efforts will be a significant benefit towards this effort. Outside of their VT office, Stantec has staff that have unique and specific expertise in the various components of developing and submitting the HMGP application that are of high value to this initiative.

Additionally, Stantec is contracted by Vtrans to complete the design of the adjacent VT 108 and Luce Hill Rd intersection project.

Enclosed is a proposal from Stantec for these services. If we are not awarded the Grant, we have no obligation to proceed with Phase C and D. A summary of each Phase with anticipated cost and funding source is as follows:

| Phase   | Description            | Cost         | Completion | Funding            |
|---------|------------------------|--------------|------------|--------------------|
| Phase A | Benefit-Cost Analysis  | \$20,064.00  | 2/28/2025  | Prop. FY26 Capitol |
| Phase B | HMGP Grant Application | \$16,059.00  | 4/11/2025  | Prop. FY26 Capitol |
| Phase C | Project Definition     | \$216,208.00 | 2026       | 75% HMGP / 25% VEM |
| Phase D | Project Design         | \$338,365.00 | 2027       | 75% HMGP / 25% VEM |
| TOTAL=  |                        | \$590,696.00 |            |                    |

#### Town Plan & Policy Impact:

Purchasing Policy: For design related procurement in excess of \$50k, contracts are to be awarded by the Selectboard. Engineers should be hired primarily based on their professional qualifications.

**Fiscal & Staff Resource Impact:**

The Selectboard has a proposed budget of \$35,000 to complete Phases A and B as a FY 26 Capitol Project. If the grant is awarded, Phases C and D will be funded at 75% by the FEMA Hazard Mitigation Grant Program and 25% by Vermont Emergency Management (100% total).

Public Works will provide administrative and technical support to the application development, and a potential subsequent project design and construction. Phases A & B are anticipated to be a modest investment of staff time. Phases C & D, and a subsequent construction project will require substantially more attention from staff and will occur over a period of 2+ years. Staff is unable to estimate the number of hours required of Town staff to manage and support the completion of this project.

It is noted Stantec estimated appx. 3500 person- hours to complete Phases A through D and that does not include construction inspection. A raw assumption of 3500 person-hours for construction inspection might be reasonable, for a total of 7000 consultant-hours to complete design and construction. A range of 5% - 25% of the required consultant-hours for required staff time might be a reasonable estimate. This estimate equates to 350 – 1750 hours of staff time to manage and support the project through design and construction.

**Recommendation:**

Move to approve the proposal from Stantec and to authorize the Town Manager to sign the Agreement, provided this project is approved as an FY 26 Capitol Project.

# **Luce Hill Road Bridge: FEMA Hazard Mitigation Grant Program**

## **Project Workplan**

**Submitted to**

**Town of Stowe Department of Public Works**

**Prepared by**

**Stantec**

**January 14, 2025**

# SCOPE OF WORK

## INTRODUCTION

The Town of Stowe is requesting proposals for a base phase of completing a FEMA Benefit-Cost Analysis, and optional add-alternate phases of developing a Hazard Mitigation Grant Program (HMGP) Application and Bridge Design Services for the replacement of the Luce Hill Rd Bridge.

The project is managed locally by Chris Jolly, Municipal Project Manager. The owner of the project is the Town and the sole authority for the project rests with the Town of Stowe Selectboard, through its Municipal Project Manager. This project is anticipated to be funded entirely, or in part, by the Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant Program through Vermont Emergency Management (VEM). Accordingly, all aspects of this project must conform to federal and state regulations.

This project workplan includes Stantec's proposed scope of work, project team, schedule, and budget.

## SCOPE OF WORK

The Town of Stowe has received an invitation to submit a FEMA Hazard Mitigation Grant Application to Vermont Emergency Management (VEM) for the proposed reconstruction of the Luce Hill Road bridge. The Town has completed a Scoping Study including selection of a preferred alternative. The Town seeks an Engineering Consultant, prequalified thru the VTrans Municipal Assistance "At the Ready" process to perform of a Benefit-Cost Analysis (BCA), and if favorable, develop a HMGP application on behalf of the Town. If the HMGP grant is awarded, the Town anticipates entering an Agreement with VEM to advance design and construction for replacement of the Luce Hill Rd Bridge (B. 53).

The Work will be completed in the following Phases:

- Phase A: Benefit-Cost Analysis (BCA)
- Phase B: Hazard Mitigation Grant Program (HMGP) Application
- Phase C: Project Definition
- Phase D: Project Design

Phases C and D will be advanced at the discretion of the Town of Stowe, contingent upon Phase A yielding a BCA >1.0 and the acceptance of the Town's Phase B HMGP grant application.

In general, the scope of Phase C and Phase D of this project, will follow the project development process used by the Municipal Assistance Section of VTrans as follows:

- Project kick-off and development of conceptual plans
- Submission of documentation and plans for NEPA process
- Development of preliminary plans
- Develop Right of Way (ROW) plans, if necessary, and assist with ROW documents
- Develop contract plans, technical specifications, final engineer's estimate and bid documents and assist with the bidding process
- Limited assistance during construction

Phase A is to be completed by a mutually agreed upon time that will allow adequate time for the successful completion of Phase B (estimate early to mid-March, 2025).

Phase B, if advanced, is to be completed by April 11, 2025 in advance of an April 30, 2025 HMGP application deadline. It is estimated that award of the HMGP grants will take 6 to 12 months from the application deadline.

Phases C and D, if advanced, are desired to be completed such that construction of the new bridge can be done concurrently with VTrans project STP 0235(24) VT 108 & Luce Hill Rd Intersection Improvements, which is anticipated to be constructed during the 2027 construction season. The feasibility of concurrent phasing will be evaluated as the project advances through Phase C.

The Work will be broken down into the following phases and tasks:

## **Phase A- BENEFIT-COST ANALYSIS**

### ***Task 1: Perform Benefic-Cost Analysis***

The consultant will complete a Benefit- Cost Analysis (BCA) using FEMA approved methodologies and tools. Details of the requirements of the FEMA

BCA Can be found here: <https://www.fema.gov/grants/tools/benefit-cost-analysis>.

The Town reserves the right to review the BCA with Vermont Emergency Management prior to advancing to Phase B.

*Assumptions:* The consultant assumes the subapplication will be created as a Phase 1 project due to insufficient information to substantiate bridge failure at a 50-year or 2% chance flood event. The provided data strongly suggests this possibility, but further analysis is required to include it in the Benefit-Cost Analysis (BCA). Phase 1 will facilitate this additional analysis. The Consultant will also evaluate other potential benefits through Phase 1 to add to the BCA, increasing the likelihood of successful funding for the proposed bridge replacement project.

*Exclusions:* None.

*Deliverables:* The consultant will create a preliminary Benefit-Cost Analysis (BCA) using current available information, assuming the bridge will likely fail or be severely damaged and unusable during a 50-year or 2% chance flood event. This BCA will support a Phase 1 subapplication in accordance with the Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant Program (HMGP) rules and regulations, through Vermont Emergency Management for the Town of Stowe Department of Public Works.

## **Phase B - HAZARD MITIGATION GRANT PROGRAM APPLICATION**

### ***Task 2: Prepare Hazard Mitigation Grant Application***

The consultant will prepare a complete HMGP subapplication, including all required attachments and supporting documents. The Application will be submitted by the Town. Details of the requirements of the HMGP application can be found here: [Infrastructure Projects | Vermont Emergency Management](#)

*Assumptions:* The consultant assumes the BCA will perform favorably and the Town will move forward to Phase B of the requested scope of work to create and submit an HMGP subapplication.

*Exclusions:* None.

*Deliverables:* The consultant will submit a complete HMGP subapplication to the Town, following a phased approach in accordance with applicable FEMA HMA guidelines. Phase A will encompass the necessary design and engineering requirements for bridge replacement, coordination of the Environmental and Historic Preservation (EHP) review, and create the final BCA. Phase B will address the construction components of the project.

## **Phase C- PROJECT DEFINITION (Task 3 – Task 6)**

### ***Task 3: Project Kick-off***

The consultant will convene a project kick-off meeting to discuss the goals and objectives of the municipality and define the project development process. The Consultant will discuss the project schedule and arrange to collect all information relevant to the project, including all existing project files, underground utility information, tax maps of the affected properties, etc. The consultant will coordinate and schedule this meeting and take notes to document the discussions and decisions made and to distribute to parties of interest.

*Assumptions:* None.

*Exclusions:* None.

*Deliverables:* Meeting agenda and notes.

### ***Task 4: Topographic Survey and Base Mapping***

#### ***4.1 Right-of-Way and Deed Information***

The consultant is to develop a base map that shows the approximate limits of the existing Right-of-Way. The municipality will provide available roadway plans, land records, property deeds and tax maps on file for the properties within the project limits. The purpose will be to document the property lines and owners within the project limits for subsequent Right-of-Way use. This right of way and property information will be compiled and presented on the plans.

#### *4.2 Utility Location*

The consultant shall identify all existing overhead and underground utilities that may be affected by project construction and depict their location on project plans.

#### *4.3 Ground Survey*

The consultant will perform the topographic survey for this project and will include enough information to design, permit, acquire Right-of-Way and construct the project.

#### *Assumptions:*

- A subconsultant will perform topographic survey and right-of-way and deed information. Upon completion of Phase B, Stantec will solicit a proposal to complete survey from a qualified firm licensed to perform survey in the State of Vermont
- Utility locations shall be identified via available information provided by utility companies. Utility locations may need to be assumed depending on the quality of the information and presence of on-the-surface indicators.

#### *Exclusions:*

- No effort is included for underground utility locations using geophysical or vacuum testing methods.

#### *Deliverables:*

- None

#### ***Task 5: Conceptual Plans***

The consultant will prepare Conceptual Plans and a conceptual construction cost estimate for the improvements. The Conceptual Plans will indicate the existing topography and other base information and illustrate the proposed work. The design will be in accordance with the Vermont Pedestrian and Bicycle Facility Planning and Design Manual, 2024 VTrans Standard Specifications for Construction, the current editions of the Vermont State Standards, the Public Rights of Way Accessibility Guidance issued by the US Access Board, and the most recent edition of the Manual on Uniform Traffic Control Devices. Identified rights-of-ways, utilities, natural and cultural resources, and other features affecting the design will be indicated on the



plans. The basis for project pay items will be the 2024 VTrans Standard Specifications for Construction.

The Conceptual Plans are anticipated to consist of:

- Title Page
- Layout Sheets showing existing and proposed features
- Preliminary profiles
- Approximate right of way lines and construction limits (consultant shall provide supporting information addressing how right of way limits were determined)
- Typical Sections for the proposed improvements
- Cross Sections

Together, these drawings illustrate the information necessary to define the project and will include information such as:

- Roadway, sidewalk and/or path design (cross slope, material type, and thickness)
- New or modified subsurface drainage
- Limits of construction
- Pavement markings and signs

Conceptual Traffic Control (at a minimum, plans shall reference VTrans standard drawings or Typical Applications from the MUTCD that illustrate how work zone traffic will be addressed).

The consultant will submit two full size copies of the Conceptual Plans and construction cost estimate to the municipality. The conceptual cost estimate must be prepared in a complete and concise tabular format and will be submitted in .pdf format. The consultant will develop the construction cost estimate utilizing individual items and unit prices consistent with the 2024 VTrans Standard Specifications for Construction, including any revisions, supplements or addenda.

If traffic control measures, including any needed temporary pedestrian facilities, are needed, their cost shall be included in the project cost estimate.

*Assumptions:*

- Stantec will submit the Conceptual Plans to the Town one time for review. Stantec will prepare responses to review comments. Any updates to the plans based on the comments will be completed during development of the Preliminary Plans.

*Exclusions:*

- None

*Deliverables:*

- Conceptual Plans and Estimate

**Task 6: Resource Constraints and CE Documentation**

The consultant is expected to identify natural and cultural resources on the project plans to support the municipality in satisfying the NEPA process which is expected to be at the level of an Environmental Assessment (EA).

*6.1 Natural Resource Identification*

There are two potential natural resources in the vicinity of the project area per the Luce Hill Road Bridge Scoping Study – a VSWI Class II Wetland and habitat for the Federally-Threatened Northern Long-Eared Bat. Stantec will conduct a field review to confirm the presence of these resources in the project area. The Class II wetland is not anticipated to be impacted. Habitat for the bat may be impacted. Stantec will conduct one coordination meeting with the US Fish and Wildlife Service and if necessary, include contract provisions that require potential bat roosting trees to be removed outside of the active bat season.

*6.2 Historical/Archaeological*

Within the Area of Potential Effect (APE) of the proposed action there are structures that are over 50 years of age. Hartgen Archeological Associates, Inc. (Hartgen) performed a file review at the Vermont Division for Historic Properties (DHP) where archeological site files, National Register, State Register and town information were reviewed. In a report dated March 2023, Hartgen's file review identified no properties listed on the National Register of Historic Places (National Register) or on the Vermont State Register of Historic Places (State Register).

Hartgen prepared a Historic Resources Identification (HRI) that surveyed 11 structures. Hartgen identified 2 structures that may be individually eligible for listing on the State Register. Two structures comprise a potential historic district. The two dwellings and associated garage were built in a similar Tyrolean style in the 1960's while Stowe was evolving from a hotel/lodge-based clientele to that of second homeowners.

The proposed bridge is not anticipated to impact any of the structures. While it's not anticipated that any mature plantings associated with National Register eligible properties will be impacted by the proposed project, care should be exercised in this regard.

Hartgen conducted a Phase IA Archeological Resource Assessment (ARA) of the area of potential effects (APE) on October 5, 2022. In a report dated February 2023 Hartgen identified three Archeology Sensitive Areas (ASA) on Luce Hill Road, east and outside of the anticipated construction limits of the bridge project.

Should the future sidewalk project connecting Chase Park to the Luce Hill Road VT 108 intersection be incorporated together, these areas will need further investigation. For purposes of this proposal, it is assumed that the future sidewalk will not be included with this project.

Based on this previous study, no further archeological or historic resource assessment work is anticipated.

### *6.3 Other Permitting and Investigations*

Based on the scoping report, it is anticipated that a State of Vermont Stream Alteration Permit, a State of Vermont Wetland Permit, and an ACOE Wetland permit will be required for the project. The Consultant will determine the need for other environmental permits and will assist the municipality in applying for the federal, state, and local environmental permits necessary to complete the project. The municipality is generally responsible for any permit fees, although these are waived for some permits.

### *6.4 Preparation of the NEPA Document*

Because federal funding is involved with this project, the National Environmental Policy Act (NEPA) process and requirements must be followed.

Based on our experience, we anticipate an Environmental Assessment (EA) is the appropriate level of documentation due to the potential presence of endangered species.

*Assumptions:*

- The appropriate level of NEPA documentation is an EA. Stantec will consult with VEM to confirm during development of the BCA and HGMP application.
- Natural resource impacts are limited to endangered species habitat.
- Historic and archeological resource have been studied and no further investigation is required.
- The project will not result in historic or archeological resource impacts.
- Two coordination calls with USFWS will be required.
- Stantec will prepare permit applications for State and ACOE wetlands and State Stream Alterations.

*Exclusions:*

- Permit application fees

*Deliverables:*

- Natural resource ID field investigation summary, State Wetland permit application, ACOE permit application, State Stream Alterations permit application, Environmental Assessment document

## **Phase D- PROJECT DESIGN (Task 7 – Task 11)**

### ***Task 7: Preliminary Plans***

Once the NEPA process has concluded, the consultant will develop preliminary plans for the project. The preliminary plans will include all the information from the conceptual plans and will add further detail, including any stormwater drainage and required erosion prevention and sediment control measures. The preliminary plans will contain:

- Title Sheet
- Typical Section
- Base Plan with a project centerline and existing ROW information
- Profiles
- Cross Sections
- Driveway treatments

- Drainage details
- Erosion Prevention measures and details
- Signs and pavement markings
- Lighting
- Traffic control plans for motor vehicles, bicycles (if accommodated separately from motor vehicles) and pedestrians including any details not covered by VTrans standard drawings or MUTCD Typical Applications.

In addition to the preliminary plans, the consultant will develop a revised Engineer's Estimate.

*Assumptions:*

- Stantec will submit the Preliminary Plans to the Town one time for review. Stantec will prepare responses to review comments. A revised set of Preliminary Plans will be developed that show final project construction limits so that temporary and permanent easements can be identified in the Right-of-Way Plans developed in Task 8.
- Soils exceeding the urban background level of contamination are not located within the project area and a soil management or corrective action plan are not required.

*Exclusions:*

- None

*Deliverables:*

- Preliminary Plans and Estimate, Revised Preliminary Plans

**Task 8: Right-of-Way Plans and Acquisition Process**

Using the project construction limits and any anticipated need for temporary rights during construction, the need for additional right of way will be confirmed by the Consultant. They will determine if any additional right-of-way (ROW), including all permanent and temporary easements, beyond the existing ROW is required to construct the project.

**8.1 Right of Way Plans**

Existing ROW, and all areas of additional ROW, whether temporary or permanent, will be clearly indicated on ROW plans prepared by the Consultant in accordance with standard survey practices.

Easements are typically developed by municipal attorneys, but their content must match information shown on the ROW plans. ROW plans must include all the elements of preliminary plans with the addition of the following:

- Right-of-Way detail sheet
- Property Acquisition Table

If Right-of-Way acquisition is simple and/or does not involve many parcels, it is acceptable to include Right-of-Way information on the project plan sheets.

### *8.2 Right of Way Coordination*

The municipality will be responsible for appraisals, negotiations and completing the acquisitions. The Consultant will provide assistance and work closely with the municipality throughout the ROW phase, including any Necessity and Condemnation procedures. ROW acquisition must conform to Public Law 91-646 and 100-17, which together are referred to as the "Uniform Act."

#### *Assumptions:*

- Stantec will develop draft Right-of-Way Plans for Town review. Stantec will update the plans one time based on comments received from the Town and the State, including the Town's attorney. The updated plans will be submitted to the Town as the final Right-of-Way Plans and will be used by the Town to finalize easement documents and appraisals.
- The Town will be responsible for easement documents, appraisals, negotiations, and completing the acquisitions. The Town will lead and Necessity or Condemnation procedure if required.

#### *Exclusions:*

- Easement documents, appraisals

#### *Deliverables:*

- Draft Right-of-Way Plans, Final Right-of-Way Plans

### ***Task 9: Final Design/Bidding***

The consultant will prepare the final construction design of the project. Final Design will include final plans, an updated construction cost estimate, and draft special provisions. These provisions will supplement the VTrans Standard Specifications for Construction which will serve as the basis for the

construction of the project The contract plans will include all information necessary to put the project out to bid.

### *9.1 Final (85%) Plans*

The Consultant will submit Final plans along with an updated listing of items and quantities, and an associated cost estimate for municipal review and concurrence. These plans will incorporate all comments and conditions received from permitting agencies. Final utility relocations will be shown. ROW plans (if necessary) showing acquisition lines and any agreements made with property owners will be included. The Consultant will certify through the signature of an engineer registered in the state of Vermont to practice “structural or civil” engineering that these plans and subsequent 100% plans meet all applicable standards, codes and requirements for design and public safety (design certification.) The Consultant will also provide a “Utility & Railroad Clearance” that indicates that all necessary utility coordination has been completed

### *9.2 Special Specification*

The Consultant will develop project special specifications to cover items not contained in the VTrans 2024 Standard Specifications for Construction or those items that vary from the standard specifications.

### *9.3 Final Estimate*

The consultant will develop a final engineer's estimate.

#### *Assumptions:*

- It is assumed that up to ten (10) special specifications will be required.
- Stantec will submit the Final Plans to VTrans and the Town one time for review. The Town and VTrans will review the Final Plans concurrently. Stantec will prepare responses to review comments. Any updates to the plans based on the comments will be completed during development of the Contract Plans.

#### *Exclusions:*

- None

#### *Deliverables:*

- Final Plans, Specifications, and Estimate

### ***Task 10: Contract Plans, Construction Bidding and Award***

The consultant will take necessary steps to provide the municipality with a complete package which can be put out to bid. The municipality is responsible for the bid advertising process.

#### *10.1 Contract Plans*

The consultant will submit Contract (100%) Plans along with an updated list of items, estimated quantities and an associated cost estimate for municipal review and concurrence. These plans will incorporate any final changes since the review and acceptance of 85% Plans. These plans will be signed and stamped by the Consultant's licensed PE.

#### *10.2 Construction Bid Package*

Once the Contract Plans are approved, the Consultant will be responsible for assembling the Construction Bid Package. The complete Construction Bid Package will include all of the following items:

- Complete Contract (100%) plans.
- Construction cost estimate.
- Final utility relocations and special provisions.
- Right-of-way special agreements.
- Construction special provisions.
- All necessary permits acquired, and conditions noted.
- Construction Contract specifications.

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Bid Documents including instructions to bidders, bid form and all required federal documents

#### *10.3 Bid Process*

The Consultant will be available during the bidding process to answer any technical questions about the project design. Once bids are opened, the consultant will confirm that all required components of the bid have been submitted. The consultant will conduct an analysis of the bids and will provide a recommendation to the municipality on award of the contract after review of the bids.



*Assumptions:*

- The Town will advertise the project for bid. Costs to advertise will be paid by the Town and are not included in this proposal.
- Up to four (4) bid addenda will be issued.

*Exclusions:*

- None

*Deliverables:*

- Contract Plans, Specifications, and Estimate
- Bid addenda (2)
- Bid analysis

**Task 11: Construction Services**

The Consultant will provide limited assistance during the construction phase, primarily to answer any design questions that come up. The consultant will also review for conformance, any required contractor submittals.

*Assumptions:*

- The amount of hours required for construction services largely depend on the contractor's quality of work and schedule. Stantec will complete these services on a time and materials basis.
- Stantec will attend a pre-construction meeting
- Stantec will complete up to two (2) site visits
- Stantec will attend the final inspection

*Exclusions:*

- Stantec will not perform construction inspection services. These services will be provided by the Town or a consultant hired by the Town.

*Deliverables:*

- Submittal reviews for temporary bridge, bearings, demolition, steel, piles, traffic control, bridge rail, and approach rail

## Project Team

**Greg Goyette** will serve as our Client Liaison/Principal-In-Charge responsible for meeting coordination, QC and schedule adherence. **Tom Knight** will manage the technical aspects of the project, assuring quality reviews on

project deliverables and helping to facilitate client and stakeholder collaboration efforts. **Jay Pritchett** will provide primary FEMA BCA and grant application support. Greg, Tom, and Jay will be supported by team members in our local office in South Burlington, VT as well as subject matter experts across the company as Stantec sees fit to deliver the project.

## Project Schedule

The tentative completion of the Phases A-D are as follows:

|                                     |            |
|-------------------------------------|------------|
| Phase A – Benefit-Cost Analysis     | 02/28/2025 |
| Phase B – HGMP Grant Subapplication | 04/11/2025 |
| Phase C – Project Definition        | 2026       |
| Phase D – Project Design            | 2027       |

The schedule assumes Town Selectboard approval of the proposal on January 22, 2025 and Stantec receiving a Notice to Proceed or executed contract no later than January 30, 2025. Dates are subject to change based on data availability, review of deliverables, and stakeholder meetings. Table 1 provides the initial project milestone schedule for Phases A and B. A detailed project schedule will be prepared for Phases C and D if the Town is successful with obtaining grant funds.

**Table 1. Milestone Schedule**

| <b>Project Milestone</b>                | <b>Tentative Initiation/ Completion Date</b> | <b>Achieved</b> |
|---|--|-----------------|
| Phase A - Preliminary BCA Submitted     | 2/28/2025                                    |                 |
| Phase B – HMGP Subapplication Submitted | 4/11/2025                                    |                 |
| Phase C – Project Definition            | 2026   |                 |
| Phase D – Project Design                | 2027   |                 |

## Invoicing and Progress Reports

Invoices will be submitted monthly to the Client. Each invoice will be accompanied by a progress report consisting of a bulleted list summarizing that month's efforts. Invoices will be sent to:

Chris Jolly  
Assistant Director of Public Works  
Public Works Department  
PO Box 730, Stowe, VT 05672

## Project Contacts

### **Town of Stowe:**

Chris Jolly  
Assistant Director of Public Works  
cjolly@stowevt.gov  
802-696-8435

### **Stantec:**

Greg Goyette  
Principal-in-charge  
[greg.goyette@stantec.com](mailto:greg.goyette@stantec.com)  
802-497-6403

## Project Budget

Total project budget is \$590,696 and is broken down by phase as follows:

|                                  |             |
|----------------------------------|-------------|
| Phase A – Benefit-Cost Analysis: | \$20,064    |
| Phase B – HGMP Grant Application | \$16,059    |
| Total A & B                      | \$36,123*   |
| Phase C – Project Definition     | \$216,208   |
| Phase D – Project Design         | \$338,365   |
| Total C & D                      | \$554,573** |

A breakdown of tasks, hours, and fee is attached.

\*The Town will execute an initial contract with Stantec for Phase A and B services at this time for a total requested budget of \$36,123. Stantec will not expend budget on Phase B until the BCA is completed and the Town has provided written authorization to Stantec to proceed with Phase B.

\*\*A change order will be executed for Stantec to complete Phase C and D services if the Town is successful in obtaining grant funding. Stantec reserves the right to modify scope, schedule, and budget for Phases C and D based on the outcomes of Phases A and B.

Estimated budget amounts for subconsultant services in Phases C and D including topographic survey, geotechnical investigation, and cultural resource investigation are included. Stantec will request proposals from subconsultants during development of the grant application and refine these costs for the grant application submission.



FEE ESTIMATE - Luce Hill Road Final Design: FEMA Hazard Mitigation Program

| Role                       | Principal  | FEMA Specialist 1 | FEMA Specialist 2 | FEMA Specialist 3 | Project Manager | Sr. Engineer | Project Engineer | Sr. Environmental Scientist | Environmental Scientist | Technical / Clerical | Direct Expense | Subconsultant |
|----------------------------|------------|-------------------|-------------------|-------------------|-----------------|--------------|------------------|-----------------------------|-------------------------|----------------------|----------------|---------------|
| Project Billing Rate (T&M) | \$210.32   | \$235.95          | \$223.21          | \$202.24          | \$196.29        | \$173.86     | \$123.38         | \$148.87                    | \$90.17                 | \$114.97             | \$1.00         | \$1.00        |
| Total Units (T&M)          | 37.00      | 108.00            | 26.00             | 18.00             | 382.00          | 778.00       | 1,021.00         | 167.00                      | 129.00                  | 724.00               | 3,650.00       | 85,000.00     |
| Fee (T&M)                  | \$7,781.84 | \$25,482.60       | \$5,803.46        | \$3,640.32        | \$74,982.78     | \$135,263.08 | \$125,970.98     | \$24,861.29                 | \$11,631.93             | \$83,238.28          | \$3,650.00     | \$85,000.00   |

| Project Summary | Hours    | Labor        | Expense    | Subs        | Total        |
|-----------------|----------|--------------|------------|-------------|--------------|
| Fixed Fee       | 0.00     | \$0.00       | \$0.00     | \$0.00      | \$0.00       |
| Time & Material | 3,390.00 | \$498,656.56 | \$3,650.00 | \$85,000.00 | \$590,696.56 |
| Total           | 3,390.00 | \$498,656.56 | \$3,650.00 | \$85,000.00 | \$590,696.56 |

| WBS Code | Task Code | Task Name                        | Units |       |       |       |        |        |        |        |        |          |           |
|----------|-----------|----------------------------------|-------|-------|-------|-------|--------|--------|--------|--------|--------|----------|-----------|
| 1        | 100       | Phase A - Benefit Cost Analysis  | 2.00  | 50.00 | 18.00 | 18.00 | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 100.00   | 0.00      |
| 1.1      |           | Develop Preliminary BCA          | 1.00  | 50.00 | 10.00 | 10.00 |        |        |        |        |        |          |           |
| 1.2      |           | Conduct BCQ QA                   | 1.00  |       | 8.00  | 8.00  |        |        |        |        |        | 100.00   |           |
| 2        | 200       | Phase B - Grant Application      | 2.00  | 58.00 | 8.00  | 0.00  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 100.00   | 0.00      |
| 2.1      |           | Create and submit HMGP           |       | 50.00 |       |       |        |        |        |        |        |          |           |
| 2.2      |           | Conduct HMGP subapplication QC   | 1.00  |       | 8.00  |       |        |        |        |        |        |          |           |
| 2.3      |           | Subapplication submittal support | 1.00  | 8.00  |       |       |        |        |        |        |        | 100.00   |           |
| 3        | 300       | Phase C - Project Definition     | 7.00  | 0.00  | 0.00  | 0.00  | 135.00 | 146.00 | 169.00 | 167.00 | 129.00 | 160.00   | 85,000.00 |
| 3.1      |           | General                          | 4.00  |       |       |       | 72.00  |        |        |        |        |          |           |
| 3.2      |           | Design Allowances*               |       |       |       |       | 16.00  | 40.00  | 80.00  | 36.00  | 20.00  | 1,200.00 | 75,000.00 |
| 3.3      |           | Conceptual Plans Phase           | 3.00  |       |       |       | 27.00  | 90.00  | 57.00  |        | 132.00 |          |           |
| 3.4      |           | Environmental Document (NEPA)**  |       |       |       |       | 20.00  | 16.00  | 32.00  | 131.00 | 109.00 | 24.00    | 10,000.00 |
| 4        | 400       | Phase D - Project Design         | 26.00 | 0.00  | 0.00  | 0.00  | 247.00 | 632.00 | 852.00 | 0.00   | 0.00   | 564.00   | 2,250.00  |
| 4.1      |           | Preliminary Plans                | 2.00  |       |       |       | 129.00 | 278.00 | 531.00 |        |        | 221.00   | 1,000.00  |
| 4.2      |           | Final Plans Phase                | 10.00 |       |       |       | 50.00  | 188.00 | 257.00 |        |        | 289.00   | 500.00    |
| 4.3      |           | Contract Plans                   | 10.00 |       |       |       | 40.00  | 50.00  | 8.00   |        |        | 38.00    | 250.00    |
| 4.4      |           | Construction Services            | 4.00  |       |       |       | 28.00  | 116.00 | 56.00  |        |        | 16.00    | 500.00    |

\*Includes estimated budget for topographic survey and geotechnical investigation/engineering by subconsultant

\*\*Includes estimated budget to complete archeological/historic resources reviews by subconsultant

| Task Type       | Hours    | Labour       | Expense    | Subs        | Total        |
|-----------------|----------|--------------|------------|-------------|--------------|
| Time & Material | 88.00    | \$19,876.24  | \$100.00   | \$0.00      | \$20,064.24  |
| Time & Material | 71.00    | \$16,262.32  | \$0.00     | \$0.00      | \$16,333.32  |
| Time & Material | 17.00    | \$3,613.92   | \$100.00   | \$0.00      | \$3,730.92   |
| Time & Material | 68.00    | \$15,891.42  | \$100.00   | \$0.00      | \$16,059.42  |
| Time & Material | 50.00    | \$11,797.50  | \$0.00     | \$0.00      | \$11,847.50  |
| Time & Material | 9.00     | \$1,996.00   | \$0.00     | \$0.00      | \$2,005.00   |
| Time & Material | 9.00     | \$2,097.92   | \$100.00   | \$0.00      | \$2,206.92   |
| Time & Material | 913.00   | \$129,094.59 | \$1,200.00 | \$85,000.00 | \$216,207.59 |
| Time & Material | 76.00    | \$14,974.16  | \$0.00     | \$0.00      | \$15,050.16  |
| Time & Material | 196.00   | \$27,588.04  | \$1,200.00 | \$75,000.00 | \$103,984.04 |
| Time & Material | 309.00   | \$43,786.89  | \$0.00     | \$0.00      | \$44,095.89  |
| Time & Material | 332.00   | \$42,745.50  | \$0.00     | \$10,000.00 | \$53,077.50  |
| Time & Material | 2,321.00 | \$333,794.31 | \$2,250.00 | \$0.00      | \$338,365.31 |
| Time & Material | 1,161.00 | \$164,998.28 | \$1,000.00 | \$0.00      | \$167,159.28 |
| Time & Material | 794.00   | \$109,538.37 | \$500.00   | \$0.00      | \$110,832.37 |
| Time & Material | 146.00   | \$24,003.70  | \$250.00   | \$0.00      | \$24,399.70  |
| Time & Material | 220.00   | \$35,253.96  | \$500.00   | \$0.00      | \$35,973.96  |

## Chris Jolly

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**From:** Sun, Wenjuan <Wenjuan.Sun@partner.vermont.gov>  
**Sent:** Wednesday, January 15, 2025 3:19 PM  
**To:** Chris Jolly  
**Cc:** seth; Eberhardt, Brian  
**Subject:** Re: [EXTERNAL] Invitation to Apply: Town of Stowe – Stowe Luce Hill Rd Bridge Upgrade

Good afternoon, Chris,

Thanks a lot for reaching out.

FEMA's mitigation programs Typically require a 25% local match. However, VEM covers 100% of local match for the HMGP4720 grant (see the VEM webpage with the link below).

<https://vem.vermont.gov/funding/mitigation>

Please let me know if you have any other questions or concerns. Thanks!

Sincerely,

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**From:** Chris Jolly <cjolly@stowevt.gov>  
**Sent:** Wednesday, January 15, 2025 11:29 AM  
**To:** Sun, Wenjuan <Wenjuan.Sun@partner.vermont.gov>  
**Cc:** seth <seth@lpcvt.org>  
**Subject:** RE: [EXTERNAL] Invitation to Apply: Town of Stowe – Stowe Luce Hill Rd Bridge Upgrade

**EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.**

Hi Wenjuan –

Can you confirm that this HMGP program is 100% funded and there is indeed no local match required?

Chris

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**From:** Sun, Wenjuan <Wenjuan.Sun@partner.vermont.gov>  
**Sent:** Tuesday, September 3, 2024 4:49 PM  
**To:** Chris Jolly <cjolly@stowevt.gov>  
**Cc:** seth@lpcvt.org  
**Subject:** [EXTERNAL] Invitation to Apply: Town of Stowe – Stowe Luce Hill Rd Bridge Upgrade

You don't often get email from [wenjuan.sun@partner.vermont.gov](mailto:wenjuan.sun@partner.vermont.gov). [Learn why this is important](#)

Good afternoon, Chris Jolly,

Thank you for your interest in applying for the FEMA Hazard Mitigation Grant Program (HMGP). Town of Stowe – Stowe Luce Hill Rd Bridge Upgrade project has been determined to be eligible for HMGP funding

and we are inviting you to apply. Please note that this funding round is anticipated to be highly competitive. This invitation is not related to how your project will be scored or prioritized.

Next Steps:

- First, submit a Detailed Scope of Work (see attached template), Budget Narrative (see attached form), and a detailed schedule for our review.
- Then we will need documentation for a [Benefit Cost Analysis](#) demonstrating that the project is likely cost-effective.
- Please provide the conceptual design and the scoping study (2022) mentioned in the pre-application.

If you need technical assistance or have any questions, please reach out to setup a time to meet with me. You can send all materials back to me. Once received, Vermont Emergency Management will review your materials and return to you with next steps. Application materials for this bridge upgrade, once requested, can be found at [Infrastructure Projects](#). For general information about the grant or program, please visit [here](#).

Sincerely,

**Wenjuan Sun**

Hazard Mitigation Program

Vermont Emergency Management

Cell: (540) 577-0629

[wenjuan.sun@partner.vermont.gov](mailto:wenjuan.sun@partner.vermont.gov)

**\*\* WARNING \*\***

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