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THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION



Victoria F. Sheehan
Commissioner

William Cass, P.E.
Assistant Commissioner

Bureau of Highway Design
February 5, 2020

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

REQUESTED ACTION

Authorize the Department of Transportation to enter into an Agreement with WSP USA Solutions Inc. (formerly known as Louis Berger U.S. Inc.), Manchester, NH, Vendor #315303, for an amount not to exceed \$759,727.55, for preliminary design of improvements to 1.4 miles of US Route 3 in the Town of Hooksett, effective upon Governor and Council approval through September 30, 2022. 100% Federal Funds.

Funds to support this request are available in the following account in State FY 2020 and State FY 2021, and funding is contingent upon the availability and continued appropriation of funds in FY 2022 and FY 2023, with the ability to adjust encumbrances between State Fiscal Years through the Budget Office if needed and justified:

	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
04-096-96-963515-3054				
Consolidated Federal Aid				
046-500464 Gen Consultants Non-Benefit	\$80,000.00	\$310,000.00	\$310,000.00	\$59,727.55

EXPLANATION

The Department requires consulting engineering and environmental services to study improvements to US Route 3 in Hooksett from Alice Ave/West Alice Ave to the intersection of NH 27 (Whitehall Road)/Martins Ferry Road, a distance of approximately 1.4 miles. The Consultant will develop and evaluate alternatives along US Route 3 to improve intermodal transportation needs for automobiles, bicycles and pedestrians; prepare and complete all appropriate environmental documentation; and assist the Department in the public involvement process, culminating in a formal Public Hearing for the preferred alternative. The objective of the project is to develop an alternative that will improve the safety and mobility of all users by applying 'Complete Streets' principles and 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 improvement alternatives proceeds, it will be important to work closely with the Public Advisory Committee, as well as all other appropriate public or private stakeholders to gain consensus on design decisions. Public Advisory Committee meetings are intended to discuss and reach consensus on local desires for the highway improvements. The Public Advisory Committee will act in an advisory role. This project will require both Part "A" (Preliminary Design) and Part "B" (Final Design) services. This agreement is for Part "A" only. Upon completion of Part "A" services, and assuming a successful Public Hearing (if required), the Department reserves the right to either negotiate a scope and fee for Part "B", or terminate the contract. This project is included in the State's Ten-Year Transportation Improvement Plan (Hooksett 29611).

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 Hooksett 29611, improvements to US Route 3. The assignment was listed as a "Project Soliciting for Interest" on the Department's website on June 15, 2018 asking for letters of interest from qualified firms. From the list of firms that submitted letters of interest, the Committee prepared a long and then short list of Consultants on August 9, 2018 for consideration and approval by the Assistant Commissioner. Upon receipt of that approval, three shortlisted firms were notified on August 15, 2018 through a technical "Request for Proposal" (RFP). Committee members individually rated the firms on October 11, 2018 using a written ballot to score each firm on the basis of comprehension of the assignment, clarity of the proposal, capacity to perform in a timely manner, quality and experience of the project manager and the team, previous performance, and overall suitability for the assignment. (A compilation of the completed individual rating ballots and the ranking summary form is attached.) The individual rankings were then totaled to provide an overall ranking of the three firms, and the Committee's ranking was submitted to the Assistant Commissioner for consideration and approval. Upon receipt of that approval, the short listed firms were notified of the results and the highest-ranking firm was asked to submit a fee proposal for negotiations.

The long list of eleven (11) consultant firms that were considered for this assignment, with the three (3) short-listed firms shown in bold, is as follows:

<u>Consultant Firm</u>	<u>Office Location</u>
BETA Group, Inc.	Manchester, NH
CMA Engineers, Inc.	Portsmouth, NH
Fuss & O'Neill	Manchester, NH
Greenman-Pedersen, Inc.	Portsmouth, NH
HNTB Corporation	Westbrook, ME
Hoyle, Tanner & Associates, Inc.	Manchester, NH
Jacobs Engineering	Manchester, NH
Louis Berger U.S. Inc. (now WSP USA Solutions Inc.)	Manchester, NH
McFarland-Johnson, Inc.	Concord, NH
Stantec Consulting Services, Inc.	Auburn, NH
WSP USA Inc.	Manchester, NH

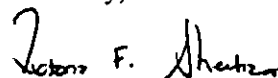
The firm of WSP USA Solutions Inc. was recommended for this contract. This firm has an excellent reputation and has demonstrated their capability to perform the required services. Background information on this firm is attached.

WSP USA Solutions Inc. has agreed to furnish the professional engineering services for an amount not to exceed \$759,727.55. This is a reasonable fee and is commensurate with the complexity of the project and the scope of the engineering and technical services to be furnished. This project funding is 80% Federal funds with 20% State match. Turnpike toll credit is being utilized for New Hampshire's match requirement, effectively using 100% federal funds.

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

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

Sincerely,



Victoria F. Sheehan
Commissioner

Attachments

PROJECT: Hooksett 29611 (Part A)

DESCRIPTION: Preliminary engineering, environmental services, public involvement services, and final design are needed for improvements to US 3/NH 28 in the Town of Hooksett to include widening, intersection modifications and bicycle and pedestrian facilities. The project begins at Alice Ave/West Alice Ave and extends 1.4 miles to the intersection of Whitehall Road/Martins Ferry Road. The scope of work may include: Traffic safety and capacity analysis; Preliminary design to develop and evaluate alternatives; Environmental investigations to prepare and complete all appropriate environmental documentation and all necessary permitting; Public outreach and involvement support services, including a Public Hearing; ROW layout and plan development, including any necessary survey work, for reestablishing and documenting the existing highway right-of-way in a manner suitable for recording at the Registry of Deeds; Roadway final design associated with the preferred alternative; Drainage design, including appropriate water quality evaluations; Construction traffic control design; Construction support services; For additional information see scope of work checklist. Environmental efforts are needed to prepare and complete all appropriate environmental documentation and permitting, to satisfy NEPA, State, and Federal requirements. The Consultant will also be required to assist the Department in the public involvement process, including a formal Public Hearing for the preferred alternative.

Services Required: STRC, RDWY, ENV, HAZ, HIST, ARCY, AIR, NOIS, WET, HYD, SURV, ROW, TRAF, PINV, BRDG

SUMMARY

Fuss & O'Neill	2	2	2	2	1	3	2	14
Greenman-Pedersen, Inc.	3	3	3	3	3	2	3	20
Louis Berger US, Inc.	1	1	1	1	2	1	1	8

EVALUATION OF TECHNICAL PROPOSALS

Rating Considerations	Scoring of Firms			
	W E I G H T	F u s s & O' N e i l l	G r e e n m a n - P e d e r s e n, I n c.	L o u i s B e r g e r U S, I n c.
Comprehension of the Assignment	20%	16	14	18
Clarity of the Proposal	20%	16	14	18
Capacity to Perform in a Timely Manner	20%	16	18	18
Quality & Experience of Project Manager/Team	20%	18	18	18
Previous Performance	10%	8	8	8
Overall Suitability for the Assignment	10%	8	8	8
Total	100%	82	80	88

Ranking of Firms:

1. LBG
2. F+O
3. GPI

Rating Considerations	Scoring of Firms			
	W E I G H T	F u s s & O' N e i l l	G r e e n m a n - P e d e r s e n, I n c.	L o u i s B e r g e r U S, I n c.
Comprehension of the Assignment	20%	3	4	3
Clarity of the Proposal	20%	4	4	4
Capacity to Perform in a Timely Manner	20%	3	2	4
Quality & Experience of Project Manager/Team	20%	3	2	4
Previous Performance	10%	3	1	4
Overall Suitability for the Assignment	10%	3	2	4
Total	100%	3.2	2.7	3.8

Ranking of Firms:

1. L.B.
2. F&O.
3. GPI

EVALUATION OF TECHNICAL PROPOSALS (continued)

Rating Considerations	Scoring of Firms			
	W E I G H T	Fuss & O'Neill	Greenman-Pedersen, Inc.	Louis Berger US, Inc.
Comprehension of the Assignment	20%	19	17	20
Clarity of the Proposal	20%	19	16	19
Capacity to Perform in a Timely Manner	20%	17	17	19
Quality & Experience of Project Manager/Team	20%	18	16	18
Previous Performance	10%	9	7	8
Overall Suitability for the Assignment	10%	8	6	9
Total	100%	90	79	93

Ranking of Firms:

1. Louis Berger
2. Fuss & O'Neill
3. Greenman-Pedersen

Rating Considerations	Scoring of Firms			
	W E I G H T	Fuss & O'Neill	Greenman-Pedersen, Inc.	Louis Berger US, Inc.
Comprehension of the Assignment	20%	19	18	19
Clarity of the Proposal	20%	17	17	18
Capacity to Perform in a Timely Manner	20%	19	19	19
Quality & Experience of Project Manager/Team	20%	18	17	18
Previous Performance	10%	8	7	9
Overall Suitability for the Assignment	10%	8	7	9
Total	100%	89	85	92

Ranking of Firms:

1. LBG US, Inc.
2. Fuss & O'Neill
3. Greenman-Pedersen

Rating Considerations	Scoring of Firms			
	W E I G H T	Fuss & O'Neill	Greenman-Pedersen, Inc.	Louis Berger US, Inc.
Comprehension of the Assignment	20%	20	15	20
Clarity of the Proposal	20%	18	18	18
Capacity to Perform in a Timely Manner	20%	15	10	15
Quality & Experience of Project Manager/Team	20%	20	18	20
Previous Performance	10%	10	8	8
Overall Suitability for the Assignment	10%	10	8	10
Total	100%	93	77	91

Ranking of Firms:

1. F+O
2. LBG
3. GPI

Rating Considerations	Scoring of Firms			
	W E I G H T	Fuss & O'Neill	Greenman-Pedersen, Inc.	Louis Berger US, Inc.
Comprehension of the Assignment	20%	16	16	19
Clarity of the Proposal	20%	16	16	19
Capacity to Perform in a Timely Manner	20%	18	18	19
Quality & Experience of Project Manager/Team	20%	16	17	17
Previous Performance	10%	9	9	9
Overall Suitability for the Assignment	10%	9	9	9
Total	100%	83	85	91

Ranking of Firms:

1. LBG
2. GPI
3. F+O

Rating Considerations	Scoring of Firms			
	W E I G H T	Fuss & O'Neill	Greenman-Pedersen, Inc.	Louis Berger US, Inc.
Comprehension of the Assignment	20%	18	17	19
Clarity of the Proposal	20%	18	17	20
Capacity to Perform in a Timely Manner	20%	17	18	20
Quality & Experience of Project Manager/Team	20%	17	16	20
Previous Performance	10%	9	8	10
Overall Suitability for the Assignment	10%	9	8	10
Total	100%	88	84	99

Ranking of Firms:

1. LBG
2. F+O
3. GPI

ARCHITECT — ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (if any)

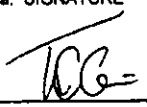
PART II - GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME LOUIS BERGER U.S., INC. n/k/a WSP USA SOLUTIONS INC.			3. YEAR ESTABLISHED 2016	4. UNIQUE ENTITY IDENTIFIER 080244851
2b. STREET 100 Commercial St., 2nd Floor North			5. OWNERSHIP	
2c. CITY Manchester	2d. STATE NH	2e. ZIP CODE 03101	a. TYPE New York Corporation	
6a. POINT OF CONTACT NAME AND TITLE Liviu Sfintescu, Civil/Highway Group Manager			b. SMALL BUSINESS STATUS	
6b. TELEPHONE NUMBER 603-218-5419	6c. E-MAIL ADDRESS Liviu.Sfintescu@wsp.com		7. NAME OF FIRM (If block 2a is a branch office) Louis Berger U.S., Inc. n/k/a WSP USA Solutions Inc.	
8a. FORMER FIRM NAME(S) (if any) The Louis Berger Group, Inc.			8b. YR. ESTABLISHED 1953-2016	8c. UNIQUE ENTITY IDENTIFIER 07-688-0744

9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. No. of Employees		a. Profile Code	b. Experience	c. Revenue Index Number (see below)
		(1) FIRM	(2) BRANCH			
02	Administrative/other	594	2	A03	Agricultural Development	8
05	Archaeologist	28		A06	Airports	8
06	Architect	9		C15	Construction Management	9
07	Biologist	11		C16	Construction Surveying	6
08	CADD Technician	31		D04	Design-Build - Preparation of RFP	4
12	Civil Engineer	83	4	E01	Ecological & Archeological Investigations	6
15	Construction Inspector	139	1	E09	Environmental Impact Studies, Assessments or Statements	7
16	Construction Manager	33		E13	Environmental Testing and Analysis	9
18	Cost Engineer/Estimator	9		H07	Highways; Streets	10
21	Electrical Engineer	12		O01	Office Buildings; Industrial Parks	8
23	Environmental Engineer	41		P04	Pipelines	7
24	Environmental Scientist	64	1	P05	Planning (Community)	6
29	GIS Specialist	14	1	P06	Planning (Site, Installation, and Project)	6
30	Geologist	16		P08	Prisons & Correctional Facilities	7
39	Landscape Architect	8		P12	Power Generation, Transmission	10
42	Mechanical Engineer	14		R03	Railroad; Rapid Transit	8
47	Planner	48		R04	Recreation Facilities; Parks, Marinas	7
48	Project Manager	55		S04	Sewage Collection, Treatment and Disposal	7
57	Structural Engineer	144	1	T03	Traffic & Transportation Engineering	7
60	Transportation Engineer	106	6	W02	Water Resources	6
62	Water Resource Engineer	25		W03	Water Supply	8
Total		1,484	16			

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS (Insert revenue index number shown at right)		PROFESSIONAL SERVICES REVENUE INDEX NUMBER	
a. Federal Work	10	1. Less than \$100,000	6. \$2 million to less than \$5 million
b. Non-Federal Work	10	2. \$100,000 to less than \$250,000	7. \$5 million to less than \$10 million
c. Total Work	10	3. \$250,000 to less than \$500,000	8. \$10 million to less than \$25 million
		4. \$500,000 to less than \$1 million	9. \$25 million to less than \$50 million
		5. \$1 million to less than \$2 million	10. \$50 million or greater

12. AUTHORIZED REPRESENTATIVE The foregoing is a statement of facts.	
a. SIGNATURE 	b. DATE February 10, 2020
c. NAME AND TITLE Thomas Lewis, PE, JD	

Liviu Sfintescu PE, ENV SP

Project Manager

Louis Berger

Education
BS, Civil Engineering

Registrations and Certifications
Professional Engineer (NH, MA,
NV, GA, VA)

Envision Sustainability
Professional

Years of Experience
19

Liviu Sfintescu is a roadway engineer with 19 years of experience. He currently serves as Louis Berger's Highway Group Manager in New England leading a team of 10 engineers and CAD technicians. Liviu has a thorough knowledge of transportation projects with special emphasis on major highways and interstate design. On his various assignments he has been responsible for preparing plans, specifications, cost estimates, providing construction support, project management, and coordination between various disciplines such as roadway, drainage, utilities, traffic and construction staging. Liviu is proficient in MicroStation and InRoads.

NHDOT, NH Route 101 Widening, Bedford, New Hampshire. Project manager. Widening of existing NH Route 101 from two to four lanes. Responsible for preparing final design documents, right-of-way plans and assisting in the development of permitting applications. Participated in numerous design and project management meetings with NHDOT, the Town of Bedford, and utility companies.

NHDOT, I-93 Salem-Manchester Corridor Widening, Salem/Manchester, New Hampshire. Deputy project manager. Final design of southern segment of this reconstruction project, which consisted of expanding I-93 from an existing two-lane facility to four lanes and upgrading interchanges at exits 1, 2, and 3. Water quality was a major project issue with the design incorporating more than 30 water quality treatment basins. Project included full engineering services from preliminary design to development of contract documents for 12 construction contracts. Primary responsibilities included roadway design, traffic control, coordinating all disciplines of the civil design and the preparation of contract documents for construction contracts E; H and I at Exit 3. Liviu was the main point of contact for NHDOT and participated in meetings with the various Department's Bureaus throughout the project design.

Massachusetts Department of Transportation (MassDOT), Route 2 Crosby Corner Safety Improvement Project, Concord-Lincoln, Massachusetts. Project engineer. Project includes the design of an interchange at Route 2 and 2A for MassDOT as well as the elimination of direct

abutter access by the addition of service roads. Assisted MassDOT with resolving miscellaneous issues during the construction phase of this project. Participated in meetings with the Department, the adjacent towns and abutters.

Clark County, Paradise Road from Naples Drive to Desert Inn Road, Las Vegas, Nevada. Project manager. Project included redesign of median islands and driveways to improve business access, as well as design of bus stops along the corridor. In charge of preparing final plans, specifications, and cost estimate for the widening of an urban arterial from four to six lanes. Discussed project impacts with local businesses. Defined right-of-way acquisitions, permanent, and temporary easements. Provided technical assistance during construction.

MaineDOT, Route 1/Main Street, Ogunquit, Maine. Quality control manager. Performed quality control reviews of the civil plans for this 2.3-mile roadway rehabilitation of Route 1. The project included pavement reconstruction, drainage improvements, utility relocations, curb and sidewalk construction.

City of North Las Vegas, North Fifth Street Improvements, North Las Vegas, Nevada. Project engineer. Preliminary engineering for a 2.8-mile urban super-arterial with four urban interchanges, overpasses and underpasses, mass transit, and multi-use paths. Conducted alternative studies to select the best alignment for the new road. Designed a roundabout marking the entrance to the City of North Las Vegas.

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ATTACHMENTS

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2. CONSULTANT DISCLOSURE STATEMENT FOR PREPARATION OF ENVIRONMENTAL EVALUATIONS
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6. SIGNATURE PAGE
7. CERTIFICATION OF GOOD STANDING
8. CERTIFICATION OF AUTHORITY / VOTE
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AGREEMENT
FOR PROFESSIONAL SERVICES

PREAMBLE

THIS AGREEMENT made this 10th day of February in the year 2020 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 WSP USA Solutions Inc. (formerly known as Louis Berger U.S., Inc.), with principal place of business at 412 Mount Kemble Avenue, in the City of Morristown, State of New Jersey, and New Hampshire local office at 100 Commercial Street, 2nd Floor North in the City of Manchester, State of New Hampshire, hereinafter referred to as the CONSULTANT, witnesss that:

The Department of Transportation, State of New Hampshire, hereinafter referred to as the DEPARTMENT, proposes to improve US 3 in the Town of Hooksett. The project begins at Alice Ave/West Alice Ave and extends north 1.4 miles to the intersection of NH 27 (Whitehall Road)/Martins Ferry Road.

The DEPARTMENT requires professional engineering and environmental consulting services to select an appropriate proposed action that is supported by the community, technically feasible, environmentally permittable, and economical; develop an approved Environmental Document; and bring the proposed action to a public hearing for layout approval.

The CONSULTANT'S Fee Proposal dated August 8, 2019 is hereby adopted by reference and considered to be part of this AGREEMENT.

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

ARTICLE I

ARTICLE I - DESCRIPTION OF PROFESSIONAL SERVICES TO BE RENDERED

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

A. LOCATION AND DESCRIPTION OF PROJECT

This project involves the study of improvements to US 3 in the Town of Hooksett. The project begins at Alice Ave/West Alice Ave and extends north 1.4 miles to the intersection of NH 27 (Whitehall Road)/Martins Ferry Road. Some key considerations to be aware of include the following:

- Recommendations for this segment of US 3 were included in the *US 3 Corridor Study* dated January 2008 and the *US 3 & NH 28 Corridor Study* dated May 1995.
- The segment of US 3 to be improved is three lanes with variable width shoulders.
- Localized improvements have been made at key intersections and some commercial developments to add turning lanes, shoulders, and traffic signals.
- The corridor is subject to peak traffic volumes, which restricts mobility particularly in the vicinity of the key intersections.
- Shoulders or sidewalks are not consistent which hinders the mobility of non-motorized users.
- There are numerous private driveways within the segment and the corridor study proposed implementing access management measures.

The objective of the project is to develop an alternative that will improve the safety and mobility of all users by applying 'Complete Streets' principles with the central goal of achieving an appropriate balance between the needs of motorized, non-motorized, and transit users of the corridor and provide safe and efficient access to abutting properties. As the development of improvement alternatives proceed, it will be crucial to work closely with all other appropriate public or private stakeholders to gain consensus on design decisions.

The development of the preliminary engineering for this project is expected to be performed in two phases Part A (preliminary design) and Part B (final design). This scope of services is for the first phase (Part A) only. The purpose of this first phase of the project is to develop and evaluate design alternatives for improving US 3. Part 'A' efforts will: 1.) develop and evaluate improvements alternatives; 2.) identify all impacted natural and cultural resources potentially affected by the proposed action, and investigate means of minimizing or mitigating the impacts; 3.) prepare an environmental document for the proposed action; 4.) assist the Department with public involvement support services, including preparation of a Hearing plan, and minor revisions to the selected alternative resulting from hearing comments and 5.) identify and document the existing right-of-way.

ARTICLE I

B. SCOPE OF WORK (GENERAL)

The goals of the Part "A" engineering efforts of this project are to select an appropriate proposed action that is supported by the community, technically feasible, environmentally permissible, and economical; develop an approved Environmental Document; and bring the proposed action to a public hearing for layout approval.

Assuming a successful Public Hearing, and upon completion of Part A, the DEPARTMENT reserves the right to either negotiate a scope and fee for Part B to prepare final design plans, specifications and estimates for the project limits, or terminate the contract.

The development of improvement alternatives will include a dynamic public participation program involving public and private stakeholders and the general public in the decision-making process to aid in the determination of the proposed action.

C. SCOPE OF WORK (SPECIFIC)

The tasks for Part 'A' have been divided into three categories: Preliminary Design, Environmental Documentation and Public Participation. The Preliminary Design tasks cover the work required to evaluate and develop improvement alternatives to arrive at a proposed action. The Environmental Documentation tasks cover the work required to document impacts of the alternatives to all relevant natural and cultural resources. The Public Participation tasks cover public outreach for all aspects of the project. Final design will be undertaken by Part 'B' of the design efforts and will encompass the engineering efforts needed to advance the design from NEPA approval to project advertising.

1. Preliminary Design

a. Data Collection

The CONSULTANT shall collect any pertinent information available within the project limits including, lane geometries, traffic control information, utility locations, 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 design.

The Department will provide the traffic counts that are currently available for the Route 3 corridor.

The Consultant will collect Turning Movement Counts (TMCs) on a Tuesday, Wednesday or Thursday non-holiday from 6-9 AM and 3-6 PM on days where snow is not expected at the following locations:

1. Hooksett Road & Alice Avenue
2. Hooksett Road & Brace Avenue
3. Hooksett Road & Leonard Avenue / Silver Avenue

ARTICLE I

4. Hooksett Road & Route 28 A
5. Hooksett Road & Martins Ferry Road / NH Route 27.

At the following two intersections, TMCs will be collected on a Tuesday, Wednesday or Thursday non-holiday from 6AM to 6PM on days where snow is not expected. This data will be used along with the crash analysis to determine if traffic control is needed on Route 3 at any of these two locations:

1. Hooksett Road & Zachary Drive
2. Hooksett Road & Embassy Avenue.

The TMCs will be classified into the following categories: passenger vehicles, motorcycles, single unit trucks, buses, tractor trailers, pedestrians and bicycles.

The CONSULTANT shall process the raw TMC data to create peak hour volume turning movement diagrams, calculate truck percentages and peak hour factors. The roadway network will be balanced for each peak hour with discrepancies applied to high volume driveways as needed. The traffic data will be submitted to the DEPARTMENT for review prior to the development of the design alternatives.

b. Topographic Survey and Base Plan Preparation

The CONSULTANT will develop a digital terrain model and base plan from topographic survey data to be provided by the Department. ~~The DEPARTMENT will conduct the~~ topographic survey(s) and process the data, which the CONSULTANT will then incorporate into the digital terrain model and base plan. The most recent ortho-rectified digital aerial photographs will be provided by the DEPARTMENT if needed.

The CONSULTANT will submit requests for supplemental survey as necessary. It is anticipated that three additional survey requests may be needed to supplement the initial base plan preparation.

c. Right-of-Way Boundary Preparation

This work will be performed primarily by subconsultant Doucet Survey. The CONSULTANT shall be responsible for coordination efforts and will participate in the ROW meetings that will be scheduled with the DEPARTMENT.

The CONSULTANT shall complete a boundary survey of the identified section of US 3, including all intersecting municipal or State roads extending to a minimum distance of 500 ft beyond the limits of the proposed improvements. All survey work must be completed in accordance with the minimum standards for a Category 3 Urban Class Boundary Survey as detailed in the New Hampshire Code of Administrative Rules (Part Lan 503, Technical Standards) and shall be supervised by a NH Licensed Land Surveyor. The survey shall include,

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but is not limited to, a complete field survey locating all available boundary monumentation and relevant lines of occupation of Right of Way. The CONSULTANT, in conjunction with a certified NH Licensed Land Surveyor, shall prepare a right of way plan showing ROW limits and centerline alignments, and metes and bounds with station and offset information for the existing roadway deflection points. The CONSULTANT will develop the existing Boundary and control through the following process:

- i. ROW Facilitation Meeting: An initial meeting with the DEPARTMENT for project overview, review of historic ROW information and turnover of DEPARTMENT project data and ROW;
- ii. Records Research: The CONSULTANT shall research the town and town roads and property records, State highway and relevant archive records, court, registry and probate records, abutters' deeds and property plans within the project limits, and other research as needed to define the existing ROW limits;
- iii. Boundary Survey: The Consultant shall complete the boundary survey as outlined:
 1. Field reconnaissance of Right-of-Way and abutting boundary monuments.
 2. Establish geodetic control network on NH State Plane Coordinate System.
 3. Perform boundary survey of existing Right-of-Way.
 4. Process survey control data using least squares adjustment at 95% confidence level. Process side shot data on adjusted controls and verify.
 5. Develop Right-of-Way alignments and establish Right-of-Way limits based on survey and boundary control standards of practice and the current NHLSA Ethics and Standards.
- iv. Existing ROW Plan Review: The CONSULTANT shall submit preliminary ROW plans for DEPARTMENT'S review and attend a ROW facilitation meeting to discuss ROW Plan review comments;
- v. Development of Final Existing ROW Plan; The CONSULTANT shall address the comments from DEPARTMENT Preliminary Plan review through a written explanation on how review items were addressed prior to recording existing ROW plan with the County Registry. The CONSULTANT shall provide the DEPARTMENT with the Existing ROW Plans in DWG & DGN file format and a PDF plan file. The CONSULTANT shall provide the DEPARTMENT with a plan showing the existing boundary monumentation and survey traverse in DWG & DGN file format and the geodetic control data in ASCII file format. The CONSULTANT shall be responsible to record the base plan at the County Registry in which the project is located

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d. Traffic Data Collection & Analysis

The CONSULTANT shall gather traffic volume data as needed to analyze existing and future traffic operations under both no-build and build conditions within the project area. Macroscopic and microscopic evaluations will be undertaken for the various alternatives as needed.

One AM & one PM scenario will be analyzed for up to 4 different design alternatives and no-build condition using Synchro/Sim Traffic. It is assumed that construction will be completed in 2025. Traffic volumes will be projected to 2045 using an annual growth rate which will be supplied by the DEPARTMENT or, if necessary, calculated based on research of historical data in the area. The anticipated traffic analysis scenarios are as follows:

1. 2019 No Build – AM & PM peak hour (base condition for noise analysis)
2. 2025 No-Build – AM & PM peak hour
3. 2025 Alternative 1 – AM & PM peak hour
4. 2025 Alternative 2 – AM & PM peak hour
5. 2025 Alternative 3 – AM & PM peak hour
6. 2025 Alternative 4 – AM & PM peak hour
7. 2045 No-Build – AM & PM peak hour
8. 2045 Alternative 1 – AM & PM peak hour
9. 2045 Alternative 2 – AM & PM peak hour
10. 2045 Alternative 3 – AM & PM peak hour
11. 2045 Alternative 4 – AM & PM peak hour

e. Crash Data Collection & Analysis

The CONSULTANT shall evaluate crash data provided by the DEPARTMENT (in Excel format) to understand the safety performance within the project area. The CONSULTANT shall consider how the alternatives would impact safety.

Crash data for each intersection/roadway segment based on the most recent three-year crash records will be tabulated based on type, location and severity. Based on the tabulation of crash data, the CONSULTANT shall assess and note patterns within the data to address potential traffic safety problems. Collision diagrams will not be required.

The results of the traffic and crash data analysis will be presented in a traffic and safety operations memorandum that will be submitted to the DEPARTMENT for review prior to incorporation in the final engineering report. The traffic analysis will be reported in terms of Level of Service (LOS) based on delay outputs from Synchro and queue data based on five averaged runs of SimTraffic. DEPARTMENT comments on the traffic and safety operations

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memorandum will be incorporated in the final Engineering Report. When appropriate, the AASHTO Highway Safety Manual will be referred to in order to predict the safety performance of the proposed design alternatives.

f. Alternative Development & Evaluation

The CONSULTANT will develop and evaluate alternatives and investigate their consequences to allow the DEPARTMENT to select a proposed action.

- i. Reasonable Alternatives: Each alternative will be developed to an equal level of detail. Lanes, shoulders, slope impact limits, right of way requirements, environmental impacts, and potential water quality protection measures will be determined for each alternative. It is anticipated that up to four (4) different reasonable design alternatives will be developed for the US 3 corridor. Each alternative will be submitted to the Department for review in roll plot format. Each submission will include conceptual level plan, profile, typical sections and critical cross-sections. In locations where the proposed improvements are minimal and the roadway footprint does not change (e.g. minimal widening, milling and resurfacing, etc.), general (non-critical) cross-sections will not be provided. Cross-sections at all typical (non-critical) driveway locations will not be required. Conceptual level traffic control will be presented at this time to determine if there are major differences in the alternatives. This is expected to be a short explanation with critical sections, showing phasing, if needed.

The alternatives will be summarized in a comparison matrix and accompanied by conceptual level cost estimates, with clear explanations of assumptions used to develop the estimates. Calculations supporting the major item categories will be provided at a level consistent with the level of design detail.

The following design alternatives submissions are anticipated:

1. One preliminary submission of the four design alternatives to the DEPARTMENT.
2. One revised submission of the four design alternatives that incorporates the DEPARTMENT comments on the preliminary submission.
3. Two additional submissions of the four design alternatives that address comments from the Town and public.
4. Two submissions of the two preferred design alternatives.
5. Three submissions of the preferred design alternative that will be presented at the public hearing.
6. Final submission incorporating the hearing comments.

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A basic drainage study will be performed for the project based on conceptual drainage and preliminary BMP locations. The purpose of this study is to identify existing drainage patterns, establish presumed proposed drainage outlets with approximate flows and determine the right-of-way that will be required for the conceptual BMP measures developed. There will be no closed system analysis or culvert analysis performed as part of this study. A report will be provided outlining the conceptual pre and post flows at all the presumed outlet locations. This study will be performed only for one of the design alternatives (likely the one featuring the most impervious surface area).

It is assumed that the development of the design alternatives will be an iterative process. The four alternatives may not be designed at the same time; we anticipate they will evolve based on comments received from stakeholders and the Department.

- ii. **Cost Estimates:** Conceptual cost estimates will be developed for the alternatives. The cost estimates will quantify items such as pavement, roadway select materials, earthwork, structures, and other major cost items as appropriate, and apply the DEPARTMENT'S current weighted average unit prices. Other items such as drainage, traffic control, signing and striping will be estimated on a percentage basis. Right of way acquisition costs will be determined from approximate assessed value of impacted property. Environmental mitigation costs will be estimated based on approximate impacts to wetlands and streams.

g. Engineering Report

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

h. Project Team Meetings

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

It is anticipated that a total of 15 project team meetings will be held for the duration of the project. These meetings are in addition to the working group and public informational meetings listed under the Public Participation section below.

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i. Approved action deliverables

The CONSULTANT'S final submission shall include hard copy 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, complete out to the slope limits. The horizontal, vertical (profiles), and pavement layout shall allow further development toward final design. In addition, the following shall be provided for the preferred alternative: design calculations to support superelevations, preliminary traffic control plan/critical sections, draft construction schedule, proposed right-of-way layout, major utility impacts documented, draft typical sections, cost estimate with supporting quantity calculations, and outstanding issues/concerns.

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

At the completion of Part A, the CONSULTANT shall provide the DEPARTMENT a 3D model of the proposed top roadway surface (LandXML (preferred) or DTM format) for the preferred alternative only. This model will include basic elements such as roadway super-elevation, side slopes, location of curbs, sidewalks, guardrail, BMP measures (water quality location identified but not fully designed with final grades) and retaining walls. No detailed intersection or driveway modeling will be included.

2. Environmental Documentation

a. Data Collection

The CONSULTANT shall review relevant data sources to identify all resources present within the Project Area. Resources to be identified include:

i. Water-Based Resources

- a) 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 Bureau, inventory data, municipal data or municipal mapping. The CONSULTANT will describe these resources and display them on project mapping. Data will also be

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needed to identify any sensitive resources directly adjacent and potentially down gradient of the project 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 to stormwater conveyance and treatment in the vicinity of the drinking water supplies and wellhead protection areas.

- b) Surface Waters: The CONSULTANT will review all current regulatory requirements and constraints associated with surface water resources which will be identified and summarized in the environmental document. A review of the most recently approved State 303(d) list will be conducted to identify water quality impairments and TMDLs within the project area. The proposed action and alternatives if necessary, will be assessed to determine adherence to any 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), and for Construction activities (CGP).

The CONSULTANT will investigate appropriate water quality treatment measures necessary to minimize nutrient impacts on surface waters. This shall include a pavement-area-analysis-to-determine-the-percent-of-the-pavement-treated-prior-to-discharge with the goal of 100% capture and treatment. The approximate size and placement of structural Best Management Practices (BMPs) will be shown at the Public Hearing. BMP placement and type will be compliant with current AOT requirements and consideration of soil conditions, depth to bedrock, groundwater tables, wellhead protection areas, drinking water protections, groundwater protections, and the proximity to the project's stormwater discharge points.

The CONSULTANT will assess chloride (salt) loadings based on the number of travel lanes for the existing and proposed facility. An assessment of existing operational BMPs will be conducted and compared to the Department's MS4 procedures for winter maintenance and presented in the environmental document.

- c) Floodplains: FEMA floodplain and floodway information will be gathered from appropriate sources and displayed on project mapping.
- d) Wetlands: The CONSULTANT will delineate wetlands and determine their functions and values within the study area limits based on state and federal criteria, and will collect sufficient field data to document the delineation. Wetlands will continue to be identified using the 2007 wetland permit numerical designation. If access to private

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property is required, landowners will be notified by the DEPARTMENT. The CONSULTANT will survey wetland flagging using a GPS unit with sub-meter accuracy. The CONSULTANT will note any unusual features such as invasive species, disturbed areas, or uncommon wetland types such as bogs or vernal pools. This information will be provided in plan format and in a report that is stamped by a Certified Wetland Scientist (CWS) with a current NH certification, which includes the location of the features, classifications of wetlands present within the wetlands, descriptions of the each wetland's hydrology, soils and vegetation, flagging number system of each delineated feature, photographs, functions and values (including the Wetlands Function-Value Evaluation Form from the Highway Methodology Workbook Supplement), Wetland Determination Data Plot Forms with paired upland and wetland sample data points, and the results of the stream crossing assessments. If required, the CONSULTANT will identify potential wetland mitigation opportunities either within the project corridor or the surrounding area.

- e) Stream Crossings: The CONSULTANT will identify all intermittent and perennial stream crossings within the project study limits. The CONSULTANT will complete stream crossing field data collection assessments for any of the streams identified as tier 3 in accordance with Env-Wt 900 and any applicable DEPARTMENT field data collection forms. The delineations at streams shall be at a minimum 100' upstream and downstream of the crossing. Data collection shall include a longitudinal profile through the crossing with relative inlet and outlet invert elevations and upstream and downstream streambed elevations. The CONSULTANT will determine the watershed size for each crossing and determine the corresponding Tier classification using the USGS Stream Stats tool. The CONSULTANT will perform Stream Crossing Evaluations in accordance with the NHDES Stream Crossing Rules Env-Wt 900 series to aid in determination of a design that meets the NHDES Stream Crossing Guidelines and/or alternative design. It is assumed that Stream Crossing evaluations are limited to Messer Brook.

ii. Land-Based Resources

- a) Soils: Soil series within the study area will be mapped based on existing databases, including the distribution of prime, statewide, local, or unique farmland soils.
- b) Active Farmlands: Active farmlands will be identified and described.
- c) Public and Conserved Lands: Publicly owned lands, bicycle and pedestrian trails, and privately conserved lands will be identified.

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- d) Section 4(f) Resources: Parks, historic sites, or other areas subject to Section 4(f) will be identified.
 - e) Section 6(f) Resources: Lands receiving Section 6(f) funds will be identified based on coordination with the Department of Natural & Cultural Resources (DNCR).
- iii. Wildlife
- a) Wildlife and Habitat: Wildlife resources will be identified with information from the NH Wildlife Action Plan and supplemented as needed by field reconnaissance.
 - b) Fisheries: The fisheries resource information will be updated based on coordination with NH Fish and Game and the US National Marine Fisheries Service.
 - c) Threatened and Endangered Species: Threatened and endangered species information will be gathered through coordination with the NH Department of Natural & Cultural Resources, NH Fish and Game Department, and the US Fish and Wildlife Service, as well as field investigations. 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.
- iv. 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 or the Section 106 Programmatic Agreement Appendix A or B Certification Forms, as applicable. The CONSULTANT will be responsible to complete all National Register eligibility survey forms in accordance with NHDHR Survey Policy and Manuals. The CONSULTANT will conduct all Section 106 public outreach efforts with Consulting Parties and municipalities. The CONSULTANT will prepare a draft effect memo and, if needed, e106 for submission to the Advisory Council on Historic Preservation and a Memorandum of Agreement for the Adverse Effect. If needed, following a determination of adverse effect, the CONSULTANT will coordinate with the DEPARTMENT, the lead federal agent, NHDHR, and Consulting Parties on appropriate mitigation.

It is assumed that:

- no historic districts or documented archaeological sites are located within the project area.
- a maximum of 35 properties would be included in the Request for Project Review (RPR).

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- no more than 15 properties would be further investigated for individual eligibility for the National Register of Historic Places.

Preparation of a Project Area Form (PAF) is assumed as a planning document for NHDHR.

v. Cultural Resources (Archaeology):

The CONSULTANT shall undertake a Phase IA Archaeological Sensitivity Assessment followed by a Phase IB Intensive Archaeological Investigation of areas of sensitivity that may be impacted by the project alternatives, if necessary. The CONSULTANT shall produce a comprehensive report indicating the results of the investigations, identifying areas of sensitivity, and presenting recommendations, if needed for Phase II Determination of Eligibility and Phase III Data Recovery. The CONSULTANT shall complete all necessary phases of archaeology as required to reach a Public Hearing, understanding that additional phases may be completed in Part B.

Should the Phase 1A investigation identify any sensitive areas that may be impacted by the design alternatives, these areas may be further evaluated through a Phase 1B investigation to determine if resources are present. The CONSULTANT will provide a report in Part A to summarize Phase 1A/1B findings and recommendations. Phase II and any other archeological investigations will be included as an environmental commitment in the NEPA documentation and advanced during Part B of the project.

It is assumed that:

- no ancillary locations (borrow pits, staging areas, etc.) are included in the Phase 1A/1B investigations
- a maximum of 350 shovel tests will be required for the Phase 1B
- a maximum of 50 artifacts would be processed.

vi. Social and Economic Resources: The DEPARTMENT will develop the socio-economic analysis of the regional social and economic resources. The CONSULTANT will review the Department's analysis and identify the relationship between the study area transportation/circulation pattern, regional and local municipalities' Master Plans, and the businesses and residents within its immediate influence. The CONSULTANT will prepare a short narrative that summarize the applicability of the Department's analysis to this corridor.

vii. Noise: The CONSULTANT shall perform, as necessary, tasks required to assess the potential effects on noise levels at receptors adjacent to the project to determine and/or achieve compliance with the FHWA Procedures for Abatement of Highway Traffic Noise and Construction Noise (23 CFR 772) and the DEPARTMENT'S *Policy and Procedural*

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Guidelines for the Assessment and Abatement of Highway Traffic Noise for Type I and Type II Highway Projects (the Noise Policy).

The project is anticipated to be a Type I project with scope to include existing conditions noise monitoring, model development and consideration of mitigation. The study will be prepared in accordance with NHDOT's 2016 Policy and Procedural Guidelines for the Assessment and Abatement of Highway Traffic Noise for Type I Highway Projects and FHWA's 2011 Highway Traffic Noise: Analysis and Abatement Guidance.

The noise study will include the following specific sub-tasks:

1. **Identification of Receptors.** A review of existing land use will be conducted based on aerial photography and field reconnaissance to identify noise sensitive receptors within approximately 200 feet of the project per the Noise Abatement Criteria activity classifications. The status of any proposed developments will be researched to determine if any may be considered "permitted" before the NEPA process is completed and thus potentially require assessment of noise impacts and mitigation.
2. **Noise Monitoring for Model Validation.** Existing conditions noise monitoring will be conducted for up to six locations (with one set of measurements at each location). Traffic counts (including vehicle classification) will be conducted simultaneously. The sound-level-meter will meet or exceed the requirements set forth in the ANSI-S1.4-1983 Standards for Type I quality and accuracy.
3. **GIS data analysis and Traffic Noise Model (TNM) input data development.** This task includes obtaining TNM input data (elevation, roadways, receptors, tree zones, ground zones etc.) and processing this data for entry into the model.
4. **TNM modeling.** The noise model will be validated for the six monitoring locations. An existing conditions model will be developed and run using 2019 traffic volumes/classification consistent with the baseline condition developed for the traffic study. Two future Build condition models will be developed—one for the 2025 opening year and one for the 2045 design year. A spreadsheet format will be used to summarize existing and future traffic noise levels and quantify the number of noise impacts per the NHDOT traffic noise policy. The Build condition TNM modeling will be conducted for the preferred alternative only, potential differences with other alternatives will be discussed qualitatively for NEPA purposes.
5. **Noise abatement.** If noise impacts are predicted, noise abatement measures will be evaluated for feasibility and reasonableness. This will include modeling of possible noise barrier reasonableness per the 2016 NHDOT noise policy.

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6. **Information for Noise-Compatible Land Use Planning.** The approximate distance to the future 2045 66 dBA contour line will be disclosed in the technical memo to inform future land use planning (a detailed future noise contour map is not included).
 7. **Report.** A brief noise technical memo will be prepared to document the study results and recommendations.
- viii. **Air Quality:** The CONSULTANT shall perform, as necessary, tasks required to assess the potential air quality impacts of the project to determine and/or achieve compliance with the State of New Hampshire Air Quality Implementation Plan, and the provisions set forth in the Clean Air Act Amendments (CAAA) and the National Environmental Policy Act (NEPA).
- As a former nonattainment area for 1997 8-hr ozone NAAQS, the project area is subject to EPA's November 2018 *Transportation Conformity Guidance for the South Coast II Court Decision*. The NEPA documentation will discuss this guidance and the compliance of the project with transportation conformity. It is assumed that there will be no need for formal CO or PM2.5 hot-spot analysis and interagency coordination for purposes of transportation conformity. For NEPA purposes, a qualitative analysis indicating changes in LOS and traffic volumes and comparing the proposed conditions to other similar projects found not to result in significant air quality impacts will be completed. No quantitative regional emissions analyses are included.
- ix. **Invasive Species:** The CONSULTANT will determine the presence of invasive species in conjunction with other project field investigations. The type and extent of each distinctive invasive plant population will be identified within the project limits. Approximate locations of populations will be located with GPS and shown on the project plans.
- x. **Contaminated Properties:** A database search will be undertaken to identify areas with records of hazardous materials or contamination within 1,000 feet of the project limits. This work will also require a review of historic aerial photographs to evaluate past and current land use, and field surveys of the project area to look for observable physical evidence of contamination or potential contamination sources. This information will be described in a summary report that includes a list of all parcels with potential contamination concerns. The CONSULTANT will populate the DEPARTMENT's RASCAL database and will coordinate with the DEPARTMENT's Bureau of Environment's Contamination Program to confirm findings and will assess measures required to conduct geotechnical investigations within areas of potential contamination.

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- xi. Limited Reuse Soil (LRS): The CONSULTANT shall determine the quantity of LRS generated during construction, by phase if applicable, and determine the ability, due to quantities and any applicable construction phasing, to reuse the LRS within the project limits. The CONSULTANT shall determine and provide figures for potential temporary on-construction-site stockpile locations for excavated LRS.
 - xii. Construction Impacts: The CONSULTANT shall perform, as necessary, tasks required to assess the potential construction impacts on the natural, cultural and socio-economic resources present within the project areas qualitatively and include identification of BMP's to minimize impacts. Potential construction impacts and likely mitigation measures will be described. These may include detours during construction; erosion and sediment control; air, noise, and dust pollution; and special measures that may be needed to protect water quality.
- b. Agency Coordination
- The CONSULTANT will attend up to three of the DEPARTMENT's monthly Natural Resource Agency meetings and coordinate a field meeting, if needed, with the agencies to review resource impacts. The CONSULTANT will also attend up to three of the DEPARTMENT's monthly Cultural Resource meetings and possible field visit, with the lead federal agent and the NHDHR to discuss historic resources and Section 106 findings. The CONSULTANT will be responsible for supplying support graphics, making presentations and preparing meeting minutes.
- c. Project Purpose and Need
- The CONSULTANT will develop a formal Purpose and Need Statement for the project consistent with NEPA and other Federal guidelines.
- d. Alternatives Development and Evaluation
- The CONSULTANT will develop a Summary Matrix of the impacts and effects of the reasonable design alternatives for use by the DEPARTMENT and stakeholders as a planning tool to determine the proposed alternative.
- The summary matrix will quantify the impacts of each alternative onto the project critical resources. For the purpose of the NEPA documentation, a detailed summary matrix is not anticipated. Rather, the alternatives screening and selection process will be summarized for the anticipated Non-Programmatic Categorical Exclusion.

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e. Description of Proposed Action

The CONSULTANT will describe the Proposed Action in detail, including location, dimensions, traffic patterns, amenities or facilities such as pedestrian crossings, construction issues, and estimated costs. Conceptual plan, profile, and cross-section views will be included.

f. Environmental Impacts of the Proposed Action

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

The CONSULTANT will perform tasks as outlined in the CONSULTANT'S Scope of Work and Task Descriptions, for the following resources/impacts:

Land Use	Social and Economic Resources	Farmlands
Air Quality	Noise	Groundwater Resources
Surface Water Resources	Chloride Loading	Pollutant Loading (TN, TP & TSS)
Floodplains	Wetlands	Wetland Mitigation
Wildlife/ Vegetation/ Fisheries	Threatened or Endangered Species	Parks/Recreation/Conservation Lands
Cultural Resources	Hazardous Materials/Contamination	Limited Reuse Soils
Visual Resources	Environmental Justice (provided by the DEPARTMENT)	Construction Impacts
Summary of Impacts	Environmental Commitments	

A Non-Programmatic Categorical Exclusion is assumed for purposes of the scope of work and cost. The environmental narrative accompanying the Categorical Exclusion documentation package is anticipated to be approximately 20 pages based on the size, type and context of the project. Mapping for the report will be limited to a topographic map and simple aerial overview (3-4 sheets). Agency correspondence and supporting materials will be provided in appendices. The floodplain evaluation for the NEPA review will map the location of floodplain/floodway encroachments and discuss project compliance with Executive Order 11988.

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It is assumed that any detailed hydraulic analyses/modeling associated with Messer Brook stream crossing would be completed during Part B of the project.

For purposes of Section 7 compliance, it is assumed that the project will have “no effect” on federally-listed species.

Land acquisition impacts will be summarized, including any potential displacements.

A detailed analysis of neighborhoods, land use, community services, farmlands, energy and utilities is not anticipated to be required.

g. Section 4(f)

If necessary, the CONSULTANT will prepare a Section 4(f) evaluation that complies with applicable federal laws and regulations, including Section 4(f) of the Department of Transportation Act, 23 CFR 774, FHWA’s *Section 4(f) Policy Paper*, and other resources as appropriate. The evaluation will include: a description of Section 4(f) resources; a description of any project “use” of the resources; an alternatives analysis, including a least overall harm analysis; measures to minimize harm; coordination activities with NH SHPO, lead Federal agency; and conclusions.

Potential historic and parkland resources potentially subject to Section 4(f) will be identified and mapped. In terms of level of effort, it is assumed that the preferred alternative will have only a de-minimis impact to Section 4(f) resources. An individual Section 4(f) review that has extensive alternatives analysis requirements is not anticipated.

h. Section 6 (f)

Section 6(f) properties will be identified, and potential impacts to 6(f) properties will be quantified. Coordination for use of 6(f) properties will include one field meeting with the Department of Natural & Cultural Resources (DNCR) and additional coordination activities. Lands receiving Land and Water Conservation Fund funds will be identified. This scope assumes that there are no 6(f) properties impacted.

i. Draft Environmental Study/Section 4(f) Evaluation

The Draft Environmental Document will document the resource impacts outlined in Section C.2.f above. The Environmental Document will incorporate, either directly or by reference, the alternatives analysis and conclusions reached in Section C.2.d above and in the subsequent selection of the proposed alternative. The document will also identify which environmental permits are required, but the actual permit applications will not be undertaken until final design. The Section 4(f) evaluation, resource reports, agency correspondence, and public meeting summaries will be appended. An administrative Draft will be prepared for review by the DEPARTMENT and the lead Federal agency. After comments are addressed by the

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CONSULTANT, the Draft Environmental Document will be submitted to the DEPARTMENT, the lead Federal agency, and all other parties as directed, for review. Four printed copies and 3 CDs of the Draft Environmental Document /4(f) Evaluation will be provided by the CONSULTANT.

It is assumed that the level of environmental study for this project will be a Categorical Exclusion (CE) with supporting technical documentation.

j. Final Environmental Study/Section 4(f) Evaluation

Following review of the Draft Environmental Document and comments received at the Public Hearing, the CONSULTANT will meet with the DEPARTMENT and the lead Federal agency to review and address comments as needed. The CONSULTANT will then revise and resubmit the document. It is anticipated one review will be necessary. Four printed copies of the Final Environmental Document/4(f) Evaluation will be provided to the DEPARTMENT as well as 3 CDs of the document.

It is assumed that the level of environmental study for this project will be a Categorical Exclusion (CE) with supporting technical documentation. The Draft CE package will be revised based on DEPARTMENT and FHWA comments. Two rounds of DEPARTMENT review and one round of FHWA review are anticipated.

3. Public Participation

The CONSULTANT shall support a dynamic public participation process that enhances the DEPARTMENT'S "Public Involvement Procedures 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 presentations and draft meeting minutes. Specific tasks include:

a. Prepare a Public Involvement Plan

The CONSULTANT will prepare a Public Involvement Plan outlining all elements of the tasks listed below. Virtual tools (mobile applications, visualizations, do-it-yourself videos, crowdsourcing, virtual town hall, etc.) should be considered as part of the plan and used when appropriate. The public involvement plan will include a detailed schedule of all activities. It is assumed that implementation of the plan will be a joint effort, performed by the Consultant, the DEPARTMENT and the Town.

The CONSULTANT shall coordinate with the DEPARTMENT, Southern NH Regional Planning Commission and the Town to establish the working group/technical advisory committee members. The CONSULTANT will prepare invitations to meetings and provide minutes of the meetings flagging action items.

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The CONSULTANT shall prepare one questionnaire/survey for each of the public informational meetings to solicit additional input on the design alternatives. MetroQuest and/or Poll Everywhere as described below as an Every Day Counts initiative, will be employed.

The CONSULTANT shall gather and draft responses to public inquiries received through the project website and other social media outlets for approval and distribution.

The CONSULTANT shall prepare meeting minutes for distribution amongst design team members.

It is assumed that the following tasks will be outside of the CONSULTANT scope of work:

- Preparation of public informational meeting/hearing notices.
- Coordination and reservation of meeting spaces.
- Mailing list development and coordination.
- Formally responding to public inquiries (outside of the public hearing, public informational and working group meetings). It is envisioned that the DEPARTMENT will respond to public inquiries with CONSULTANT's input.

FHWA Everyday Counts Initiative 5: An allowance has been established for encouraging virtual public involvement throughout the duration of the project. These efforts will be primarily the responsibility of subconsultant WSP and are intended to supplement the graphic material prepared for the Working Group and Public Informational meetings:

- Provide content for the project website hosted on the DEPARTMENT site
- Provide content for Social media accounts the Department currently maintains
- Drone footage – use for outreach videos/images on social media/website/public meetings
- Incorporate Poll Everywhere (interactive, real-time polling by text) into Public Meetings and workshops
- Live-stream meetings on social media and post 'educational' videos of the project in-between meetings
- MetroQuest is an online public engagement tool that utilizes game-like planning techniques to create compelling, interactive and educational surveys. MetroQuest offers 14 screen templates designed to optimize engagement quickly (within five minutes) and the platform is compatible with any device – laptops, tablets, smart phones and kiosks.

b. Working Group Meetings

The CONSULTANT, in consultation with the Town, will assist the DEPARTMENT in identifying appropriate stakeholders and assembling a working group whose role will be to advise the design team on the development and evaluation of design alternatives. Working group meetings will be held as needed with project stakeholders to review and discuss

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alternatives and to facilitate local input into important design decisions. The CONSULTANT will prepare any needed informational handouts and presentation materials, will assist with presentations as needed, and will document the proceedings.

It is assumed that six (6) working group/technical advisory committee meetings will be held throughout the duration of the project. As part of the six meetings, a Working Group meeting will be held in advance of the two public information meetings and in advance of the public hearing. The Group's expertise will assist in the formulation and exploration of the early, larger set of alternatives, will inform the development of the preferred alternative and will enhance the public hearing process. It is advantageous to garner the Working Group's feedback before sharing project progress with the public.

It is assumed that no more than 4-5 representatives from the CONSULTANT and its subconsultants will attend these meetings. It is assumed that no advertising will be needed for the working group meetings. It is assumed that once the working group is established, these meetings will be announced on the project website and/or by E-mail.

c. Public Informational Meetings

Two 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 Informational Meeting will take place early in the design to facilitate discussion of the reasonable range of design alternatives, while the second Public Informational Meeting will focus on the proposed action and will occur during the NEPA process prior to finalizing the Draft Environmental Document. The CONSULTANT will prepare any needed informational handouts and presentation materials, will assist with presentations as needed, and will document the proceedings.

It is assumed that no more than 4 representatives from the CONSULTANT and its subconsultants will attend these meetings.

The following graphic material will be prepared by the CONSULTANT to support the public informational and the working group meetings:

- First Public Informational Meeting: One existing conditions plan (roll plot format) annotated with photos/text. This plan will outline the critical corridor issues perceived by the design team and will be used to guide discussions, spark feedback from the public, as well as identify other potential elements of concern.
- Working Group Meetings: Up to 4 distinct design alternatives in roll plan format will be presented for discussion. It is expected that these alternatives will be refined and design

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elements such as proposed roadway location relative to existing, profile adjustment, access management, location of sidewalk, etc. will be determined.

- Schematic typical sections. This will be a joint effort between the CONSULTANT and Ironwood.
- Up to 3 plan exhibits at Mammoth Road where different intersection types may be evaluated (signalized intersection with or without slip ramps, roundabout, etc.)
- Up to 3 plan exhibits at other key project locations to assist with the evaluation of design alternatives. This will be a joint effort between the CONSULTANT and Ironwood.
- Up to 5 exhibits for individual properties that outline elements such as right-of-way impacts, driveway locations and access management strategies. The purpose of these would be to foster discussion and confirm feasibility of the project alternatives.
- Second Public Informational Meeting: A schematic colored plan will be prepared for the proposed action only (roll plot format). The format will be similar to DEPARTMENT hearing plans, but the graphic elements may be modified to enhance their presentation to the general public. This plan will identify location of proposed pavement, shoulders, sidewalks, cross-walks, traffic signals, BMPs and landscaping. Text annotation may be added to the plan to present the improvements proposed by the project (i.e. solutions to the issues identified at the first Public Informational Meeting). This will be a joint effort between the CONSULTANT and Ironwood.
- Handouts, as needed, for the public informational and public hearing to support the design alternative discussion. It is assumed that these handouts would be simplified versions of the graphic material used in the meetings.

It is assumed that the following tasks will be outside of the CONSULTANT'S scope of work:

- Providing a stenographer to capture meeting minutes.
- Advertising the meeting in local media and project website
- Video renderings of the proposed condition.

d. Public Hearing

A formal Public Hearing will be held at the end of Part A for layout of the proposed action and environmental document to include the existing metes and bounds property boundary information. The CONSULTANT will prepare any needed informational handouts and presentation materials and will assist with presentations as needed. The CONSULTANT will also assist the DEPARTMENT in formally addressing comments received through the public hearing process.

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D. MATERIAL FURNISHED BY THE DEPARTMENT OF TRANSPORTATION

The DEPARTMENT will furnish the following data to the CONSULTANT:

1. Electronic files in US Customary units of the following information in accordance with the DEPARTMENT'S CAD/D Procedures and Requirements for incorporation into the plans by the CONSULTANT:
 - a. Any available electronic topographical mapping within the project area shall be provided along with any pertinent electronic supporting information (survey field notes, ASCII point file, SDR data files, etc.).
 - b. Any additional topographic surveys of adjacent parcels, mitigation sites, wetland boundaries, or other pertinent items deemed necessary by the project team will be undertaken and processed by the DEPARTMENT. Incorporation of this information into the topographic base plan shall be the responsibility of the CONSULTANT.
 - c. Electronic drawings in MicroStation format of roadway typical cross-sections and other detail sheets shall be provided, when available from the DEPARTMENT'S CAD/D library, upon request by the CONSULTANT, in accordance with the current DEPARTMENT CAD/D procedures and Requirements.
 - d. Electronic drawings in MicroStation format of the existing utilities, if provided to the DEPARTMENT by the utility. The CONSULTANT shall be prepared to provide an electronic copy of the preliminary base plans to the DEPARTMENT for submission to and use by the utilities. The CONSULTANT shall be responsible for the incorporation of this utility information (either in paper or electronic format) into the plans, in accordance with the current DEPARTMENT CAD/D Procedures and Requirements.
2. Prints of the following information:
 - a. Any information outlined in Article I.D.1.a thru d. above (electronic information) both existing and proposed, when available, for verification by the CONSULTANT.
 - b. Any additional information not available electronically (e.g., utilities) for the CONSULTANT to incorporate into the plans in accordance with the DEPARTMENT'S CAD/D Procedures and Requirements.
3. Right-of-Way data: Any additional information collected or prepared by the DEPARTMENT that could supplement the CONSULTANT's Right-of-Way Boundary (Section C.1.c.) (e.g., existing right-of-way layout per record plans, property lines to a tax map level, parcel owners, title abstracting, etc.) will be provided by the DEPARTMENT in MicroStation format for incorporation into the plans by the CONSULTANT.
4. Plans of prior highway and bridge construction projects within the project limits, as available.

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5. The location of all existing and proposed utilities through direct contact with the various utility companies.
6. Geotechnical investigations and recommendations, if available: Electronic files of the Environmental resource data collected in previous studies.
7. Crash data and Safety Analysis within the study area.
8. Ground survey, as needed, within the study area to supplement the digital surface model. The DEPARTMENT will process the raw survey data and incorporate into the digital surface model.
9. The DEPARTMENT's latest high-resolution color aerial photography (which is geo-referenced and ortho-rectified).

E. WORK SCHEDULE AND PROGRESS REPORTS

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

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

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

F. SUBMISSION OF REPORTS, PLANS AND DOCUMENTS

The submissions shall be as necessary in accordance with the study process and environmental analysis as outlined above. Each submission shall be supplemented with such electronic copies of MicroStation drawings, illustrations, and descriptive matter as are necessary to facilitate a comprehensive understanding and review of proposed concepts.

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

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.

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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.

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

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

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

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

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

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

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

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

Email: Files 10 MB or smaller may be transferred via Email. If compressed, the files should be self-extracting and encrypted based on content.

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

Website Information:

- a. Website Content: All external DEPARTMENT websites created for this project shall meet the ADA Section 508 requirements as stated in the NH DoIT Website Standards. Those standards are outlined in <https://www.nh.gov/doit/vendor/documents/nh-website-standards.pdf>.

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- b. Website Documents: All documents posted to a website created for this project, or that are submitted to be posted to a DEPARTMENT website, shall meet ADA Section 508 accessibility requirements. A checklist for document compliance is provided in <https://www.section508.gov/content/build/create-accessible-documents> (go to second link down under "Checklists").

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

G. DATE OF COMPLETION

In accordance with the Governor and Council Resolution authorizing this AGREEMENT, the date of completion for the Part A professional services rendered under this AGREEMENT is September 30, 2022.

ARTICLE II

ARTICLE II - COST PLUS FIXED FEE COMPENSATION OF CONSULTANT

A. GENERAL FEE

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

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

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

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

Direct salary costs are estimated at: \$224,020.33

- 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 June 29, 2018, which expires December 31, 2019, 144.10%, shall be used for invoicing for the life of the AGREEMENT.

Overhead costs are estimated at: \$322,813.29

- 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: \$54,683.36

ARTICLE II

- 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 to approval by the DEPARTMENT. Subconsultants with a subcontract value of less than \$200,000 shall be invoiced as direct expenses and do not require individual invoices, unless the subcontract is more than 25% of the contract total.

Direct expenses are estimated at: \$8,420.00

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

WSP USA Inc. \$64,215.76

Doucet Survey, Inc. \$64,974.11

Ironwood Design Group, LLC \$20,600.70

AGREEMENT NOT-TO-EXCEED TOTAL \$759,727.55

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 \$759,727.55, the sum of the amounts shown in Article II, Section A (which amount is based on the CONSULTANT'S fee and manhour estimates of August 8, 2019), 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.

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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.
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).

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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.
- Complete copy of the CONSULTANT'S annual audited financial statements.
- Analysis of reasonableness of executive compensation as outlined in the AASHTO Audit Guide.
- Cognizant letter, if available.
- A listing of all contracts, with dollar amounts, the CONSULTANT has currently with the DEPARTMENT as a prime consultant or subconsultant.

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

E. RECORDS, REPORTS, AND FINAL AUDIT

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

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

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

ARTICLE III

ARTICLE III - GENERAL PROVISIONS

A. HEARINGS, ETC.

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

B. CONTRACT PROPOSALS

(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 100 Commercial Street, 2nd Floor North, Manchester, NH.

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

C. EXTENT OF CONTRACT

1. Contingent Nature of AGREEMENT

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

2. Termination

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

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

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

D. REVISIONS TO REPORTS, PLANS OR DOCUMENTS

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

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

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

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

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

E. ADDITIONAL SERVICES

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

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

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

F. OWNERSHIP OF PLANS

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

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G. SUBLETTING

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

All subcontracts shall be in writing and those exceeding \$10,000 shall contain all provisions of this AGREEMENT, including "Certification of CONSULTANT/Subconsultant". 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,

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

J. CONTRACTUAL RELATIONS

1. Independent Contractor

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

2. Claims and Indemnification

a. Non-Professional Liability Indemnification

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

b. Professional Liability Indemnification

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

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

3. Insurance

a. Required Coverage

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

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

ARTICLE IV

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

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

b. Proof of Insurance

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

4. No Third-Party Rights

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

5. Construction of AGREEMENT

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

K. AGREEMENT MODIFICATION

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

ARTICLE IV

L. EXTENSION OF COMPLETION DATE(S)

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

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

COMPLIANCE

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

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

ARTICLE IV

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

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

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

ARTICLE IV

N. DISADVANTAGED BUSINESS ENTERPRISE POLICY REQUIREMENTS

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

O. DOCUMENTATION

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

P. CLEAN AIR AND WATER ACTS

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

ARTICLE IV

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

Attachment 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.

WSP USA Solutions Inc.
(Company)

By: Thomas Lewis, PE, JD

President/CEO
(Title)

Date: 2/10/20

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

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

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

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

Attachment 2

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

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

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

2/10/20

(Date)

A handwritten signature in black ink, appearing to be 'T. C. L.', written over a horizontal line.

(Signature)

Attachment 3

CERTIFICATION OF CONSULTANT/SUBCONSULTANT

I hereby certify that I am the President/CEO and duly-authorized representative of the firm of WSP USA Solutions Inc. and that neither I nor the above firm I here represent has:

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

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

except as here expressly stated (if any):

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

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

2/10/20

(Date)



(Signature)

Attachment 4

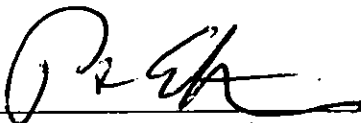
CERTIFICATION OF STATE DEPARTMENT OF TRANSPORTATION

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):

February 15, 2020
(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.

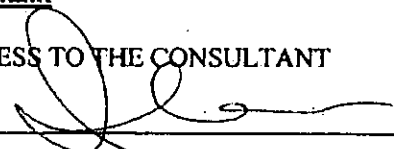
The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower-tier subcontracts which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

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: 
IRENE ALTMAN

Dated: 2/10/20

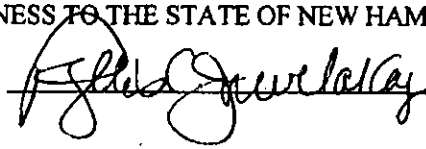
CONSULTANT

By: 
President/CEO
(TITLE)

Dated: 2/10/20


Department of Transportation

WITNESS TO THE STATE OF NEW HAMPSHIRE

By: 

Dated: February 15, 2020

THE STATE OF NEW HAMPSHIRE

By: 
Director of Project Development
for DOT COMMISSIONER

Dated: February 15, 2020

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: 4/2/20

By: 
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

WSP USA SOLUTIONS INC.

ASSISTANT SECRETARY'S CERTIFICATE

I, Hillary F. Jassey, Assistant Secretary of WSP USA Solutions Inc. (the "Corporation"), do hereby certify on behalf of the Corporation and not in my individual capacity that on October 16, 2019 the Board of Directors of the Corporation adopted the following resolution:

"RESOLVED, that effective October 9, 2019, Thomas G. Lewis is hereby elected the President and Chief Executive Officer of the Corporation, subject to the by-laws, until his respective successor is duly elected and qualified, and has remain in such position since such date."

I further certify that the resolution has not been amended or repealed and remains in full force and effect as of the date of the contract to which this certificate is attached and that, as President and CEO for the Corporation, Thomas G. Lewis is authorized by the Delegation of Authority to enter into contracts or agreements and to execute any documents which may be desirable or necessary regarding Hooksett X-A004(199) 29611 (Part A) between the State of New Hampshire and any of its agencies and departments and the Corporation. This authority remains valid for thirty (30) days from the date of this corporate resolution. I further certify that it is understood that the State of New Hampshire will rely on this certificate as evidence that the person listed above currently occupies the position indicated and that he has full authority to bind the Corporation.

Dated: February 10, 2020


Hillary F. Jassey
Assistant Secretary

State of New Hampshire

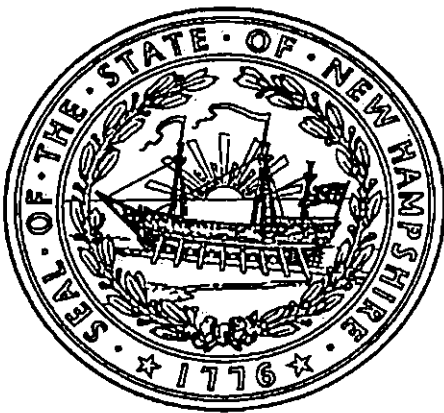
Department of State

CERTIFICATE

I, William M. Gardner, Secretary of State of the State of New Hampshire, do hereby certify that WSP USA SOLUTIONS INC. is a New York Profit Corporation registered to transact business in New Hampshire on May 11, 2016. 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: 744246

Certificate Number: 0004876974



IN TESTIMONY WHEREOF,

I hereto set my hand and cause to be affixed
the Seal of the State of New Hampshire,
this 1st day of April A.D. 2020.

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

William M. Gardner
Secretary of State



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
3/31/2020

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).

PRODUCER Arthur J. Gallagher Risk Management Services, Inc. 250 Park Avenue, 5th Floor New York NY 10177	CONTACT NAME:		
	PHONE (A/C, No, Ext): 212-994-7100	FAX (A/C, No): 212-994-7047	
INSURED WSP USA Solutions Inc. One Penn Plaza New York, NY 10119	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A: Zurich American Insurance Company		16535
	INSURER B: Liberty Insurance Corporation		42404
	INSURER C:		
	INSURER D:		
	INSURER E:		
INSURER F:			

COVERAGES

CERTIFICATE NUMBER: 63494896

REVISION NUMBER:

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

INSR LTR	TYPE OF INSURANCE	ADOL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:	Y		GLO983581907	4/1/2020	4/1/2021	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ 5,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
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 type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY			AS7621094060030	4/1/2020	4/1/2021	COMBINED SINGLE LIMIT (Ea accident) \$ 5,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
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	N/A	WA762D094060010	4/1/2020	4/1/2021	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 2,000,000 E.L. DISEASE - EA EMPLOYEE \$ 2,000,000 E.L. DISEASE - POLICY LIMIT \$ 2,000,000

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

THIRTY (30) DAYS NOTICE OF CANCELLATION.

RE: Hooksett X-A004(199) 29611 (Part A) | 20PCBF0.01042.02

State of New Hampshire is included as additional insured as respects General Liability.

CERTIFICATE HOLDER

New Hampshire Department of Transportation
Attn: William Hardiman and Phyllis Jouvelakas
7 Hazen Drive, P.O. BOX 483
Concord NH 03302-0483

CANCELLATION

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

© 1988-2015 ACORD CORPORATION. All rights reserved.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
2/12/2020

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).

PRODUCER Arthur J. Gallagher Risk Management Services, Inc. 250 Park Avenue, 5th Floor New York NY 10177	CONTACT NAME: AJG Service Team	
	PHONE (A/C, No, Ext): 212-981-2485	FAX (A/C, No): 212-994-7074
INSURED WSP USA Solutions Inc. One Penn Plaza New York, NY 10119	E-MAIL ADDRESS: GGB.WSPUS.CertRequests@ajg.com	
	INSURER(S) AFFORDING COVERAGE	
	INSURER A: QBE Specialty Insurance Company	
	INSURER B:	
	INSURER C:	
	INSURER D:	
INSURER E:		
INSURER F:		

COVERAGES	CERTIFICATE NUMBER: 1817905149	REVISION NUMBER:
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.		

INSR LTR	TYPE OF INSURANCE	ADOL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE \$
	<input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence) \$
							MED EXP (Any one person) \$
							PERSONAL & ADV INJURY \$
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE \$
	<input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						PRODUCTS - COMP/OP AGG \$
	OTHER:						\$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident) \$
	<input type="checkbox"/> ANY AUTO						BODILY INJURY (Per person) \$
	<input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS						BODILY INJURY (Per accident) \$
	<input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident) \$
							\$
	UMBRELLA LIAB						EACH OCCURRENCE \$
	<input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE						AGGREGATE \$
	<input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$						\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						<input type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	Y/N					E.L. EACH ACCIDENT \$
	If yes, describe under DESCRIPTION OF OPERATIONS below		N/A				E.L. DISEASE - EA EMPLOYEE \$
							E.L. DISEASE - POLICY LIMIT \$
A	Professional Liability CLAIMS-MADE			QPL0022630	11/1/2019	10/31/2020	Per Claim/Aggregate \$2,000,000

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

THIRTY (30) DAYS NOTICE OF CANCELLATION

RE: Hooksett X-A004(199) 29611 (Part A) | 20PCBF0.01042.02

Professional Liability deductible: \$75,000

CERTIFICATE HOLDER	CANCELLATION
New Hampshire Department of Transportation Attn: William Hardiman and Phyllis Jouvelakas 7 Hazen Drive, P.O. BOX 483 Concord NH 03302-0483	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