



*William Cass, P.E.*  
Commissioner

**THE STATE OF NEW HAMPSHIRE**  
**DEPARTMENT OF TRANSPORTATION**

74B



*David Rodrigue, P.E.*  
Assistant Commissioner  
*Andre Briere, Colonel, USAF (RET)*  
Deputy Commissioner

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

Bureau of Highway Design  
May 2, 2023

**REQUESTED ACTION**

Authorize the Department of Transportation to enter into an Agreement with T.Y. Lin International, Falmouth, ME, Vendor #452169, for an amount not to exceed \$553,352.68, for a Planning level corridor study of NH Route 111 in Windham, NH, effective upon Governor and Council approval through July 31, 2025. Funding Type (100% Federal Funds).

Funds to support this request are available in the following account in State FY 2023 and funding is contingent upon the availability and continued appropriation of funds in FY 2024 and FY 2025, with the ability to adjust encumbrances between State Fiscal Years through the Budget Office if needed and justified:

	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>
04-096-96-963515-3054 Consolidated Federal Aid 046-500464 Gen Consultants	\$200,000	\$300,000	\$53,352.68

**EXPLANATION**

The Department requires Planning level corridor study of NH Route 111 in Windham, NH from the intersection of Ledge Road / London Bridge Road easterly approximately 1.6 miles to the Wall Street / NH Route 111 intersection. This work will also include extending the traffic analysis only from the intersection with NH Route 128 to the intersection of Wall Street. This project is included in the State's Ten-Year Transportation Improvement Plan (Windham 40663).

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 Windham 40663, Corridor Study. The assignment was listed as a "Project Soliciting for Interest" on the Department's website on October 11, 2019, 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 December 12, 2019, for consideration and approval by the Assistant Commissioner. Upon receipt of that approval, five (5) shortlisted firms were notified on February 26, 2020, through a technical "Request for Proposal" (RFP). Committee

members individually rated the firms on April 9, 2020, 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 development of the scope and fee for this project has been delayed and protracted due to resources and other project priorities but is now ready to move forward.

The long list of five (5) consultant firms that were considered for this assignment, with the three (3) short-listed firms shown in bold, is as follows:

Consultant Firm

Office Location

**McFarland-Johnson, Inc.**  
Sebago Technics, Inc.  
**Sewall**  
TEC, Inc.  
**T.Y. Lin International**

**Concord, NH**  
South Portland, ME  
**Old Town, ME**  
Hampton, NH  
**Falmouth, ME**

The firm of T.Y. Lin International 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.

T.Y. Lin International has agreed to furnish the professional engineering services for an amount not to exceed \$553,352.68. 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,



William J. Cass  
Commissioner

Attachments

**PROJECT: Windham 4066J Corridor Study**

**DESCRIPTION:** Planning level corridor study of NH Route 111 in Windham, NH from the intersection of Lodge Road / London Bridge Road easterly approximately 1.6 miles to the Wall Street / NH Route 111 intersection. This work will also include extending the traffic analysis only from the intersection with NH Route 128 to the intersection of Wall Street. The purpose of the project is to update and extend the July 2011 planning level corridor study (<http://windhamnh.gov/200/NH-Route-111-Corridor-Wall-Street-Extension>) to consider public transit including bicycle use, transit pull off and sidewalks. The project should also consider opportunities to enhance the Town Center, located on NH Route 111 (see also conceptual beautification plans <https://www.windhamnh.gov/272/Town-Center-Beautification-Sub-Committee>). The project should be developed considering complete streets and context sensitive designs. This study should be an effective tool for assessing existing conditions, developing a preferred future condition, and offering interim fixes for transitioning the corridor. Other considerations may include: Define and assess acceptable levels of access and mobility; Determine transportation system needs to support surrounding land uses; Consolidate and control access points; Consider roundabouts in the design as shown in the July 2011 study recommendations; Identify operational deficiencies and promote operational efficiency; Maximize existing infrastructure and consider future infrastructure improvements; Improve safety conditions; Identify congestion reduction; Traffic analysis; Stormwater concepts and considerations; and Cost estimates. The study shall include conceptual engineering plans for inclusion in the final report and shall be developed in sufficient detail to establish a geometric framework to guide future improvement projects in the Corridor and to create planning level cost estimates for such improvements. Environmental efforts are needed to evaluate the proposed alternatives. The Consultant will also be required to assist the Department in the public involvement process including working with a Public Advisory Committee.

T O T A L	R A N K
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McFarland-Johnson, Inc.	1	2	1	2	2	2	10	2
James W. Sewall Company	3	3	3	3	3	3	18	3
T.Y. Lin International, Inc.	2	1	2	1	1	1	8	1

**EVALUATION OF TECHNICAL PROPOSALS**

Rating Considerations	Scoring of Firms			
	W E I G H T	McFarland-Johnson, Inc.	James W. Sewall Company	T.Y. Lin International, Inc.
Comprehension of the Assignment	20%	18	15	17
Clarity of the Proposal	20%	18	15	17
Capacity to Perform in a Timely Manner	20%	20	17	16
Quality & Experience of Project Manager/Team	20%	20	17	19
Previous Performance	10%	10	7	9
Overall Suitability for the Assignment	10%	10	7	9
<b>Total</b>	<b>100%</b>	<b>98</b>	<b>78</b>	<b>87</b>

- Ranking of Firms:
1. MJ
  2. Ty Lin
  3. Sewall

**EVALUATION OF TECHNICAL PROPOSALS**

Rating Considerations	Scoring of Firms			
	W E I G H T	McFarland-Johnson, Inc.	James W. Sewall Company	T.Y. Lin International, Inc.
Comprehension of the Assignment	20%	19	15	19
Clarity of the Proposal	20%	18	16	19
Capacity to Perform in a Timely Manner	20%	17	17	19
Quality & Experience of Project Manager/Team	20%	20	18	18
Previous Performance	10%	10	7	9
Overall Suitability for the Assignment	10%	9	7	10
<b>Total</b>	<b>100%</b>	<b>93</b>	<b>80</b>	<b>94</b>

- Ranking of Firms:
1. TYLIN
  2. MJ
  3. SEWALL

**EVALUATION OF TECHNICAL PROPOSALS**

Rating Considerations	Scoring of Firms			
	W E I G H T	McFarland-Johnson, Inc.	James W. Sewall Company	T.Y. Lin International, Inc.
Comprehension of the Assignment	20%	19	17	19
Clarity of the Proposal	20%	18	18	17
Capacity to Perform in a Timely Manner	20%	16	15	17
Quality & Experience of Project Manager/Team	20%	18	16	16
Previous Performance	10%	9	7	9
Overall Suitability for the Assignment	10%	9	7	8
<b>Total</b>	<b>100%</b>	<b>89</b>	<b>80</b>	<b>86</b>

- Ranking of Firms:
1. MJ
  2. TYLIN
  3. SEWALL

**EVALUATION OF TECHNICAL PROPOSALS**

Rating Considerations	Scoring of Firms			
	W E I G H T	McFarland-Johnson, Inc.	James W. Sewall Company	T.Y. Lin International, Inc.
Comprehension of the Assignment	20%	18	17	18
Clarity of the Proposal	20%	18	17	18
Capacity to Perform in a Timely Manner	20%	19	18	18
Quality & Experience of Project Manager/Team	20%	9	8	9
Previous Performance	10%	8	7	8
Overall Suitability for the Assignment	10%	8	7	9
<b>Total</b>	<b>100%</b>	<b>90</b>	<b>84</b>	<b>91</b>

- Ranking of Firms:
1. T.Y. Lin International
  2. McFarland-Johnson, Inc.
  3. James W. Sewall

**EVALUATION OF TECHNICAL PROPOSALS**

Rating Considerations	Scoring of Firms			
	W E I G H T	McFarland-Johnson, Inc.	James W. Sewall Company	T.Y. Lin International, Inc.
Comprehension of the Assignment	20%	18	16	20
Clarity of the Proposal	20%	15	16	18
Capacity to Perform in a Timely Manner	20%	20	18	18
Quality & Experience of Project Manager/Team	20%	19	16	20
Previous Performance	10%	10	5	5
Overall Suitability for the Assignment	10%	9	6	10
<b>Total</b>	<b>100%</b>	<b>91</b>	<b>77</b>	<b>91</b>

- Ranking of Firms:
1. TY LIN
  2. MJ
  3. SEWALL

**EVALUATION OF TECHNICAL PROPOSALS**

Rating Considerations	WEIGHT	Scoring of Firms		
		McFarland-Johnson, Inc.	James W. Sewall Company	T.Y. Lin International, Inc.
Comprehension of the Assignment	20%	19	17	19
Clarity of the Proposal	20%	17	15	18
Capacity to Perform in a Timely Manner	20%	17	15	18
Quality & Experience of Project Manager/Team	20%	17	16	17
Previous Performance	10%	8	7	9
Overall Suitability for the Assignment	10%	9	6	10
<b>Total</b>	<b>100%</b>	<b>87</b>	<b>76</b>	<b>91</b>

- Ranking of Firms:
1. T.Y. Lin
  2. M.J. INC
  3. James W. Sewall

11/1

TABLE OF CONTENTS

**PREAMBLE**

<b>ARTICLE I - DESCRIPTION OF PROFESSIONAL SERVICES TO BE RENDERED .....</b>	<b>2</b>
A. LOCATION AND DESCRIPTION OF PROJECT .....	2
B. SCOPE OF WORK (GENERAL) .....	3
C. SCOPE OF WORK (ENVIRONMENTAL) .....	3
D. SCOPE OF WORK (CONCEPTUAL ENGINEERING) .....	10
E. SCOPE OF WORK (UTILITIES) .....	20
F. SCOPE OF WORK (PUBLIC PARTICIPATION) .....	20
G. MATERIAL FURNISHED BY THE DEPARTMENT OF TRANSPORTATION .....	23
H. WORK SCHEDULE AND PROGRESS REPORTS .....	24
I. SUBMISSION OF REPORTS, PLANS AND DOCUMENTS .....	25
J. DATE OF COMPLETION .....	28
<b>ARTICLE II - COST PLUS FIXED FEE COMPENSATION OF CONSULTANT .....</b>	<b>29</b>
A. GENERAL FEE .....	29
B. LIMITATION OF COSTS .....	30
C. PAYMENTS .....	31
D. ANNUAL INDIRECT COST RATE SUBMISSIONS .....	31
E. RECORDS, REPORTS, AND FINAL AUDIT .....	32
<b>ARTICLE III - GENERAL PROVISIONS .....</b>	<b>33</b>
A. HEARINGS, ETC. ....	33
B. CONTRACT PROPOSALS .....	33
<b>ARTICLE IV - STANDARD PROVISIONS .....</b>	<b>34</b>
A. STANDARD SPECIFICATIONS .....	34
B. REVIEW BY STATE AND FHWA - CONFERENCES - INSPECTIONS .....	34
C. EXTENT OF CONTRACT .....	34
1. Contingent Nature of Agreement .....	34
2. Termination .....	34
D. REVISIONS TO REPORTS, PLANS OR DOCUMENTS .....	35
E. ADDITIONAL SERVICES .....	36
F. OWNERSHIP OF PLANS .....	36
G. SUBLETTING .....	37
H. GENERAL COMPLIANCE WITH LAWS, ETC. ....	37
I. BROKERAGE .....	37
J. CONTRACTUAL RELATIONS .....	38
1. Independent Contractor .....	38
2. Claims and Indemnification .....	38
3. Insurance .....	38
4. No Third-Party Rights .....	39
5. Construction of Agreement .....	39
K. AGREEMENT MODIFICATION .....	39
L. EXTENSION OF COMPLETION DATE(S) .....	39

M.	TITLE VI (NONDISCRIMINATION OF FEDERALLY-ASSISTED PROGRAMS)	
	COMPLIANCE .....	40
N.	DISADVANTAGED BUSINESS ENTERPRISE POLICY REQUIREMENTS .....	41
	1. Policy .....	41
	2. Disadvantaged Business Enterprise (DBE) Obligation.....	41
	3. Sanctions for Non-Compliance.....	42
O.	DOCUMENTATION .....	42
P.	CLEAN AIR AND WATER ACTS .....	42

**ATTACHMENTS**

- A. SPECIAL CONTRACT PROVISIONS FOR COVID-19
- 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

WINDHAM  
X-A004(461)  
40663  
(CORRIDOR STUDY)

**AGREEMENT  
FOR PROFESSIONAL SERVICES**

**PREAMBLE**

THIS AGREEMENT made this 3<sup>rd</sup> day of May in the year 2023 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 T.Y. Lin International, with principal place of business at 345 California Street, Suite 2300, in the City of San Francisco, State of CA, and New England Regional Office at 12 Northbrook Drive, in the Town of Falmouth, State of Maine, hereinafter referred to as the CONSULTANT, witnesses that:

The Department of Transportation, State of New Hampshire, hereinafter referred to as the DEPARTMENT, proposes to complete a planning level corridor study of NH Route 111 (Corridor Study) in Windham, NH from the intersection of Ledge Road/London Bridge Road easterly approximately 1.6 miles to the Wall Street/NH Route 111 intersection.

The DEPARTMENT requires professional planning, engineering, traffic, public involvement and environmental consulting services to update and extend the July 2011 NH Route 111 planning level corridor study. The study shall include conceptual engineering plans for inclusion in the final report and shall be developed in sufficient detail to establish a geometric framework to guide future improvement projects in the corridor and to create planning level cost estimates for such improvements. This study shall take a context sensitive approach and shall consider intermodal transportation needs for automobiles, commercial vehicles, public transit, bicycles and pedestrians; consider enhancements (aesthetics, pedestrian mobility, access connectivity, etc.) recommended in the proposed Town Center Beautification Plan; and assist the DEPARTMENT in the public involvement process. These services are outlined in 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 update and extension of the July 2011 corridor study for NH Route 111 in Windham, NH from the intersection of Ledge Road/London Bridge Road easterly approximately 1.6 miles to the Wall Street/NH Route 111 intersection. This work will also include extending the traffic analysis to include the intersection with NH Route 128. Some of the existing highway features and conditions to be aware of include:

- The lack of consistent shoulders or sidewalks hinders the mobility of non-motorized users.
- The project will need to consider and implement access management measures, where possible.
- There is potential for a proposed Town owned water line running parallel to NH Route 111.
- The Town is currently working on a Beautification Plan for the Town Center, the study alternatives should take the Beautification Plan into consideration so as not to adversely impact their project.
- The corridor is subject to high peak period traffic, which restricts mobility particularly in the vicinity of key intersections.
- The July 2011 Corridor Study included bypass alternatives for Wall Street and the NH Route 111 Bypass. These are not proposed as a part of this update.
- For the purposes of the study, the Corridor width is considered to be 100 feet each side of centerline.
- NH Route 111 in Windham is on the State Bicycle Route map as a preferred route.
- There are floodplains within the project limits.

The objective of the project is to identify priority needs that will improve the safety and mobility of all users and improve access management with the central goal of achieving an appropriate balance between the needs of motorized and non-motorized users of the corridor. As the development of the corridor study proceeds, it will be important to work closely with the Public Advisory Committee (PAC), established as a part of this project, as well as all other appropriate public or private stakeholders to gain consensus on decisions. This could include bicycle advocacy groups. PAC meetings are intended to discuss and reach consensus on local desires for the highway improvements. The PAC will act in an advisory role only.

## ARTICLE I

The goal of the study is to identify improvements for inclusion in a future Ten-Year plan with planning level construction cost estimates and will consider the following tasks: public outreach, existing conditions, future conditions, concept development, alternative analysis, recommended corridor plan/report documentation, and project management/administration.

### **B. SCOPE OF WORK (GENERAL)**

The study shall include transit considerations as well as pedestrian and bicycle facilities that consider accessibility. The study should be supported through Context Sensitive Solutions and complete street approaches. The study recommendations shall be technically feasible, environmentally permissible, and financially feasible. This study will include a dynamic public participation program involving public officials, public and private stakeholders, and the general public in the decision-making process through the use of an effective public outreach program, including engagement with a Public Advisory Committee.

The study shall consider traffic control measures, drainage, treatments to minimize environmental impacts (including approximate Best Management Practice (BPM) placement), traffic volume counts, traffic analysis, overhead highway signs with significant supports, traffic control signals, roundabouts, pavement markings, and current and future access management techniques and recommendations.

The CONSULTANT is responsible for preparing all meeting minutes.

### **C. SCOPE OF WORK (ENVIRONMENTAL)**

The CONSULTANT shall be responsible for developing the corridor study considering the environmental and community resources and impacts to those resources with the alternatives within the study area:

#### **1. Data Collection:**

The CONSULTANT shall review relevant data sources to identify any and all resources present within the Project Area. Additional effort may be needed for the listed resources below to identify additional impacts, potential measures to minimize or mitigate impacts, as well as possible proposed enhancements. Resources to be identified include:

##### **a. Water-Based Resources:**

- 1) **Groundwater:** Data regarding aquifers, public water supplies and wells within the study area will be gathered from appropriate sources such as the GRANIT GIS database, NHDES mapping, NHDES Drinking Water and Groundwater Bureaus, inventory data, and municipal data or municipal mapping. The CONSULTANT will describe these resources and display them on project mapping. Data will also be needed to identify any sensitive resources directly adjacent and potentially down gradient of the project

## ARTICLE I

area. The mapped resources will be assessed and described in terms of their current and potential use and their relative proximity and potential hydrological connection to the project area. In addition, consideration shall be given for the protection of drinking water supplies, as well as stormwater conveyance and treatment in the vicinity of the drinking water supplies and wellhead protection areas as related to the project.

- 2) Surface Waters: All current regulatory requirements and constraints associated with water-based resources will be identified and summarized. The CONSULTANT shall coordinate with the appropriate regulatory agencies. Data regarding existing surface waters and water quality will be gathered and documented. The CONSULTANT will review the most recently approved State 303(d) list to identify water quality impairments and TMDLs within the project area. The CONSULTANT will compile existing TMDL implementation plans, watershed management plans, and active water quality related permits including, but not limited to, NHDES Alteration of Terrain (AoT) and EPA NPDES for Small Municipal Separate Storm Sewers (MS4). Federal and State permits that will be required will be identified, such as but not limited to the MS4 General Permit, Army Corps of Engineers (ACOE) permit and Water Quality Certificate. The CONSULTANT will investigate appropriate water quality treatment measures necessary to minimize project related nutrient impacts on surface waters. The project is located within an MS4 regulated area and will be subject to MS4 redevelopment requirements for stormwater treatment. The CONSULTANT shall evaluate the Redevelopment requirements of the most recently issued MS4 permit; and AoT permit requirements.
- 3) Floodplains and Floodways: Federal Emergency Management Agency (FEMA) floodplain and floodway information will be gathered from appropriate sources and displayed on project mapping. This information will be used to assess the status of anticipated preliminary impacts and quantify the volume of impacted floodplain and floodway.
- 4) Wetlands: The CONSULTANT will identify wetland resources based on a review of available mapping from GRANIT, NHDES OneStop, NWI and other online sources. Additionally, a "windshield" survey will be completed, and wetland areas will be photo documented. The windshield survey will include noting any unusual features such as invasive species, disturbed areas, or uncommon wetland types such as bogs or vernal pools. As required, the CONSULTANT will identify, at a high level, impact areas or basic options available for mitigation such as payment into the Aquatic Resource

## ARTICLE I

Mitigation Fund. This effort will need to be coordinated with the municipality. Formal wetland delineations will not be completed.

- 5) Stream Crossings: The CONSULTANT will identify all intermittent and perennial stream crossings within the project study limits based on a review of available mapping from GRANIT, NHDES OneStop, NWI and other online sources. Additionally, a "windshield" survey will be completed, and stream crossings will be photo documented. The CONSULTANT will determine the watershed size for each crossing using the USGS Stream Stats tool. The CONSULTANT will also determine the corresponding Tier classification in accordance with the NHDES Stream Crossing Rules Env-Wt 900 series to aid in determination of a design for a stream crossing that meets the NHDES Stream Crossing Guidelines and/or alternative design. Environmental resources identification will be limited to a review of available mapping.

b. Land-Based Resources:

- 1) Soils: Data on soil series mapped within the study area, including the distribution of prime, statewide, local, or unique farmland soils, will be obtained from the GRANIT GIS database and the NRCS web soil survey.
- 2) Public and Conserved Lands: Publicly owned lands, bicycle and pedestrian trails, and privately conserved lands will be identified. This will also include coordination with public officials including the LCIP and the LCHIP programs.
- 3) Section 4(f) Resources: Publicly owned Parks, recreational areas, historic sites, or other areas subject to Section 4(f) within and adjacent to the project corridor will be identified. As necessary, the CONSULTANT will identify Section 4(f) resources that may be impacted by the project and require additional evaluation.
- 4) Section 6(f) Resources: Lands receiving Section 6(f) funds will be identified based on coordination with the NH Department of Natural and Cultural Resources (DNCR). Section 6(f) properties will be identified, as well as potential impacts to 6(f) properties.

c. Wildlife:

- 1) Wildlife and Habitat: Wildlife resources will be identified with information from the NH Wildlife Action Plan and supplemented as needed by field reconnaissance. The CONSULTANT will identify areas where habitat connectivity could be improved based on field observations, aerial imagery, and other publicly available data.
- 2) Fisheries: The fisheries resource information will be identified based on coordination with NH Fish and Game and the US National Marine Fisheries Service.3)

## ARTICLE I

Threatened and Endangered Species: Threatened and endangered species information will be gathered by the CONSULTANT through coordination with the NH Fish and Game Department, the US Fish and Wildlife Service, and the Natural Heritage Bureau. The CONSULTANT will use the US Fish and Wildlife Service's on-line Information for Planning and Consultation (IPaC) tool for review of identified federally-listed species. No field surveys for threatened and endangered species is included.

d. Cultural Resources (Historic):

The CONSULTANT will prepare and submit, through the DEPARTMENT, a NH Division of Historical Resources (NHDHR) Request for Project Review (RPR) form for Transportation projects. The anticipated tasks for this project are:

- 1) Preparation of the Request for Project Review (RPR) form for NHDHR, which will include fieldwork and photography of all buildings in the study area, research, file review via EMMIT (online records search hosted by NHDHR) to identify all previously surveyed properties and other buildings more than fifty years old, and production of the report, with photographs, table of properties and mapping.
- 2) Mitigation is not included.
- 3) Assume attendance at one Cultural Resource meeting.

e. Cultural Resources (Archaeology):

The CONSULTANT will undertake a Phase IA Archaeological Sensitivity Assessment. The CONSULTANT will produce a comprehensive report indicating the results of the investigations, identifying areas of sensitivity, and presenting recommendations for the next appropriate step.

The archeological study will entail Phase I-A preliminary reconnaissance to address archeological resource sensitivity for the project area which includes a 1.6-mile segment of NH Route 111 between London Bridge Road and Enterprise Drive in Windham, NH. The following provides a discussion of individual tasks that will be completed for the proposed archeological survey. A combined research and field investigation approach will be used to address known and likely archeological resources. The potential for pre-contact Native American and post-contact historic period European-American archeological resources will be considered in this survey.

The Phase I-A survey will include the following:

- 1) Project initiation and notification to proceed, confirmation of survey parameters, schedule and other details. Confirm survey approach with NH DOT Cultural

## ARTICLE I

- Resources personnel. Field investigation is dependent on weather.
- 2) Literature review and background documentary research to provide information on history of land use within the project area. This will entail review of a variety of source materials including: the EMMIT NH DHR data base to identify any previously completed surveys or archeological sites in the immediate locale, as well as any historic properties, districts or areas that may provide overall context for archeological resources; historic town maps; historic topographic maps; Granit-View stone wall mapping; soils mapping; NH Old Graveyards data base; and State or National Register property listings. This step will identify any previously recorded resources on the property and develop expectations for archeological resource potential. Literature review will be completed prior to field investigation.
  - 3) Field inspection will be completed within the study area during walkover survey. For the purpose of this survey, the study area is defined as a 1.6-mile segment of NH Route 111, addressing up to 100 feet on either side of the roadway. During this step, visual inspection will confirm any previously recorded resources and will record any new archeological resources visible on the ground surface. Visual inspection will also identify stone walls and graveyards. The relationship of the project area to any previously recorded sites in the general locale will be noted. Prevalent conditions will be noted, such as topography, terrain, soil qualities, drainage, and any visible evidence of prior impact. Review or evaluation of standing buildings will not be completed. Any zones exhibiting archeological resource sensitivity will be recorded and sketched onto project plans. Notation will be made, and representative photographs will be taken. Field inspection can be completed only during non-winter conditions.
  - 4) Following field inspection, all field and research information will be compiled in preparation for report writing. This will include field notes, photos and mapping. Data will be correlated with proposed impact areas.
  - 5) If no archeological sites and no areas of archeological resource sensitivity are found during research and field inspection, a NHDHR Short Report will be prepared and no further archeological survey will be recommended.
  - 6) If areas of archeological sensitivity are identified and are to be impacted by the project, recommendations will be made for continued Phase I-B archeological

## ARTICLE I

survey. Recommendations will be communicated for any continued efforts in an End-of-Field Letter.

- 7) Cultural resource results will be compiled for review. Depending on results, this will include the End-of-Field Letter, Bibliography Form and Short Report, Archeology Site Form, or Archeology Report.
- 8) For the purpose of this scope, it is assumed that:
  - i. Survey will be completed for a 1.6-mile section. An additional 2-mile traffic analysis section is not applicable
  - ii. Survey will address up to a 100-foot width, and up to 5 acres for storm water treatment areas.
  - iii. Survey will include stone wall identification and up to 2 archeological sites or graveyards
  - iv. Survey will not address historic standing buildings, bridges or other above-ground elements
  - v. Survey will not include subsurface sampling
  - vi. Survey will not include participation in public meetings or hearings
  - vii. Up to one agency meeting will be attended, involving NHDOT and/or NH Division of Historical Resources.

f. Social and Economic Resources:

The CONSULTANT will conduct a socio-economic analysis of the regional social and economic resources. The CONSULTANT will identify the socio-economic relationship between the study area transportation/circulation pattern (including bicycles, pedestrians, access management and transit), regional and adjacent municipalities' Master Plans, and the businesses and residents within its immediate influence. This will require corresponding with the local and regional planners, and review of local and regional plans. Zoning in the project study area will be identified and US Census data will be used to summarize population and employment trends. The types of economic activity along the corridor and its regional importance will be summarized in a report.

g. Noise:

The CONSULTANT shall identify which alternatives may result in a Type I noise project. A detailed analysis will not be performed.

h. Air Quality:

The CONSULTANT shall verify and update the air quality conditions in the previous feasibility study. A detailed analysis will not be performed.

## ARTICLE I

i. Invasive Species:

The CONSULTANT will determine the presence of invasive species in conjunction with other project field investigations. General locations and types will be identified within the project limits, approximate limits of populations will be located on the base map.

j. Contamination:

A database (NHDES OneStop and PFAS datamapper) search will be undertaken to identify areas with records of Per- and Polyfluoroalkyl Substances (PFAS), hazardous materials, or contamination within 1,000 feet of the project limits and landfills within 4,000 feet of the project limits. This work will also require a review of historic aerial photographs to evaluate past and current land use, and windshield surveys of the project area to look for observable physical evidence of contamination or potential contamination sources within and adjacent to the existing ROW. This information will be described in a summary report that includes a list of all parcels with potential contamination concerns. The CONSULTANT will coordinate with the DEPARTMENT's Contamination Program to confirm findings, and will assess measures required to conduct subsurface investigations within areas of potential contamination which will be described in the summary report. The CONSULTANT will coordinate with the DEPARTMENT on evaluating the presence of Limited Reuse Soil (LRS), known asbestos or lead paint on existing bridges, and in determining future investigation requirements of the project.

k. Detailed Resource Identification and Mitigation:

The CONSULTANT shall identify existing natural, cultural, social, and economic resources to a level sufficient to evaluate impacts of the alternatives. The study area for this effort shall be the corridor occupied by the highest priority (Recommended Alternative) of the Alternative selected, considering input from state and federal resource agencies, Town Officials, and the public. Resource identification will be based upon the proposed conceptual engineering scope for the Recommended Alternative. Changes in project design or the Recommended Alternative requiring additional identification of resources will be considered supplemental to the Contract.

l. Visual Resources:

The CONSULTANT will identify visually sensitive areas along the corridor, such as residential neighborhoods or public parks. The changes in visual appearances in these areas will be described in general terms.

2. Agency Coordination:

In total, the CONSULTANT will attend up to one of the DEPARTMENT's monthly Natural

## ARTICLE I

Resource Agency meetings and coordinate a field meeting, if needed, with the agencies to review resource impacts. The CONSULTANT will also attend up to one of the DEPARTMENT's monthly Cultural Resource meetings, with the FHWA and the NH Division of Historical Resources to discuss historic resources and Section 106 findings. The CONSULTANT will be responsible for supplying support graphics and making presentations.

### 3. Project Purpose and Need:

The CONSULTANT, in conjunction with the Department with input from the PAC and Town, will update the Project Problem and Visions statements in the previous feasibility study. Draft and final versions will be developed and circulated for review.

### 4. Alternatives Development and Evaluation:

The CONSULTANT will develop a Summary Matrix of the impacts and effects of the design alternatives for use by the DEPARTMENT and stakeholders to evaluate the proposed alternatives. The alternatives screening and selection process will be summarized in the corridor study.

### 5. Environmental Impacts of Alternatives:

The CONSULTANT will identify resource impacts, potential measures to minimize or mitigate impacts, and possible resource enhancements that could be achieved by the proposed alternative.

## D. SCOPE OF WORK (CONCEPTUAL ENGINEERING)

1. Existing Conditions: The CONSULTANT will perform an existing conditions analysis. The existing condition assessment will be extended to match the updated project limits. The goal is to identify and document the existing and future problem areas from an operational, multi-modal, and safety perspective. The CONSULTANT will:

a. Establish design criteria for NH Route 111. Review existing conditions along the corridor and identify deficiencies and constraints. This review will include, but is not limited to, vertical and horizontal geometric controls as it pertains to the design speed limit, stopping/passing/intersection sight distances, vertical/horizontal curvature.

b. Collect and compile current traffic data and traffic volumes. The CONSULTANT will work with the RPC and obtain current traffic data for the corridor, including the extension to the intersection of NH Route 111 with NH Route 128. This will also include ATR counts and speed data at four locations.

i. The CONSULTANT shall collect Intersection Turning Movement Counts (TMCs) on a Tuesday, Wednesday, or Thursday (that is not the day before, during or after a holiday), when school is in session and businesses are open, and is not between Thanksgiving and New Year's Day. The counts will be

## ARTICLE I

performed during a time period when pedestrian and bicycle activity would not be influenced by winter conditions. These counts may need to be adjusted for COVID 19, coordinate with the Bureau of Traffic on these factors. The DEPARTMENT expects the counts to be performed between 6-9 AM and between 2-6 PM on days where snow is not expected at the following intersections with NH Route 111.

1. Wall Street/Enterprise Drive
2. Village Green Shopping Center/Post Office Drive
3. Commons Shopping Center Easterly Driveway
4. Irving Driveway/Commons Shopping Center
5. Church Road/Dunkin Donuts
6. North Lowell Road/Fellows Road
7. Lowell Road/Hardwood Road
8. London Bridge Road/Ledge Road
9. Balmora Road
10. Anderson Road

~~11. NH Route 128~~

ii. For signal warrant analysis 12 hour counts shall be taken at the following locations:

1. Commons Shopping Center Easterly Driveway
2. Irving Driveway/Commons Shopping Center
3. Church Road/Dunkin Donuts
4. Balmora Road
5. Anderson Road

iii. The traffic counts will be classified into six categories: passenger vehicles, motorcycles, single unit trucks/buses, tractor-trailers, pedestrians, and bicycles.

iv. The CONSULTANT will review the raw traffic count data and develop morning and afternoon peak-hour turning movement diagrams, calculate truck percentages and peak hour factors, and balance the traffic volumes along the roadway network for the morning and evening peak hours with discrepancies applied to high volume driveways based on engineering judgment, as may be needed. Adjustments to account for seasonal influences will be coordinated with NHDOT.

## ARTICLE I

2. Create a detailed base map using existing available aerial mapping sources (the most recent orthorectified digital aerial photographs will be provided by the DEPARTMENT), site visits, previously completed plans, and previously completed survey and LiDAR data from which resources and transportation improvements can be studied. A topography/boundary survey is not included. The base plan shall be appropriately enhanced for display purposes at technical and public meetings and in documents prepared for this study. The map should contain, but not be limited to the following: points of interest, wetlands mapping and mapping for other applicable environmental resources (including, but not limited to public and conserved lands (such as parks and 4(f) resources), 6(f) resources, trails, historic properties and districts, farmlands, land use, floodplains/floodways, soils, contaminated properties and materials (including LRS and PFAS), surface waters, aquifers, threatened and endangered species, as well the condition of drainage features, right-of-way and utility information, shall be superimposed on the base plan by the CONSULTANT, as directed by the DEPARTMENT.
  - a. The CONSULTANT shall collect any pertinent information available within the Project Limits including lane geometries, traffic control information, or other available materials. The CONSULTANT shall conduct a field review of the project area to identify key engineering controls, topographic features, natural and cultural resource constraints, and land uses that could have a bearing on the concept design.
  - b. Research to generally determine the width of the State Right-of-Way will be undertaken. This effort is limited to research at the DEPARTMENT and the County Registry and does not include field survey or boundary determination within the project limits.
3. Concept Evaluation Considerations. Improvement concepts will be developed based on priority segments determined with input from RPC, PAC, stakeholders, and municipality. The improvements will be displayed on the base map created above. The proposed improvements will be evaluated based on cost, benefit, resource impacts, and other controlling features. Concepts will include bicycle and pedestrian accommodations.
4. Traffic Data Analysis, Traffic Modeling and Analysis:

As noted above, the CONSULTANT shall gather traffic volume data, including turning movement count data (passenger vehicles, motorcycles, single unit trucks/buses, tractor-trailers, pedestrians, and bicycles), as needed coordinating with the DEPARTMENT, the Town of Windham and the RPC to analyze existing and future traffic operations under both no-build and build conditions. The traffic collection and analysis effort shall provide the statistics required for evaluating design concepts. Macroscopic and microscopic evaluations will be undertaken for the alternatives. The CONSULTANT will coordinate with NHDOT Bureaus of Highway Design

## ARTICLE I

and Traffic regarding traffic modeling guidelines prior to starting any traffic modeling.

- a. The CONSULTANT shall develop future traffic volumes. The traffic count data will be collected and gathered and then adjusted to reflect a common time period. Growth rates will be developed after consulting the RPC regional model, regional transportation and land use plans, local development plans and historical traffic count data. The CONSULTANT will adjust existing traffic-volume conditions to develop Design Year traffic-volume conditions. The Design Year shall be 35 years beyond the existing conditions year. These future traffic volumes shall also consider and include available traffic data or traffic impact studies from significant private developments that may impact the corridor, as identified and provided by the Town of Windham and RPC officials.
- b. The CONSULTANT shall evaluate intersection operations: A Synchro and a Sim Traffic model will be built for the NH Route 111 project corridor. The corridor will be limited to NH Route 111 and will not include parallel roadways. Capacity and queuing analysis will be conducted for the existing year, design year (no-build), and up to three (3) design year build scenarios reflecting unique combination of intersection designs based on Weekday AM and PM peak hours. The CONSULTANT will be required to produce documentation on how the microscopic model is calibrated. It is assumed that calibration will be based on a field study that documents vehicle queues and delays at the time of the traffic counts. The results of the traffic analyses will be presented in the Traffic Report that will be submitted to NHDOT for review prior to the design report. Traffic analysis will be reported in terms of Level of Service (LOS) based on delay outputs from Synchro and queue data from SimTraffic. The anticipated traffic analysis scenarios include the following:
  - 1) Existing Condition
  - 2) Design Year (No-Build)
  - 3) Design Year Build – Design Alternative 1
  - 4) Design Year Build – Design Alternative 2
  - 5) Design Year Build – Design Alternative 3
- c. The CONSULTANT shall document bicycle and pedestrian demand according to the existing traffic counts. Additionally, existing infrastructure (e.g. sidewalks, crosswalks, shoulder space, etc.) will be inventoried for documentation purposes. To support use of a broad set of transportation modes, an analysis of the localized bicycle and pedestrian demand from key existing and future land use generators will be conducted. The

## ARTICLE I

CONSULTANT will also seek guidance from the DEPARTMENT, the Town and the RPC on estimating future demand. This analysis will help identify the more important locations to install bicycle and pedestrian infrastructure to ensure the areas with high potential use are served.

The CONSULTANT shall map bicycle and pedestrian key generators and demand as collected during the traffic count program. A map will be incorporated into the public outreach effort to support identification of areas of bicycle and pedestrian demand, identify existing areas of local concern, and engage stakeholders.

To evaluate corridor options, the CONSULTANT will develop possible right-of-way alternatives and score them in terms of how each meets different mobility goals including enhancing transit operations, increasing vehicular, bicyclist and pedestrian safety, minimizing capital and maintenance costs, and maintaining vehicular capacity. The CONSULTANT will also provide technical guidance and recommendations for the conceptual engineering plans developed for the corridor, including bicycle treatments, the design and placement of future bus stops and bus stop pull outs, and pedestrian connectivity along the 1.6-mile length. The recommendations will focus on safe, accessible design treatments at key intersections, where interactions among modes present the greatest challenges. Each recommendation will include planning level cost estimates.

- d. Traffic modeling should include analysis for all evaluation years with major private developments as identified by the Town of Windham and RPC officials. Localized development trip generation will be based on future build out information provided by the Town and using the ITE Trip Generation Manual.
  - e. The CONSULTANT shall use Version 11 or higher of Synchro/SimTraffic for signalized and unsignalized intersections, and either Version 11 or higher of Synchro/Sim Traffic or SIDRA for roundabout analysis. Intersection 7 or higher if roundabouts to account for the updates included in the 6<sup>th</sup> Edition of the Highway Capacity Manual.
5. Crash Data Collection & Analysis: The CONSULTANT shall evaluate crash data provided by the DEPARTMENT and the local police department to understand the safety performance within the project area, to determine whether significant safety issues exist in the corridor, and to consider how the alternatives would impact safety. The results of the crash data analysis will be presented in the Traffic Report that will be submitted to NHDOT for review prior to inclusion in the corridor study. When appropriate, the American Association of State Highway and Transportation Officials (AASHTO) Highway Safety Manual will be referred to in order to

## ARTICLE I

predict the safety performance of the proposed design alternatives.

6. Alternative Development & Evaluation: The CONSULTANT will coordinate with the Department, RPC, municipality, and the PAC to develop and evaluate alternatives and investigate their consequences to allow the Department to select a proposed action alternative.
  - a. The CONSULTANT will describe the Alternatives in detail, including location, dimensions, traffic patterns, amenities or facilities such as pedestrian crossings, construction issues, right-of-way impacts, and estimated costs. Conceptual plan, and critical cross section views will be included.
  - b. The conceptual engineering plan is intended to be used to create one or more projects for incorporation into the 10-year plan.
  - c. The Corridor Plan shall include conceptual engineering plans developed in sufficient detail to establish a geometric framework to guide future improvement projects in the Corridor and to create planning level cost estimates for such improvements. The CONSULTANT shall develop plans at the scale of 1" = 50', unless otherwise noted, inclusive of the local road connections.
  - d. Submittals:
    - i. Submission will be based on a complete review of the material furnished by the DEPARTMENT and developed and/or supplemented by the existing information by the CONSULTANT, particularly in regard to the proposed design criteria, predicted traffic, environmental considerations, and water-quality issues, and topography of the project area.
    - ii. The CONSULTANT shall prepare and submit to the DEPARTMENT conceptual plans showing the newly created base plan, information on proposed alternative solutions, conceptual traffic control plans, critical cross sections, conceptual drainage, utility impacts, and approximate slope lines that convey order of magnitude impacts. Submissions shall include conceptual drawings, illustrations and descriptive matter as are necessary to facilitate a comprehensive review of both the proposed design and the feasibility of construction, and the coordination with the design of bridges or other structures, particularly where clearances and setbacks may be issues. This should include:
      1. The recommended conceptual horizontal of all necessary roadway construction including local roads, and driveways.
      2. Preliminary typical sections.
      3. Critical roadway cross-sections at appropriate intervals to assess impacts

## ARTICLE I

and conceptual engineering analysis.

4. Proposed roadway layouts and major design control elements.
5. Conceptual water quality treatment, Best Management Practices (BMPs) types and areas for water-quality structures shall be shown with approximated flows. A presentation and narrative will be required to explain the concept for approval.
6. The following issues, at a minimum, shall also be considered in the development of plans and alternatives:
  - i. Conceptual Traffic Control Plan and construction phasing.
  - ii. Right-of-way impacts.
  - iii. Potential conflicts with major utilities.
- iv. Submissions shall include two bound copies of the Design Report using the DEPARTMENT's Engineering Report template.
  1. The engineering report shall include reference materials used, design criteria and controls, specific items and issues of interest, design calculations, drainage information (including back-up calculations, and a copy of the drainage software model), traffic analyses and a planning-level construction cost estimate.
  2. The design report shall include a narrative including the CONSULTANT's recommendations, all applicable design assumptions and controls, and a cost estimate. The effort will compile detailing design criteria, horizontal and vertical alignments, cost estimates, traffic analyses, and plans to document each of the reasonable alternatives.
  3. The alternatives, at a minimum: a narrative describing each alternative with advantages and disadvantages with supporting design criteria documentation; Level of Service calculations (and traffic signal coordination analysis if necessary); intersection capacity; turning movements; turning lane storage queue lengths; environmental commitments; preliminary drainage layout and issues; utility issues/concerns; sight distances; any pending/outstanding issues; and any design issues addressed in that submission.
  4. The narrative shall include anticipated or outstanding issues and the CONSULTANT'S recommendations.
  5. All issues shall be noted as to whether the CONSULTANT feels that the

## ARTICLE I

issue is within the scope of work described in Article I.

v. Submissions shall include the estimate. The estimate shall be a reasonably itemized planning level estimate to cover roadways, structures, drainage and other construction items as well as costs of utility changes to be financed by the STATE.

1. No detailed quantity back-up will be provided; however high level breakdowns of major items will be required such that alternatives can be compared, how the price was derived should be easily ascertained from the supporting material provided.
2. Conceptual cost estimates will be developed for each of the alternatives. The planning level cost estimates will quantify items such as pavement, roadway select materials, earthwork, structures, significant drainage facilities, and other design elements as appropriate and will apply the Department's current weighted average unit prices. Other items will be estimated on a percentage basis.
3. Right-of-way acquisition costs will be determined by the CONSULTANT based upon the assessed value of impacted property per square foot (the DEPARTMENT will provide cost information).
4. Engineering and environmental mitigation costs will be estimated on a percentage basis.

vi. Meetings between the CONSULTANT and the DEPARTMENT shall be held prior to submissions to discuss design issues and recommendations as well as for comment resolutions after the submission.

e. Right-of-Way lines: For development of the proposed right-of-way lines, sight-distance review and the assessment of environmental impacts, it shall be necessary that all templates be plotted to develop slope lines.

f. Reasonable Alternatives: Subsequent to performing traffic analysis and modeling and assessing findings, alternatives will be developed to an equal level of detail. Typical sections, lane use, shoulders, slope impacts including the need for possible retaining walls, (which does not include design of the wall, only identification of need and associated cost), right-of-way requirements, utility impacts, traffic control impacts, constructability, construction time frames, environmental impacts, and potential water quality protection measures will be determined for each reasonable alternative. Alternatives will be supported by the design report described above (that contains a

## ARTICLE I

design narrative and engineering report).

It is anticipated that up to three different reasonable design alternatives for various locations along the corridor will be developed. Each alternative will be submitted to the Department for review in roll plot format. It is anticipated that design alternatives will include a combination of various elements including:

1. Roadway widening
2. Pedestrian/bicycle infrastructure
3. Traffic signals
4. Roundabout designs – roundabouts will be considered at the existing signalized intersections within the study area (6 locations)), including pedestrian activated beacons as required)
5. Access Management

A basic drainage study will be performed for the project area. The purpose of this study is to identify existing drainage patterns, establish proposed drainage outlets and determine the right-of-way that will be required for BMP measures.

- g. Bridge/Structure Alternatives: It is not anticipated that the alternatives will impact any bridges on NH Route 111. There are two bridges off the project limits (Windham 111/097 (Church Road over Collins Brook) and Windham 109/087 (Fellows Road over Collins Brook)) that may be impacted with the alternatives. If these are impacted the details of the various bridge alternatives will be summarized with pros and cons including costs as part of the alternatives.

### 7. Recommended Corridor Plan

- a. Preparation. The Corridor Plan for the recommended alternatives will be prepared depicting potential improvements within the area of interest. The plan must include the CONSULTANT's recommendations for priority of implementation. Short-term and long-term implementation actions should be considered in accordance with planning level cost estimates.
- b. Draft of Recommended Corridor Plan. A draft Corridor Plan will be submitted for review by the DEPARTMENT, RPC, PAC and the municipality. A public informational meeting will be held regarding proposed alternatives.
- c. Final Corridor Plan. After consideration of input from the public and the input received from the bodies stated above, a final draft will be developed and submitted. Upon receipt of comments on the Draft Final Corridor Plan, the Final Corridor Plan will be prepared and submitted to the DEPARTMENT reflecting the incorporation of comments.

## ARTICLE I

### 8. Signs, Pavement Markings and Signals:

- a. The CONSULTANT will be responsible for the identification and size of all permanent regulatory overhead signs.
- b. The CONSULTANT shall be responsible for the concept design and incorporation of all signals. This shall include conceptual layouts, and signal interconnection assumptions. Any concept signal design should also include remote access from the Department.

9. Presentation Plans: The CONSULTANT shall prepare presentation (colored) base plans at each formal submission in addition to the informational, public meetings, and PAC meetings.

10. Technical Reports: The CONSULTANT shall prepare technical reports, as necessary, throughout the duration of the project to document and summarize relevant technical data.

11. Project Team Meetings: It is assumed that over the course of the project six team meetings will be necessary through the duration of the design. These are informal meetings that will take place to discuss a variety of project issues including resource constraints, schedule, design issues, cost issues and impacts of alternatives.

12. Meeting Minutes. The CONSULTANT shall be responsible for the preparation of meeting minutes for all meetings for which they are in attendance.

The CONSULTANT shall be responsible for the preparation of concept designs including all plans, computations, estimates and documents for the required submissions to the DEPARTMENT, FHWA, and/or any other State or Federal agency that may be required. These plans shall be in accordance with the policy and procedures of the DEPARTMENT and the provisions of this AGREEMENT.

The concept engineering design shall take into consideration factors affecting the cost of the construction, such as earthwork quantities; erosion and sedimentation control, water quality treatment issues, construction phasing and complexity, utilities affected, environmental, construction materials, etc. During all phases of concept design, the CONSULTANT shall make a continuous effort to identify and minimize impacts on existing and proposed utilities, environmental resources, and Right-of-Way.

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.

The CONSULTANT shall submit for review, as requested, progress prints (black line) showing grades, cross sections, special details and general design. Paper prints shall be submitted upon request for soils studies, right-of-way use, evaluation of utility impacts, and other purposes.

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 the DEPARTMENT'S Highway Design Manual, and Standard Plans for Road Construction

## ARTICLE I

(2010), except as approved. Design plan check lists shall be provided with each formal submission, see Section I below for additional details.

Multiple visits to the site shall be made during the study to visually observe and detect changed field conditions. The CONSULTANT shall be responsible for the incorporation of this information into the base plans. The CONSULTANT shall modify the concept design as necessary based upon the updated information.

The CONSULTANT shall examine which elements of design, such as horizontal and vertical alignments, typical sections, and traffic control might affect aerial and underground utilities. Conflicts between design elements and utilities shall be identified and brought to the attention of the DEPARTMENT.

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 CONSULTANT'S Licensed Professional Engineer stamp for the State of New Hampshire shall appear on 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.

### **E. SCOPE OF WORK (UTILITIES)**

The utility coordination for this project will be performed by the DEPARTMENT and may be provided in either paper or digital format, it is anticipated that they will be in paper format and will require the CONSULTANT to draft them on the plans and critical cross sections. The CONSULTANT shall identify potential conflicts with major utilities.

### **F. SCOPE OF WORK (PUBLIC PARTICIPATION)**

The CONSULTANT shall support a public participation process that enhances the DEPARTMENT'S "Public Involvement Process for New Hampshire Transportation Improvement Projects". The CONSULTANT shall prepare presentation graphics, handouts and support displays for public participation and posting to the DEPARTMENT'S project webpage and be available to make online or face to face presentations. Specific tasks include:

1. Prepare a Public Involvement Plan: The CONSULTANT will prepare a draft Public Involvement Plan that will provide the steps anticipated to engage the public in providing input to aid in determining travel and travel-related the needs within the project study area. The public provides firsthand experiences therefore; a public outreach process must be established

## ARTICLE I

in which the public is encouraged to voice their opinions in an organized and effective manner. The plan will include a detailed schedule of activities. The CONSULTANT will create a draft plan and meet with the Department to review the plan and after receiving comments, the CONSULTANT will revise and resubmit the final plan. The plan will be updated on a periodic basis as the project progresses and will be posted to the project website. It is anticipated that the Plan will be similar to those previously developed by the DEPARTMENT and will include:

- Background and Overview – including: Purpose of Public Involvement Plan, Guiding Principles, Public Involvement to Date, Project Background, Major project Components, Project Description, Project Purpose and Need, and Project Team
  - Project Process – including: NHDOT Project Development Process, Project Advisory Committee (PAC) Meetings, PAC Guidelines and Procedures
  - Project Schedule
  - Communication Methods – including: NHDOT website, email, online and face-to-face meetings, surveys, and media
2. Website: The project website will be created by the DEPARTMENT for dissemination of project information, such as vision and problem statement, meeting minutes, reports, plans, and schedules. Information on Complete Streets shall be included. The CONSULTANT shall be responsible for providing the Department with the content of the webpage. The CONSULTANT shall regularly update the webpage content, as appropriate to remain current; this will be forwarded to the NHDOT for posting to the NHDOT project website. It is anticipated that updates to the website will be done on a bi-monthly basis.
3. Public Participation Support: The CONSULTANT shall prepare easy-to-understand slides and graphics designed to solicit public input, at any meeting intended for public input at internal milestone meetings. The CONSULTANT is responsible for generating public participation at public events, and for preparing project meeting notices and meeting notes. The CONSULTANT should anticipate participating and presenting at Public Meetings. The CONSULTANT shall be responsible for the preparation of meeting minutes/meeting reports for all meetings for which they are in attendance.
4. Public Advisory Committee Meetings:
- a. A Public Advisory Committee (PAC) will be organized by the CONSULTANT. The Committee will include those members (or those still available and representative of the same constituency) who were part of the original 2011 study as well as additional members as suggested by the TOWN and the DEPARTMENT. These members will

## ARTICLE I

include the CONSULTANT and the DEPARTMENT, the Town of Windham, the RPC, other State or Federal agencies, stakeholders, or others as appropriate. Due to changes in the corridor business profile, additional business members will be included, for example the Chamber of Commerce and the Chair of the Economic Development Committee. Both the Planning Board and the Economic Development Committee include subcommittees with a bicycle-pedestrian focus, and they will be liberally consulted in regard to these issues.

- b. PAC members will help to refine the purpose and need statement, discuss challenges, review alternatives, facilitate local input into important design issues, assist with outreach, identify current corridor issues, identify safety concerns, and provide perspective on alternative aspects of travel in the study area.
- c. It is expected that over the course of the project these informal PAC meetings will be held at least quarterly through the duration of the design. It is anticipated that 12 meetings will be conducted throughout the duration of the project.
- d. Agendas for these meetings will be set by the DEPARTMENT and the CONSULTANT, and meetings will be facilitated by the CONSULTANT. The PAC will act in an advisory role only. The CONSULTANT will also, in concert with TOWN or PAC members or other CONSULTANT team members, reach out to other town residents as indicated to reach a broader stakeholder group or fine tune input. The CONSULTANT will prepare needed informational handouts and presentation materials, will assist with presentations as needed, and will prepare written meeting summaries for posting to the Project's webpage. The goal of the PAC is to discuss and reach consensus on local desires for the highway improvements. As the development of improvement alternatives proceeds, it will be crucial to work closely with this PAC as well as other appropriate public or private stakeholders to gain consensus on design decisions.

### 5. Public Officials/Public Informational Meetings:

- a. At least four Public Officials/Public Informational Meetings will be held to involve the public and other interested parties (including any Section 106 Consulting Parties) in the project development process. The first Public Officials Meeting/Public Informational Meetings will take place early in the project to discuss the principles of Complete Streets, accept or refine the PAC-amended vision and problem statement, summarize existing conditions in the study area, and hear feedback from the public in regards to study area concerns and goals for study area functionality. For this meeting,

## ARTICLE I

the CONSULTANT will prepare graphics depicting successful Complete Streets and existing conditions and will highlight the areas of concerns as observed. The second and third meetings, Public Informational Meetings, will focus on the Proposed Action alternatives and hearing feedback on iterations of these. The CONSULTANT will prepare needed informational handouts, graphics, and presentation materials. It is anticipated that the CONSULTANT will produce three renderings of potential improvements at specific locations/intersections on the corridor for each meeting. A fourth Public Informational Meeting will be held to present the final recommended Action alternatives, and graphics of these alternatives will be posted on the DEPARTMENT webpage.

- b. It is anticipated the CONSULTANT will also assist the DEPARTMENT with Local Meetings as needed to brief elected officials (e.g., Town Councils, Selectmen, Planning Boards, Conservation Commissions, RPCs, etc.). Three Local Meetings are estimated. The CONSULTANT will assist the DEPARTMENT in the preparation of project material for presentation, will prepare the meeting notes, and will attend these meetings (including Open Houses if any are proposed) to assist with the presentation, solicit feedback, and to document the proceedings for posting to the Project's website.
- c. The CONSULTANT will also assist in the creation of materials for meeting notifications, including emails, letters, flyers, posters, and/or post cards to inform abutters of the upcoming meetings. Distribution of the materials will be undertaken by the DEPARTMENT. The CONSULTANT will also provide content to the DEPARTMENT and the TOWN for meeting notifications to be communicated by social and/or traditional media.

### **G. 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 and baseline data within the project area shall be provided along with any pertinent electronic supporting information in the format outlined in the current DEPARTMENT CAD/D Procedures and Requirements (survey field notes, ASCII point file, SDR data files, etc.). Ground survey and associated CADD files are not available for the majority of the project area. Aerial photography will be the primary source of base mapping.

## ARTICLE I

- b. 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.
  - c. Electronic drawings in MicroStation format of the existing underground 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 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: The DEPARTMENT will provide the existing condition Right-of-Way for historic projects to a tax map level. This may include legacy alignments, existing right-of-way layout, property lines (to a tax map level), parcel owners, and any other applicable abstracting information 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. Crash data within the study area.
  6. Necessary traffic counts and crash data, as previously collected by the DEPARTMENT. Additional traffic count data as determined will be collected by the CONSULTANT.
  7. The location of all existing and proposed utilities through direct contact with the various utility companies. The CONSULTANT shall be prepared to furnish CAD/D files in the current DEPARTMENT format to the DEPARTMENT for use in assisting with the Utility information.

### **H. 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.

## ARTICLE I

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 develop an acceptable reporting system capable of indicating project status on at least a monthly basis for all critical activities of the project. The reporting system shall address costs and staff hours broken out by category of work tasks as outlined in the CONSULTANT'S fee proposal and in conformance with the Department's Standardized invoicing. Monthly progress reports shall be submitted by the CONSULTANT to the DEPARTMENT, giving the percentage of completion of the work required by this AGREEMENT. These monthly progress reports shall be received by the DEPARTMENT by the 10<sup>th</sup> day of each month. All correspondence shall include the STATE and Federal project numbers as well as the project name.

### **I. SUBMISSION OF REPORTS, PLANS, AND DOCUMENTS**

During the prosecution of this AGREEMENT, the CONSULTANT shall prepare and submit to the DEPARTMENT separate submissions as described hereinafter. All work submitted by the CONSULTANT to the DEPARTMENT shall be in US Customary units.

The CONSULTANT, with each submission, shall submit a Design Report containing an Engineering Report and a Design Narrative described above.

The submissions shall be as necessary in accordance with the study process and environmental analysis as outlined above. The CONSULTANT shall supplement each submission with such paper and electronic copies of MicroStation drawings, Excel Files, drainage models, illustrations and descriptive matter as are necessary to facilitate a comprehensive understanding and review of proposed concepts.

The CONSULTANT will be expected to support their concept 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 shall indicate on the plans all Weekday AM and PM Design Hour turning movement volumes at intersections. Average daily traffic (ADT) for both the current and design years and directional design hourly volumes (DDHV) for the design year shall be provided for key roadway segments.

All plan drawings, including size of sheets, lettering, symbols and scale of said drawings, shall conform to the requirements and standards of the DEPARTMENT. Any and all CAD/D-related work completed during the course of this project shall be performed in conformance with the DEPARTMENT'S CAD/D Procedures and Requirements in effect at the time of execution of this AGREEMENT. In addition, the CONSULTANT'S final submission shall include hard copy plans, etc.

## ARTICLE I

as well as electronic CAD/D or GIS files in accordance with the current DEPARTMENT CAD/D Procedures and Requirements. The CAD/D files shall consist of the base plans with enhancements in MicroStation format, using DEPARTMENT naming conventions, line styles and character styles. The CONSULTANT shall also furnish a coordinate summary of all control points with a corresponding plot of controls and alignments (including all curve data) superimposed over the detail plan.

In addition to the final reproducible plans being furnished as noted herein, the CONSULTANT shall provide electronic file copies of all highway and bridge project plan sheets with real State plane coordinates, including, but not limited to, typical and detail sheets, general plans and profiles, traffic-signal sheets, and cross sections. In addition to these plan sheets, an electronic file of the entire project's final design shall be submitted in an "uncut" format showing all design features in a real State plane coordinate system, un-rotated. These final electronic files shall be indexed with file name, description of the contents of the file and project sheet number as applicable. All files shall be submitted in conformance with the DEPARTMENT'S CAD/D Procedures and Requirements. Any plans or calculations (e.g., quantity summary sheets) produced from a spreadsheet (e.g., Excel, or equivalent) shall be submitted in ASCII file or format suitable for incorporation into Microsoft Office or the current DEPARTMENT software. The final Special Provisions(s) and other documents, as requested, shall be submitted in both electronic format (Microsoft Word-compatible) and hard copy. The CONSULTANT shall also be prepared to submit separate electronic files of all alignments, bound locations and other project features, as requested, in a format acceptable to the DEPARTMENT, throughout the design contract, in conformance with the DEPARTMENT'S CAD/D Procedures and Requirements. The CONSULTANT shall also provide a hard copy of all proposed alignments (25-foot minimum station interval and curve control points) with associated State plane coordinates (x, y, z).

1. 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.
2. 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.
3. Computer Aided Design/Drafting (CAD/D) files: Any and all CAD/D-related work during the course of this project shall be performed in conformance with the DEPARTMENT'S CAD/D Procedures and Requirements in effect at the time of execution of this AGREEMENT, which will be coordinated on each assignment. All files submitted must be fully compatible with the current version of MicroStation being used by the DEPARTMENT. (The DEPARTMENT'S

## ARTICLE I

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/](http://www.nh.gov/dot/cadd/).)

4. Approved action deliverables: The CONSULTANT'S final submission shall include hard copies of plans, as well as electronic CAD/D files. The CAD/D files shall consist of the base plans with enhancements in MicroStation format, using DEPARTMENT naming conventions, line styles and character styles. The CAD/D files shall also contain a proposed 3D top line model. The horizontal layout shall be complete and, in a condition, to allow further development toward final design.
5. 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 2016 or NHDOT compatible version
  - Spreadsheets: Microsoft 2016 or NHDOT compatible version
  - Databases: Microsoft 2016 or NHDOT compatible versionThese 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.
6. 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:
  - File Transfer Sites: Bluebeam, DEPARTMENT SharePoint Site, DEPARTMENT FTP site
  - Email: Files 20 MB or smaller may be transferred via email. If compressed, the files should be self-extracting and encrypted based on content.
7. 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 (\*.DOC), Microsoft Excel (\*.XLS), etc.) and an electronic version in Adobe Acrobat (\*.PDF) file format.
8. Website Information:
  - a. Website Content: All external NHDOT websites created for Task Orders under this AGREEMENT shall meet the ADA Section 508 requirements as stated in the NH DoIT Website Standards. Those standards are outlined in Vendor Resources and Procurement | NH Department of Information Technology.

## ARTICLE I

- b. Website Documents: All documents posted to a website created for Task Orders under this AGREEMENT, or that are submitted to be posted to a NHDOT website, shall meet ADA Section 508 accessibility requirements. See compliance requirements at: <https://www.section508.gov/create/>.

Upon completion of the AGREEMENT, the CONSULTANT shall turn over all documentation including, but not limited to, all reports, test results, drawings, plans, and all financial supporting documentation in the formats described above.

### J. DATE OF COMPLETION

In accordance with the Governor and Council Resolution authorizing this AGREEMENT, the date of completion for the professional services rendered under this AGREEMENT is July 31, 2025.

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.

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: \$109,325.96

- 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 ending December 31, 2022, which expires June 30, 2023, 150.699%, shall be used for invoicing for the life of the AGREEMENT.

Overhead costs are estimated at: \$164,753.13

- 3) A fixed fee amount based on the estimated risk to be borne by the CONSULTANT [maximum 10.00% of Labor Costs (including overhead costs)] for profit and non-reimbursed costs.

The fixed fee is: \$27,407.91

- 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 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

ARTICLE II

to approval by the DEPARTMENT. Subconsultants with a subcontract value of less than \$200,000 shall be invoiced as direct expenses and require individual invoices.

Direct expenses are estimated at: \$12,598.00

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

Tighe & Bond	<u>\$165,953.41</u>
Morris Communications	<u>\$33,807.66</u>
Preservation Company	<u>\$7,564.19</u>
Sam Swartz Associates	<u>\$6,772.71</u>
Independent Archeological Consulting (IAC)	<u>\$25,169.71</u>
<b>AGREEMENT NOT-TO-EXCEED TOTAL</b>	<b><u>\$553,352.68</u></b>

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 \$553,352.68 the sum of the amounts shown in Article II, Section A (which amount is based on the CONSULTANT'S fee and manhour estimates of February 17, 2023), 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.
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.

## ARTICLE II

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.
- Certification of Final Indirect Costs as required pursuant to 23 CFR 172.11 and FHWA Order 4470.1A.

## ARTICLE II

- 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.**

(Not applicable to this AGREEMENT.)

**B. CONTRACT PROPOSALS**

(Not applicable to this AGREEMENT.)

## 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 12 Northbrook Drive, Falmouth, Maine 04105.

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 performed prior to termination. If no contract or contracts for construction of the project contemplated by this

#### ARTICLE IV

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 partially

## ARTICLE IV

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.

## ARTICLE IV

### **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". 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. A copy of each subcontract shall be submitted for the DEPARTMENT'S files.

### **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, at its discretion, to

## ARTICLE IV

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

## ARTICLE IV

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.

**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.

## ARTICLE IV

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 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.

#### ARTICLE IV

- (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.

#### **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

## ARTICLE IV

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 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.

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.

T.Y. Lin International

(Company)

By: Kevin S. Duval

Vice President

(Title)

Date: April 12, 2023

**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(b)(4)], 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.

April 12, 2023

\_\_\_\_\_  
(Date)

*Kevin J. Dues*

\_\_\_\_\_  
(Signature)

Attachment 3

**CERTIFICATION OF CONSULTANT/SUBCONSULTANT**

I hereby certify that I am the Vice President and duly-authorized representative of the firm of T.Y. Lin International 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): N/A

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.

April 12, 2023

(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):

5/3/23

(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: Thomas A. Emice  
Senior Associate

Dated: April 12, 2023

CONSULTANT

By: Kerrin J. Dued  
Vice President  
(TITLE)

Dated: April 12, 2023

Department of Transportation

WITNESS TO THE STATE OF NEW HAMPSHIRE

By: Natasha Fule

Dated: 5/3/23

THE STATE OF NEW HAMPSHIRE

By: [Signature]  
Director of Project Development  
for DOT COMMISSIONER

Dated: 5/3/23

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: 6/2/2023

By: [Signature]  
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

# State of New Hampshire

## Department of State

### CERTIFICATE

I, David M. Scanlan, Secretary of State of the State of New Hampshire, do hereby certify that T. Y. LIN INTERNATIONAL, INC. is a California Profit Corporation registered to transact business in New Hampshire on April 15, 1985. 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: 84404

Certificate Number: 0006205123



IN TESTIMONY WHEREOF,  
I hereto set my hand and cause to be affixed  
the Seal of the State of New Hampshire,  
this 13th day of April A.D. 2023.

A handwritten signature in black ink, appearing to read "David M. Scanlan".

David M. Scanlan  
Secretary of State

**T.Y. LIN INTERNATIONAL**  
(the "Corporation")

**CERTIFIED EXTRACT OF RESOLUTION OF THE BOARD OF DIRECTORS OF T.Y. LIN  
INTERNATIONAL DATED MARCH 3, 2023**

---

**SIGNATURE AUTHORITY**

**WHEREAS**, the Board of the Corporation desires to grant to certain officers of the Corporation signature authority for contracts of the Corporation pursuant to the Corporation's Authorization and Responsibility Matrix ("ARM"). Such contracts shall include but are not limited to, non-project contracts and other legally binding commitments except as specified in the Corporation's ARM, effective as of even date herewith.

**NOW, THEREFORE, BE IT RESOLVED**, that the following officers of the Corporation (each an "Authorized Officer" and collectively, the "Authorized Officers") hereby have signature authority for contracts of the Corporation, pursuant to the Corporation's ARM including, but not limited to, non-project contracts and other legally binding commitments except as shall be specified below:

Matthew G. Cummings  
Thomas J. Price  
Marwan Nader  
Sajid Abbas  
Kevin Cornish  
F.R. Clark Fernon  
Abe Khademi  
Nathaniel Oppenheimer  
Nyree Quintero  
Richard Waters  
Philip Yartey  
Joseph Yesbeck  
Michael Hope  
Andrew Martin  
Atiq Alvi  
Jeffrey Andrews  
Ram Balasubramanian  
James Barr  
Bruce Bushnell  
Karen Chapman  
Bill Detwiler  
Daniel B. Drew  
Kevin Ducharme

James Duxbury  
Maximo A. Fajardo  
Raymond M. Fares  
Dan Fitzwilliam  
Christopher Fronheiser  
Ahmad A. Hammoud  
William K. Harnagel  
Sheila Jordan (for marketing matters)  
Dennis Kennelly  
Jennifer N. Lee (for legal matters)  
Ian MacLeod (for human resource matters)  
Kirk I. Mettam  
Eduardo J. Palacio  
Michael Pyrz  
Dusan Radojevic  
James Rucker  
Sandeep Singh  
Bala Sivakumar  
Joseph S. Smith  
Gerard Salernitano  
Nathalie McCutcheon  
Roya Golchoobian  
Tara Boggio (for marketing matters)  
Logie Bruce-Lockhart (for human resource matters)  
John Cassidy  
Kristin Comer  
Joseph Dinkel  
Bethany Florek  
Val Frenkel  
Brian Goldman  
Glen Johnson  
Fernando Sarmiento  
Joseph Teusch  
Sundaram Solai  
Walter Walker  
Alvaro Buendia  
Stephen Cayea (for information technology matters)  
Natalie Eldredge  
Maz Goodarzi

Dated this 12th of April 2023

**CERTIFIED TRUE EXTRACT**



  
\_\_\_\_\_  
William K. Harnage  
Secretary, Treasurer and Vice President



# CERTIFICATE OF LIABILITY INSURANCE

11/1/2023

DATE (MM/DD/YYYY)

4/14/2023

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 BELOW. 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).

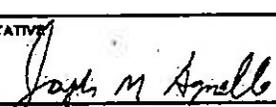
<b>PRODUCER</b> Lockton Companies 444 W. 47th Street, Suite 900 Kansas City, MO 64112-1906 (816) 960-9000 kcasu@lockton.com	<b>CONTACT NAME:</b> _____ <b>PHONE (A/C, Ho, Ext):</b> _____ <b>FAX (A/C, No):</b> _____ <b>E-MAIL ADDRESS:</b> _____													
	<table border="1"> <thead> <tr> <th>INSURER(S) AFFORDING COVERAGE</th> <th>NAIC #</th> </tr> </thead> <tbody> <tr> <td>INSURER A: Travelers Property Casualty Company of America</td> <td>25674</td> </tr> <tr> <td>INSURER B: Zurich American Insurance Company</td> <td>16535</td> </tr> <tr> <td>INSURER C: Aspen Specialty Insurance Company</td> <td>10717</td> </tr> <tr> <td>INSURER D:</td> <td></td> </tr> <tr> <td>INSURER E:</td> <td></td> </tr> <tr> <td>INSURER F:</td> <td></td> </tr> </tbody> </table>	INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A: Travelers Property Casualty Company of America	25674	INSURER B: Zurich American Insurance Company	16535	INSURER C: Aspen Specialty Insurance Company	10717	INSURER D:		INSURER E:		INSURER F:
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INSURER E:														
INSURER F:														
<b>INSURED</b> 1484704 T. Y. LIN INTERNATIONAL 345 CALIFORNIA STREET, SUITE 2300 SAN FRANCISCO CA 94104														

COVERAGES MAIN CERTIFICATE NUMBER: 19505270 REVISION NUMBER: XXXXXXXX

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	ADDITIONAL INSURED	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
B	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> SEVERABILITY <input checked="" type="checkbox"/> CLAUSE GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER: _____	Y	N	GLO 3021088.	11/1/2022	11/1/2023	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 25,000 PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ 4,000,000 PRODUCTS - COMPROP AGG \$ 4,000,000 \$
B	<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	N	N	BAP 3021090.	11/1/2022	11/1/2023	COMBINED SINGLE LIMIT (Ea accident) \$ 2,000,000 BODILY INJURY (Per person) \$ XXXXXXXX BODILY INJURY (Per accident) \$ XXXXXXXX PROPERTY DAMAGE (Per accident) \$ XXXXXXXX \$ XXXXXXXX
A	<input type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED \$ _____ RETENTION \$ _____	N	N	CUP-9T661090.	11/1/2022	11/1/2023	EACH OCCURRENCE \$ 3,000,000 AGGREGATE \$ 3,000,000 \$ XXXXXXXX
B	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/A	WC 3021089	11/1/2022	11/1/2023	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
C	PROFESSIONAL LIABILITY	N	N	LR00JUH22.	11/1/2022	11/1/2023	\$3,000,000 PER CLAIM; \$3,000,000 ANNUAL AGGREGATE

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)  
 RE: PROJECT # 3010.0012398.022, COMPLETION OF A PLANNING LEVEL CORRIDOR STUDY OF NH ROUTE 111 IN WINDHAM, THE STATE OF NEW HAMPSHIRE IS AN ADDITIONAL INSURED AS RESPECTS GENERAL LIABILITY, IF REQUIRED BY WRITTEN CONTRACT.

<b>CERTIFICATE HOLDER</b>  19505270 DEPT OF TRANSPORTATION, STATE OF NH 7 HAZEN DRIVE CONCORD NH 03302-0483	<b>CANCELLATION</b> See Attachment  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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## Additional Insured – Owners, Lessees Or Contractors – Scheduled Person Or Organization

<b>THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.</b>	
Policy No. GLO 3021088.	Effective Date: 11/1/2022

This endorsement modifies insurance provided under the:

**Commercial General Liability Coverage Part**

### SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location(s) Of Covered Operations
Any person or organization you are required to add	
as an additional insured under a written contract or	
written agreement.	

A. Section II – **Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule of this endorsement, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated in such Schedule.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

All other terms, conditions, provisions and exclusions of this policy remain the same.

## Additional Insured – Owners, Lessees Or Contractors – Completed Operations

<b>THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.</b>	
Policy No. GLO 3021088.	Effective Date: 11/1/2022

This endorsement modifies insurance provided under the:  
**Commercial General Liability Coverage Part**

### SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location And Description Of Completed Operations
Any person or organization you are required to add	
as an additional insured under a written contract or	
written agreement.	

Section II – **Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule of this endorsement, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in such Schedule, performed for that additional insured and included in the "products-completed operations hazard".

All other terms, conditions, provisions and exclusions of this policy remain the same.