



THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION



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CHRISTOPHER D. CLEMENT, SR.
COMMISSIONER

JEFF BRILLHART, P.E.
ASSISTANT COMMISSIONER

Bureau of Highway Design
August 5, 2014

Her Excellency, Governor Margaret Wood Hassan
and the Honorable Council
State House
Concord, New Hampshire 03301

REQUESTED ACTION

Authorize the Department of Transportation to enter into an Agreement with The Louis Berger Group, Inc., Manchester, NH and Morristown, NJ, Vendor #175116, for a total fee not to exceed \$1,472,643.18 to prepare the final design for improvements to a 2-mile segment of NH 101 from Wallace Road to NH 114 in the Town of Bedford, effective upon Governor and Council approval through March 31, 2017. 100% Federal Funds.

Funding is available as follows for FY 2015, and is contingent upon the availability and continued appropriation of funds in FY 2016 and FY 2017:

Table with 4 columns: Description, FY 2015, FY 2016, FY 2017. Row 1: 04-96-96-963515-3054 Consolidated Federal Aid. Row 2: 046-500463 Eng Consultants Non-Benefit \$475,500.00 \$650,500.00 \$346,643.18

EXPLANATION

The Department requires engineering and environmental consulting services to prepare final design, contract plans, specifications, special provisions, estimates of quantities and costs, and right-of-way plans for the widening and reconstruction of NH Route 101 beginning at the intersection of Wallace Road and continuing in an easterly direction approximately 2 miles to the intersection of NH Route 114 in the Town of Bedford. The proposed roadway typical for NH Route 101 includes two lanes (24'-wide total) in each direction with 5'- wide paved shoulders. A 14' to 20'-wide raised median island will be provided with openings for left turn lanes at selected intersections and commercial driveways. A 6'-wide curbed grass panel and a 5'-wide sidewalk is proposed on both sides of the roadway from the intersection of Wallace Road to Nashua Road. The curbed panel and sidewalk will continue only on one side of NH Route 101 from the intersection of Nashua Road to the east project limits. The widening is proposed to be approximately symmetrical about the existing highway centerline with consideration for design controls throughout the corridor. Substantial landscaping is envisioned for the raised median island and curbed grass panels. Traffic signals will be retained at the following intersections: Wallace Road, Nashua Road, Meetinghouse Road, Old Bedford Road/Constitution Drive, and NH Route 114/Boynton Street. This project is currently included in the State's Ten-Year Transportation Improvement Plan (Bedford 13953).

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 and 21-I:22-d, all applicable Federal laws and the Department's "Consultant Selection and Service Agreement Procedures" dated December 1999. 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 final design and associated environmental services for the Bedford 13953 project. The assignment was

listed as a "Project Soliciting for Interest" on the Department's website on September 13, 2013, 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 October 24, 2013 for consideration and approval by the Assistant Commissioner. Upon receipt of that approval, three shortlisted firms were notified on December 4, 2013 through a technical "Request For Proposal" (RFP). Committee members individually rated the firms on January 23, 2013 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 seven (7) consultant firms that were considered for this assignment, with the three short-listed firms shown in bold, is as follows:

**Consultant Firm**

CHA, Inc.  
**CLD Consulting Engineers, Inc.**  
 DuBois & King Inc.  
**Fay, Spofford & Thorndike, LLC**  
 McFarland-Johnson, Inc.  
**The Louis Berger Group, Inc.**  
 Vanasse Hangen Brustlin, Inc.

**Office Location**

Keene, NH  
**Manchester, NH**  
 Bedford, NH  
**Bedford, NH**  
 Concord, NH  
**Manchester, NH**  
 Bedford, NH

The firm of The Louis Berger Group, Inc. has been recommended for this contract. This firm has an excellent reputation and has demonstrated their capability to perform the necessary engineering and technical services for this assignment. Background information on this firm is attached.

The Louis Berger Group, Inc. has agreed to furnish the required services for a total fee not to exceed \$1,472,643.18. This is a reasonable fee and is commensurate with the complexity of the project and the scope of 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,



Christopher D. Clement, Sr.  
 Commissioner

**PROJECT: Bedford 13953**

**DESCRIPTION:** Final highway design, right-of-way plan development, right of way appraisal, procurement, and relocation, associated environmental resource study and permitting, detailed cost estimation, public outreach and public involvement, traffic signal design and coordination, utility relocation design, and construction support services are needed for a project addressing safety and capacity improvements on and along approximately two miles of NH Route 101 in the Town of Bedford, from NH Route 114 to Wallace Road. The purpose of this contract will be to complete the necessary work to bring the project from a stage after the public hearing in 2014 to construction (advertising in 2016). The process of identifying and creatively resolving property impacts will be critical in order to meet the desired schedule. The preliminary design is currently being performed in-house by Department personnel.

**Services Required: RDWY, ENV, HIST, TRAF, ROW, UTIL, HAZ LAND**

**SUMMARY**

The Louis Berger Group, Inc.	1	1	1	1	1	1	2	8
CLD Consulting Engineers, Inc.	3	3	3	3	3	3	3	21
Fay, Spofford & Thorndike, LLC	2	2	2	2	2	2	1	13

**EVALUATION OF TECHNICAL PROPOSALS**

Rating Considerations	Scoring of Firms	Scoring of Firms		
		W E I G H T	The Louis Berger Group, Inc.	CLD Consulting Engineers, Inc.
Comprehension of the Assignment	20%	20	16	18
Clarity of the Proposal	20%	18	16	18
Capacity to Perform in a Timely Manner	20%	16	16	16
Quality & Experience of Project Manager/Team	20%	18	16	18
Previous Performance	10%	10	8	6
Overall Suitability for the Assignment*	10%	10	6	8
<b>Total</b>	<b>100%</b>	<b>92</b>	<b>78</b>	<b>84</b>

\*Includes: Proximity to project; usage, quality and experience of subconsult municipalities or other third party.

- Ranking of Firms:
1. LBG
  2. FST
  3. CLD

Rating Considerations	Scoring of Firms	Scoring of Firms		
		W E I G H T	The Louis Berger Group, Inc.	CLD Consulting Engineers, Inc.
Comprehension of the Assignment	20%	18	15	17
Clarity of the Proposal	20%	18	16	17
Capacity to Perform in a Timely Manner	20%	18	15	17
Quality & Experience of Project Manager/Team	20%	18	16	18
Previous Performance	10%	8	6	7
Overall Suitability for the Assignment*	10%	9	7	8
<b>Total</b>	<b>100%</b>	<b>89</b>	<b>75</b>	<b>84</b>

\*Includes: Proximity to project; usage, quality and experience of subconsult municipalities or other third party.

- Ranking of Firms:
1. LBG
  2. FST
  3. CLD

# EVALUATION OF TECHNICAL PROPOSALS (continued)

Rating Considerations	Scoring of Firms			
	W E I G H T	The Louis Berger Group, Inc.	CLD Consulting Engineers, Inc.	Fay, Spofford & Thorndike, LLC
Comprehension of the Assignment	20%	18	16	17
Clarity of the Proposal	20%	17	15	17
Capacity to Perform in a Timely Manner	20%	20	15	17
Quality & Experience of Project Manager/Team	20%	20	16	20
Previous Performance	10%	10	8	9
Overall Suitability for the Assignment*	10%	10	7	9
<b>Total</b>	<b>100%</b>	<b>95</b>	<b>77</b>	<b>89</b>

\*Includes: Proximity to project; usage, quality and experience of subconsult municipalities or other third party.

- Ranking of Firms:
1. LBG
  2. FST
  3. CLD

Rating Considerations	Scoring of Firms			
	W E I G H T	The Louis Berger Group, Inc.	CLD Consulting Engineers, Inc.	Fay, Spofford & Thorndike, LLC
Comprehension of the Assignment	20%	17	16	17
Clarity of the Proposal	20%	17	15	16
Capacity to Perform in a Timely Manner	20%	17	17	17
Quality & Experience of Project Manager/Team	20%	15	16	16
Previous Performance	10%	7	8	8
Overall Suitability for the Assignment*	10%	7	5	5
<b>Total</b>	<b>100%</b>	<b>80</b>	<b>77</b>	<b>79</b>

\*Includes: Proximity to project; usage, quality and experience of subconsult municipalities or other third party.

- Ranking of Firms:
1. Louis Berger Group
  2. Fay Spofford Thorndike
  3. CLD, Consulting Eng.

Rating Considerations	Scoring of Firms			
	W E I G H T	The Louis Berger Group, Inc.	CLD Consulting Engineers, Inc.	Fay, Spofford & Thorndike, LLC
Comprehension of the Assignment	20%	19	17	19
Clarity of the Proposal	20%	18	17	18
Capacity to Perform in a Timely Manner	20%	19	19	19
Quality & Experience of Project Manager/Team	20%	19	18	17
Previous Performance	10%	8	7	8
Overall Suitability for the Assignment*	10%	9	7	8
<b>Total</b>	<b>100%</b>	<b>72</b>	<b>75</b>	<b>89</b>

\*Includes: Proximity to project; usage, quality and experience of subconsult municipalities or other third party.

- Ranking of Firms:
1. LBG
  2. FST
  3. CLD

Rating Considerations	Scoring of Firms			
	W E I G H T	The Louis Berger Group, Inc.	CLD Consulting Engineers, Inc.	Fay, Spofford & Thorndike, LLC
Comprehension of the Assignment	20%	20	20	19
Clarity of the Proposal	20%	18	17	18
Capacity to Perform in a Timely Manner	20%	19	16	16
Quality & Experience of Project Manager/Team	20%	19	17	19
Previous Performance	10%	9	7	9
Overall Suitability for the Assignment*	10%	9	8	9
<b>Total</b>	<b>100%</b>	<b>94</b>	<b>85</b>	<b>89</b>

\*Includes: Proximity to project; usage, quality and experience of subconsult municipalities or other third party.

- Ranking of Firms:
1. LBG
  2. FST
  3. CLD

Rating Considerations	Scoring of Firms			
	W E I G H T	The Louis Berger Group, Inc.	CLD Consulting Engineers, Inc.	Fay, Spofford & Thorndike, LLC
Comprehension of the Assignment	20%	17	16	18
Clarity of the Proposal	20%	16	15	17
Capacity to Perform in a Timely Manner	20%	18	16	18
Quality & Experience of Project Manager/Team	20%	18	17	19
Previous Performance	10%	9	8	9
Overall Suitability for the Assignment*	10%	8	7	9
<b>Total</b>	<b>100%</b>	<b>86</b>	<b>79</b>	<b>90</b>

\*Includes: Proximity to project; usage, quality and experience of subconsult municipalities or other third party.

- Ranking of Firms:
1. FST
  2. LBG
  3. CLD

# 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 The Louis Berger Group, Inc.			3. YEAR ESTABLISHED 1999	4. DUNS NUMBER 14-298-0833
2b. STREET 100 Commercial Street, 2nd Floor, North			5. OWNERSHIP	
2c. CITY Manchester	2d. STATE NH	2e. ZIP CODE 03101	a. TYPE New Jersey Corporation	
6a. POINT OF CONTACT NAME AND TITLE Aboud J. Alzaim, Senior Vice President			b. SMALL BUSINESS STATUS 7-10-14	
6b. TELEPHONE NUMBER (603) 644-5200 x7444		6c. E-MAIL ADDRESS aalzaim@louisberger.com		
8a. FORMER FIRM NAME(S) (If any) Louis Berger International, Inc.			8b. YR. ESTABLISHED 1953	8c. DUNS NUMBER 04-388-1093

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			
05	Archaeologist	98		B02	Bridges	5
06	Architect	32		C10	Commercial Buildings	1
08	CADD Technician	91		C15	Construction Management	1
12	Civil Engineer	341		D04	Design-Build	3
15	Construction Inspector	47		E09	Environmental Impact Study	4
16	Construction Manager	81		E12	Environmental Remediation	1
18	Cost Engineer/Estimator	31		H07	Highways; Streets; Parking	5
20	Economist	36		P08	Prisons & Correctional	3
21	Electrical Engineer	29		T03	Traffic/Transportation Plan	2
23	Environmental Engineer	28		W02	Water Resources	2
24	Environmental Specialist	108	2			
30	Geologist	16				
36	Industrial Hygienist	30				
42	Mechanical Engineer	22				
47	Planner (Urban/Regional)	75				
48	Project Manager	91	1			
57	Structural Engineer	61	2			
58	Technician/Analysist	43				
60	Transportation Engineer	99				
62	Water Resources Engineer	12				
	Other Employees	1,788	6			
	<b>Total</b>	<b>3,159</b>	<b>18</b>			

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	0	1. Less than \$100,000	6. \$2 million to less than \$5 million	7. \$5 million to less than \$10 million	8. \$10 million to less than \$25 million
b. Non-Federal Work	7	2. \$100,000 to less than \$250,000	9. \$25 million to less than \$50 million	10. \$50 million or greater	
c. Total Work	7	3. \$250,000 to less than \$500,000	4. \$500,000 to less than \$1 million	5. \$1 million to less than \$2 million	

12. AUTHORIZED REPRESENTATIVE  
The foregoing is a statement of facts.

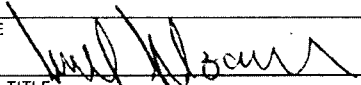
a. SIGNATURE 	b. DATE 6/19/14
c. NAME AND TITLE Aboud J. Alzaim, PE, Senior Vice President	



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**ATTACHMENTS**

1. CERTIFICATION WITH REGARD TO THE PERFORMANCE OF PREVIOUS CONTRACTS OR SUBCONTRACTS, ETC.
2. CONSULTANT DISCLOSURE STATEMENT FOR PREPARATION OF ENVIRONMENTAL EVALUATIONS
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AGREEMENT  
FOR PROFESSIONAL SERVICES

PREAMBLE

THIS AGREEMENT made this 12 day of August in the year 2014 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 The Louis Berger Group, Inc., with principal place of business at 412 Mount Kemble Avenue, in the City of Morristown, State of New Jersey, and 100 Commercial Street, in the City of Manchester, State of New Hampshire, hereinafter referred to as the CONSULTANT, witnesses that

The Department of Transportation, State of New Hampshire, hereinafter referred to as the DEPARTMENT, proposes to make improvements to NH Route 101 beginning at the intersection of Wallace Road and continuing in an easterly direction approximately 2 miles to the intersection of NH Route 114.

The DEPARTMENT intends to have prepared for said project final design, contract plans, specifications, special provisions, estimates of quantities and costs, and right-of-way plans. These services are outlined in the CONSULTANT'S Technical Proposal dated January 9, 2014 and Fee Proposal with Scope of Work Clarifications dated May 28, 2014 and revised June 12, 2014, which are 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 that 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 widening and reconstruction of NH Route 101 in the Town of Bedford. The project begins at a point along NH Route 101 at the intersection of Wallace Road and continues easterly, approximately two miles, to the intersection of NH Route 114.

The proposed roadway typical for NH Route 101 includes two lanes (24'-wide total) in each direction with 5'- wide paved shoulders. A 14' – 20'-wide raised, median island will be provided with openings for left turn lanes at selected intersections and commercial driveways. A 6'-wide curbed grass panel and a 5'-wide sidewalk is proposed on both sides of the roadway from the intersection of Wallace Road to Nashua Road. The curbed panel and sidewalk will continue only on the north side of NH Route 101 from the intersection of Nashua Road to the east project limits. The widening is currently proposed to be approximately symmetrical about the existing highway centerline with consideration for design controls throughout the corridor. Substantial landscaping is envisioned for the raised median island and curbed grass panels.

The CONSULTANT shall perform traffic analyses at the intersections requiring analysis and/or signal coordination, as may be required. Signals will be retained at the following intersections: Wallace Road, Nashua Road, Meetinghouse Road, Old Bedford Road/ Constitution Drive, and NH Route 114/ Boynton Street. The CONSULTANT shall be responsible for the development of signal and signal coordination design and plans for the opening-year peak hour volumes, including the method and means for the interconnects within the coordinated system. Syncro and SimTraffic shall be used in the development of the signal design and coordination; the Consultant will be expected to submit the Syncro and SimTraffic models to the Department for review and concurrence. At this time, AM and PM, as well as off-peak time of day programs (runs) are anticipated. The Department will provide AM and PM peak volumes for use in the traffic analyses.

The proposed drainage shall convey runoff using a combination of roadside ditches and closed drainage systems. The work also involves the design of water quality/ detention basins and drainage facilities to minimize impacts to surface water quality. A pollutant loading analysis will be required for the pre and post-development condition with the goal of attaining a no net increase in pollutant loads on a watershed basis.

## ARTICLE I

Wetland mitigation may include replacement of the triple 66" reinforced concrete pipe culverts, which carry NH Route 101 over Riddle Brook, with a bridge structure that is compliant with the NHDES stream crossing rules.

Landscaping services shall include development of landscape plantings that may be required within the center median islands and curbed grass panels, along the perimeter of water quality treatment basins, and in other locations where property impacts may require the replacement of existing buffers and screening.

ITS elements may be incorporated, in whole or in part, into the contract plans and documents for the project design. A Smart Work Zone, ~~as well as a full Transportation Management Plan in accordance with the Department's requirements,~~ will be required for the construction contract.

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

The scope of the work involves the final design and preparation of contract plans, specifications, and estimates for the layout described above and approved as a result of the Public Hearing, and documented in the Final Environmental Document. Ground survey detail provided by the DEPARTMENT will be used to develop the required final design and contract plans.

Designs shall consider temporary and permanent erosion control measures and Best Management Practices (BMPs) consistent with current New Hampshire Department of Environmental Services (NHDES) guidelines, barriers for sight and sound relief, traffic control measures, utility coordination, drainage, and treatments to minimize environmental impacts, highway signage, traffic analysis, pavement markings, lighting, and highway landscaping. The CONSULTANT shall be responsible for the development of signal and signal coordination design.

The CONSULTANT shall also incorporate into the design plans any improvements undertaken by private developments that may take place on properties adjacent to the highways during the course of the design. The CONSULTANT shall include the design of up to 3 cross access drives initiated by the Town.

The CONSULTANT will develop colored plans for the DEPARTMENT's use in meetings and coordination with the public. The colored plans will be developed subsequent to the Preliminary submission, and incorporate necessary refinements based on DEPARTMENT review to date.

The CONSULTANT shall prepare the final design and contract plans, specifications and estimates for the development of wetland impacts, erosion control, and water quality improvements. The CONSULTANT shall tabulate the wetland impacts for the project, and complete the wetland permit application with all applicable attachments.

Coordination will be required between the DEPARTMENT and the Town of Bedford. The CONSULTANT shall be prepared to support such efforts, as required. Responsibilities of the

## ARTICLE I

CONSULTANT team shall include attendance of meetings when asked, preparation of minutes reflecting meeting commitments, and preparation of illustrative plans and exhibits for the meetings, as directed by the DEPARTMENT.

The DEPARTMENT will process the project through the public hearing stage, and the preliminary horizontal and vertical alignments prepared shall be used as a basis for developing the final horizontal and vertical alignments in preparation of contract plans.

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

The DEPARTMENT anticipates completing the full geotechnical program required for the project. In support of the DEPARTMENT's geotechnical program, the CONSULTANT shall provide project plans and cross sections suitable for completion of the geotechnical program, as needed. The CONSULTANT shall also provide engineering to include preliminary and final subsurface exploration plan development and siting of the subsurface explorations by providing the station(s), offset(s) and associated GPS coordinate(s) for proposed or actual subsurface exploration locations for all bridge structures, as well as highway design elements including, but not limited to, water quality BMPs, roadways, retaining walls, box culverts, overhead sign structure foundations, traffic signal foundations, etc. No geotechnical work by the CONSULTANT is anticipated.

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

The CONSULTANT shall be responsible for the following:

1. All applicable environmental permits and supporting documentation, including photographs. Anticipated permits include: NHDES Major Impact Dredge and Fill, NHDES Section 401 Water Quality Certificate, and US Army Corps of Engineers Section 404.
2. Wetland and Conservation Land Mitigation – The CONSULTANT shall investigate up to 4 locations, in consultation with the DEPARTMENT, as compensation for the project impacts on wetlands and conservation lands. The CONSULTANT shall perform baseline environmental documentation at these locations to evaluate their suitability for preservation through the acquisition of conservation easements, in accordance with the NH Wetlands Bureau and the U.S. Army Corps of Engineers mitigation requirements, and input from the Town of Bedford.
3. Verification of wetland delineations provided by the DEPARTMENT.
4. Verification of invasive plant species delineations provided by the DEPARTMENT using GPS technology. Field work shall be appropriately timed to coordinate with growing seasons and contract advertising.
  - Type I areas – Map the specific areas on the plans where the plants are located.
  - Type II areas - Map the specific areas on the plans where the individual plant species are located.

## ARTICLE I

- Quantify, estimate and summarize the invasive species removal items for the PPS&E, PS&E and Mylar submissions.
5. Consideration of identified cultural resources (architectural and archeological) within the project limits. Confirmation of sensitive, and probable sensitive, areas with all necessary phases of archaeological investigation to be undertaken within impacted areas of the project. If additional, previously unidentified architectural resources are to be impacted, review and documentation of these resources shall be completed in consultation with the DEPARTMENT and the NH Division of Historical Resources.
  6. Flood mapping revisions including the submission of a Conditional Letter of Map Revision (CLOMR) and a final Letter of Map Revision (LOMR) for the Riddle Brook crossing at NH Route 101.
  7. Final estimates of impacts to flood storage and final design of flood storage mitigation to compensate for flood storage impacts, including the incorporation of minimization methods to further reduce impacts.
  8. If necessary, provide perennial stream crossing standard compliant designs, or alternative designs, that meet the NHDES regulations to the maximum extent practicable.
  9. Minimizing impacts to floodplain and wetland areas to the greatest extent practicable during the final design.
  10. Incorporate noise mitigation measures provided by the DEPARTMENT, should the DEPARTMENT's analysis conclude that impacts are anticipated and mitigation is necessary.
  11. A pre and post-development pollutant loading assessment to be provided at the Slope and Drain, PPS&E, PS&E and Mylar submissions. The assessment shall follow the most recent version of the NHDES pollutant loading design guidance document entitled "Guidance for Estimating Pre- and Post-Development Stormwater Pollutant Loads".
  12. Development of a Construction Stormwater Analysis to address construction stormwater management during construction. This involves identifying "open" areas per construction phase, calculating the associated stormwater runoff volumes and evaluating locations for runoff storage and sediment removal. The evaluation is intended to be largely conceptual in nature, as the actual construction phasing may differ from the phasing anticipated during the design. Related plans shall be prepared in CADD "roll plan" format, and supplemented with Excel spreadsheets detailing the stormwater analysis and recommendations. The information will be included in the project Proposal for the Contractors' use during the bidding period.
  13. The development of erosion control plans substantially conforming to (NHDES) PART Env-Wt 501.02 to include existing contours and finished grade contours at 2-foot intervals, and erosion control strategies for the completed project condition. The DEPARTMENT will submit the plans to NHDES, as

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part of the Wetland Permit application. The plans shall be prepared in "roll plan" and "cut sheet" format. The plan package shall also include an erosion control strategy legend (developed by the DEPARTMENT), drainage note sheets, traffic control phasing notes and a preliminary construction schedule. The DEPARTMENT will assist the CONSULTANT in the design of the perimeter erosion control strategies. The information will also be included in the project Proposal for the Contractors' use during the bidding period.

14. The design of the permanent erosion and sedimentation control and water quality renovation features. The development of the Temporary Erosion Control and Stormwater Pollution Prevention Plan (SWPPP) (a permitting requirement during construction of the project) shall not be the responsibility of the CONSULTANT. However, recommended controls shall be addressed during the final design to the extent that appropriate items, quantities, and an appropriate layout are developed for bidding purposes. Permanent erosion and sedimentation control and water quality features shall be shown at the Slope and Drain Plan submissions with design backup calculations complete. Conceptual erosion and sedimentation control and water quality plans shall be part of the Preliminary Plans - Roadway submission. The CONSULTANT shall furnish pre and post-development design calculations with Q2, Q10, Q25, and Q50 flows, and water quality volumes, as appropriate. Site locations for BMPs, estimated areas, and design elevations shall be proposed in sufficient detail to complete geotechnical investigations of each site.

In addition, the CONSULTANT shall be responsible for the following:

1. Incorporate stormwater runoff treatment areas and detention basins and evaluate their environmental impacts (such as archaeological sensitivity, wetland impacts, hazardous materials, etc.).
2. Incorporate water quality treatment measures (e.g. Low Impact Development (LID) Best Management Practices, treatment basins and swales) into the overall project design according to the guidance provided in the NHDES Alteration of Terrain regulations, and the NH Stormwater Management Manual. NHDES BMP worksheets shall be completed and submitted as part of the Drainage Report.
3. As part of the drainage system, infiltration measures shall be investigated and evaluated as to their feasibility and prudence. Such measures would allow stormwater to infiltrate back into the ground following treatment. If such measures are determined feasible and prudent, they should be considered for incorporation into the final design.
4. Development of an Inspection and Maintenance Manual for the LID water quality measures that will be implemented in the project.

The CONSULTANT'S plans shall include all commitments made in the environmental documents.

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### **E. SCOPE OF WORK (FINAL DESIGN)**

The scope of work proposed by this AGREEMENT includes:

1. The development of base plans by the CONSULTANT using updated ground survey provided by the DEPARTMENT. The CONSULTANT shall develop plans at a scale of 1" = 50', unless otherwise noted. All signal design plans shall be at a scale of 1" = 20'. Additionally, the CONSULTANT shall be prepared to produce intersection grading plans at a scale of 1" = 20' where necessary, or as appropriate. The CONSULTANT shall be responsible for the incorporation of environmental resource mapping, utility information, right-of-way and property line information, etc. All of these will be provided by the DEPARTMENT, or as noted elsewhere in this document.
2. The refinement of the alignment, grades and intersections of the proposed roadway(s) as shown on the preliminary conceptual designs furnished by the DEPARTMENT.
3. The preparation of complete designs, including all plans, specifications for work not included in the current specifications of the DEPARTMENT, computations, estimates and documents for the required submissions to the DEPARTMENT, the Federal Highway Administration and/or any other STATE or Federal agency that may be required.
4. The design and preparation of contract plans for construction of the roadway, structures, traffic control plans, construction phasing plans, layout and design of overhead sign structures (conceptual design of foundations for purposes of developing quantities with final design based on shop drawings provided by the Contractor), temporary and permanent traffic signals (including phasing, conduit, signal coordination, foundations, and other signalization items), soundwalls, retaining walls, guardrail, drainage facilities, temporary/ permanent erosion control measures and related water quality features, landscaping plans and appurtenances in accordance with the policy and procedures of the DEPARTMENT and the provisions of this AGREEMENT.
5. The development, and incorporation, of traffic signal and signal coordination designs for the opening year peak hour(s) volumes, as well as developing plans and specifications showing the method and means of interconnect between adjacent signals, as appropriate.
6. The design and development of all permanent guide, warning and regulatory signs, including the quantity summary sheets, with guidance from the DEPARTMENT. Contract signing shall include site reviews and documentation of the existing signing, including photographs. The permanent guide, warning, and regulatory signs shall be progressed such that once reviewed and approved by the DEPARTMENT, the approved design can be incorporated into the PPS&E submission. All signing on the plans shall be closely coordinated with the location of guardrail installations, slopes, utility locations (including street lights and underground utilities) and

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drainage system locations to avoid conflicts and to determine which support system will be required to install the signs. The CONSULTANT shall be responsible to identify all conflicts and to make necessary adjustments to highway signing.

7. The final design of one overhead sign structure on the west approach to the NH 101/114 intersection.
8. The development of the permanent construction sign and warning device package, including the quantity summary sheets.
9. The design and incorporation into the contract plans (including the quantity summary sheets) of all temporary guide and regulatory signs, and permanent construction signing required for use with detours or construction staging. These signs and locations shall be shown on the Traffic Control Plans.
10. The design and development of all pavement marking layouts, item numbers, item descriptions, and quantities for inclusion into the contract and appropriate summary tables within the plan sets. The pavement markings shall be progressed such that the design can be reviewed and approved by the DEPARTMENT for incorporation into the PPS&E submission.
11. The incorporation of utility relocations, as designed by the individual utility owner, into the contract plans.
12. Preparation of presentation (colored) base plans at the Preliminary, Slope and Drainage, PPS&E and PS&E submissions.

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

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

The CONSULTANT shall submit for review, as requested, progress prints (black line) showing grades, cross-sections, special details and general design. Paper prints shall be submitted upon request for soils studies, right-of-way use, evaluation of utility impacts, and other purposes. The DEPARTMENT will provide the existing right-of-way and approximate, abutting property information in the appropriate CAD/D format. The CONSULTANT shall incorporate the existing right-of-way information into the base plans.



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Right-of-way alignments will be furnished by the DEPARTMENT.

Designs shall conform to the current standards, specifications, policies and guidelines enumerated in the Federal-Aid Policy Guide, Subchapter 6, Part 625, or to 23 Code of Federal Regulations, Part 625 and the DEPARTMENT'S Design Manual and Standard Plans for Road Construction (2010), except as approved.

Data from survey notes shall be transcribed and plotted on base plans, profiles and cross-sections as required, if not furnished by the DEPARTMENT under Article I-G.

Multiple visits to the site shall be made during the design to detect changed field conditions and, if required, the DEPARTMENT upon request will perform additional surveys. The DEPARTMENT will process additional survey requests to ensure continuity between new and current detail model files. The DEPARTMENT will incorporate these files into the current detail base plans and digital terrain models (DTM) to include all drafting, labeling, detailing and field checking of the detail. Additional surveys may be required throughout the design process, and the CONSULTANT shall modify the design, as necessary, based upon the updated survey information.

The CONSULTANT shall examine which elements of design, such as horizontal and vertical alignments, typical sections, traffic control, earthwork utilization, drainage pipes and structures, as well as soils suitability, might affect aerial and underground utilities. Any conflict between design elements and utilities shall be identified and brought to the attention of the DEPARTMENT. A special effort shall be made by the CONSULTANT to modify drainage features in order to avoid conflicts with underground utilities.

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

The CONSULTANT shall verify all computations and design calculations. The CONSULTANT shall furnish two (2) permanent, legible copies of the design calculations, suitably bound, and when directed, all study plans, work plans, alternate studies, and estimates indexed in accordance with DEPARTMENT procedures.

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

The CONSULTANT'S Licensed Land Surveyor stamp for the State of New Hampshire shall appear on the Right-of-Way Registry Plans that will be submitted to the Department. Stamps shall be those of

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the professional surveyors who prepared the plans, or under whose direct supervisory control they were prepared.

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

The utility coordination for this project will be performed by the DEPARTMENT. The CONSULTANT shall incorporate utility relocations, as designed by the individual utility owner, into the contract plans. Municipal utility relocations (e.g., sewer and/or water), as approved by the DEPARTMENT, shall be included, as necessary, into the contract plans, cross sections, summary sheets and estimate. Non-participating municipal utility relocation items shall be kept separate from the highway and/or bridge items in the estimates submitted. The DEPARTMENT will provide the unit item numbers and unit prices to be used for the utility relocations.

### **G. MATERIAL FURNISHED BY THE DEPARTMENT OF TRANSPORTATION**

The DEPARTMENT will furnish the following data to the CONSULTANT:

1. Electronic files in English 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. All existing survey and baseline data on disk or other electronic means, notes and note reductions in the format outlined in the DEPARTMENT'S CAD/D Procedures and Requirements. An electronic ground model will be provided, if available, along with all existing information that can be used to create a model.
  - b. Any additional surveys of adjacent parcels, mitigation sites, wetland boundaries or other pertinent items deemed necessary will be processed and incorporated by the DEPARTMENT.
  - c. Electronic drawings in Microstation format, along with reproducible sheets, 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 DEPARTMENT'S CAD/D Procedures and Requirements.
  - d. Electronic drawings in Microstation format of the existing underground utilities, if provided to the DEPARTMENT by the utility. The CONSULTANT shall be prepared to provide an electronic copy of preliminary base plans to the DEPARTMENT for use by the utilities. The CONSULTANT shall be responsible for the incorporation and manipulation of this information (either in paper or electronic format) into the plans, in accordance with the DEPARTMENT'S CAD/D Procedures and Requirements.
  - e. Electronic drawings of roadway typical cross sections and other available detail sheets for inclusion in the contract plans.

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- f. Electronic drawings in Microstation format of the Right-of-Way data, approximate property lines, and parcel owners. These electronic files containing abstracting information will be updated, as necessary, throughout development of the project. The CONSULTANT shall be prepared to incorporate refinements from the Department, to the electronic files, as needed.
    - g. Prints of any information outlined in Article I.G.1.a. thru f. above, both existing and proposed, when available, for verification by the CONSULTANT.
2. Prints of the following information:
  - a. Any additional information (e.g., abstracting, utilities, etc., not available electronically) for the CONSULTANT to incorporate into the plans in accordance with the DEPARTMENT'S CAD/D Procedures and Requirements.
3. Prints and data exchange files of existing conditions not previously provided to the CONSULTANT. Reduction and incorporation of this material shall be the responsibility of the CONSULTANT.
4. All required permits. The CONSULTANT shall be responsible for plans and computations for impacted areas. These plans shall provide all necessary data, area hatching (according to DEPARTMENT standards) and detail so that these plans can be forwarded to the respective regulatory agencies as appropriate attachments for the permit applications. The CONSULTANT shall be responsible to complete the permit applications and provide all supporting documentation (e.g. photographs).
5. Necessary traffic counts and crash data, as collected by the DEPARTMENT.
6. Proposal for bidding and Standard Specifications for Road and Bridge Construction, Standard Plans for Road Construction, plus supplemental specifications and special provisions that the DEPARTMENT currently has.
7. Geotechnical investigations.
8. Geotechnical recommendations for the roadway, bridge, and signal foundation design, as needed.
9. The location of all existing utilities through direct contact with the various utility companies. Following the determination by the CONSULTANT of all unavoidable conflicts between existing utilities and the proposed construction, the DEPARTMENT will coordinate the necessary relocation of the conflicting utilities. The CONSULTANT shall be prepared to furnish CAD/D files in the current DEPARTMENT format to the DEPARTMENT for use in assisting with the Utility design.
10. The DEPARTMENT and the CONSULTANT will cooperatively develop the detailed Traffic Control Plans. The CONSULTANT shall develop the initial conceptual Traffic Control Plan and construction phasing. The DEPARTMENT will assist the CONSULTANT in the final design of

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the Traffic Control Plans as it relates to potential complications with concurrent work, utilities and closures. The CONSULTANT shall complete the final design and the associated quantity calculations.

11. Conceptual design and layout of highway lighting (temporary and permanent) if deemed necessary. The CONSULTANT shall be responsible for incorporating the design and layout into the project documents and for recommending adjustments required to avoid conflicts.
12. Any updates of the DEPARTMENT-supplied CAD/D information will be released to the CONSULTANT throughout the duration of the AGREEMENT, as appropriate. The DEPARTMENT shall be held harmless from any and all loss, damage, expense or liability whatsoever resulting from the use of these programs and macros or translated information. The DEPARTMENT may supply the documentation for use with these programs and macros, but shall not be responsible for any training in their use.
13. ITS concept plans and specifications for incorporation into the final design plans, as appropriate.

### **H. WORK SCHEDULE AND PROGRESS REPORTS**

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

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 develop an acceptable reporting system capable of indicating project status on at least a monthly basis for all critical activities of the project. Monthly progress reports shall be submitted by the CONSULTANT to the Project Manager, giving the percentage of completion of the work required by this AGREEMENT. Separate progress reports for bridge design(s) shall be required. These monthly progress reports shall be received by the DEPARTMENT by the 10th day of each month. All correspondence shall include the STATE and Federal project numbers as well as the municipality's name.

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

During the prosecution of this AGREEMENT, the CONSULTANT shall prepare and submit to the DEPARTMENT separate submissions as described hereinafter.

The CONSULTANT, with each submission, shall submit a transmittal describing the "design issues" addressed in that submission. In addition, the transmittal shall include anticipated or outstanding issues and the CONSULTANT'S recommendations. All issues shall be noted as to whether the

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CONSULTANT feels that the issue is within the scope of work described in Article I. Meetings between the CONSULTANT and the DEPARTMENT shall be held prior to submissions to discuss design issues and recommendations.

All plan drawings, including size of sheets, lettering, symbols and scale of said drawings, shall conform to the requirements and standards of the DEPARTMENT. Any and all CAD/D-related work completed during the course of this project shall be performed in conformance with the DEPARTMENT'S CAD/D Procedures and Requirements in effect at the time of execution of this AGREEMENT. The final construction plans Front Sheet and final right-of-way plans shall be submitted in waterproof ink on permanent, archival-quality, double-matte, polyester-base film (.004 in. thick) or silver-halide emulsion ("wash-off") reproduction on polyester-base film (.004 in. thick). Cross section sheets shall be submitted on quality paper prints. Construction and right-of-way plans shall be submitted on 22 in. x 34 in. sheets.

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

### 1. Roadway Design Submissions

The plan submissions for roadway design shall follow the procedures outlined below:

- a. Pre-Preliminary Plans – Roadway (Not Applicable)
- b. Preliminary Plans - Roadway

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Based on a complete review of the material furnished by the DEPARTMENT and developed and/or supplemented by the CONSULTANT, particularly in regard to the proposed design criteria, predicted traffic, preliminary soil data, expected temporary and permanent erosion measures, conceptual traffic control and topography of the project area, the CONSULTANT shall prepare and submit to the DEPARTMENT five sets of roll plans (paper prints 8 ft. to 10 ft. in length) (cross sections and other applicable plan sheets may be submitted on cut sheets) showing:

- 1) The recommended horizontal and vertical alignment of all necessary roadway construction.
- 2) All roadway cross sections at 50-foot intervals, (except 25-foot intervals in ledge areas) which shall be plotted with the top line of the template of the proposed roadway cross-sections shown. The CONSULTANT shall recognize that, typically, geotechnical information is not available at this time and, therefore, this submission may need to be re-cut and reordered for subsequent submissions when soils/ledge information is made available. Plans addressing significant modifications to private parking areas and accesses shall be developed and used to coordinate with property owners early in the process.
- 3) Proposed pavement layouts and major control elements.
- 4) The alignment (horizontal and vertical) of major diversions or construction phases that will have significant implications for the project in the final design. Critical cross sections (with superelevations) shall be developed, and labeled by phases, to assist in the assessment of the conceptual traffic control phasing and conceptual location of overhead sign structures (if needed), and traffic signal foundations.
- 5) Conceptual designs for erosion and sedimentation control (temporary and permanent) and related water quality features shall be shown with approximate flows.
- 6) Roll plans shall show where match lines are anticipated for future cut sheets.
- 7) Preliminary typical sections with top line template.
- 8) Proposed limits and recommendations for letting the construction under separate contracts (if applicable), including cost estimates, areas of overlap, maintenance of traffic, drainage, etc.
- 9) Proposed right-of-way layout with bounds.

The following issues shall also be considered in the development of the above-mentioned plans:

- 1) Traffic Control Plan and construction phasing.

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- 2) Recommended water quality treatment.
- 3) Wetland impacts.
- 4) Earthwork balances and availability.
- 5) Potential closed drainage and underdrain outlets, and depth of cover over drainage structures.
- 6) Right-of-way involvement.
- 7) Potential conflicts with major utilities.

This submission shall be supplemented with such conceptual drawings, illustrations and descriptive matter as are necessary to facilitate a comprehensive review of both the proposed design and the feasibility of construction, and the coordination with the design of bridges or other structures. This shall include profiles and cross sections, particularly where clearance and setbacks may be issues.

Estimates for this submission shall be reasonably itemized to cover roadways, structures, drainage and other construction items, as well as costs of utility changes to be financed by the STATE.

For development of the right-of-way lines, sight distance review and the assessment of environmental impacts, it shall be necessary that all templates be plotted to develop slope lines. This shall require computation and submission of pavement superelevation calculations. Rounding of slopes shall be considered in developing slope lines, but plotted cross section templates do not need to have roundings shown at this submission. Guardrail calculations shall also be submitted.

c. Slope and Drain Plans - Roadway

Upon approval in writing by the DEPARTMENT of the Preliminary submission, the CONSULTANT shall proceed to prepare and submit to the DEPARTMENT for approval the Slope and Drain Plans submission. The Slope and Drain submission shall consist of five sets of cut sheet plans (paper prints) showing slope lines, drainage system details and drainage features, and proposed right-of-way lines, including drainage, slope and/or construction easements. The cut sheets shall include typical sections, plan views, profiles, guardrail locations, and cross sections with complete template plotted and appropriate references on the plans relative to the drainage design to assist with the review of the drainage design and the backup drainage calculations. The submission shall be supplemented with a list of utility conflicts that could not be avoided during the design. Complete Best Management Practice (BMP) designs for permanent erosion and sedimentation control features, and water quality appurtenances, shall be shown accompanied by backup calculations, including a pre vs. post-

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development pollutant loading assessment. The BMPs shall be designed in accordance with the (NHDES) CHAPTER Env-Wq 1500 ALTERATION OF TERRAIN requirements, as well as the guidance in the New Hampshire Stormwater Manual. The backup calculations shall also include a narrative, mapping and computations addressing pre-construction and post-construction (and post-development, if applicable) drainage conditions and applicable drainage control features. Two bound drainage computation books shall be submitted with all backup drainage calculations illustrated and referenced to each drainage appurtenance shown based on the drainage design.

At this time, a field inspection shall be held with the DEPARTMENT, and indicated design changes or corrections shall be made and incorporated into the plans for the Preliminary PS&E submission. Any indicated revisions to fit actual field conditions, including any horizontal and vertical alignment revisions found necessary during this field inspection, and any resulting corrections to the right-of-way requirements, shall be made by the CONSULTANT.

Also, with the Slope and Drainage submission, the CONSULTANT shall submit the Traffic Control Plans in near-final form (roll plans, as a minimum) showing temporary slopes, lane uses and widths, overhead sign structures, temporary guardrail and barrier locations, temporary drainage, temporary easements, profiles, temporary drives, diversion cross sections and superelevations, etc. with backup calculations. Construction phasing shall be shown with narratives for each phase. The CONSULTANT shall also submit a conceptual construction schedule, showing the phased construction and utility relocation time frames (as applicable), for review and comment by DEPARTMENT staff.

Following incorporation of the DEPARTMENT'S comments on the Slope and Drain Submission, the CONSULTANT shall submit Wetland Impact plans showing permanent and temporary impacts for each wetland for inclusion with the wetland permit application. These areas shall be hatched according to the DEPARTMENT'S standards. Accompanying these plans, the CONSULTANT shall provide a tabulated impact summary showing wetland identification numbers, areas of fill or dredged volumes in the temporary and permanent conditions for this project, a draft copy of the wetland permit application package, and the Erosion Control Plans.

d. Utility Plans

Upon approval in writing by the DEPARTMENT of the Slope and Drain submission, the CONSULTANT shall proceed to prepare and submit to the DEPARTMENT for approval the Utility Plans submission. The CONSULTANT shall incorporate DEPARTMENT Slope and



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Drain comments into the design layout and assemble the plans into a cut sheet format. The CONSULTANT shall then furnish up to five (5) sets of cut sheet plans (paper prints) of the front sheet, plans, profiles, and up to five sets of cross sections for use by the Design Services Section. This submission plan set is intended to facilitate the identification of the scope of work required by various utilities to comply with the planned construction. The plans are intended to reflect the near-final design of drainage systems with all appurtenances, erosion and sedimentation control features, other structures, right-of-way lines (proposed permanent and temporary, and existing), curbing, pavement layout, traffic signals, traffic sign structures, slope limits, guardrail, final template plotted on cross sections, detours and detour cross sections, traffic control issues with construction phasing, underdrain, drive locations, sidewalks, clearing and grubbing limits, fencing requirements, building demolition, and lighting and conduit (e.g. lighting, traffic signals, ITS). Also, the plans shall reflect all existing detail, existing drainage and existing utilities. The intent is to have incorporated all comments from the preliminary right-of-way plan development and the Slope and Drain submission, along with design work that has progressed. All final design notes may not be necessary, but the scope of construction shall be evident to the reviewing utilities. Copies of this plan set will be forwarded to the Design Services Section for review. Comments will be returned to the CONSULTANT to finalize the plans prior to the formal submission for relocations. The plans shall show the status of the design prior to preparation of the Preliminary PS&E submission.

e. Preliminary PS&E – Roadway

Upon approval in writing by the DEPARTMENT of the Slope and Drain submission, the CONSULTANT shall proceed to prepare and submit to the DEPARTMENT for approval the Preliminary PS&E submission. The Preliminary PS&E submission shall consist of three to five sets of plans (paper prints) of preliminary contract drawings, draft special provisions for items for which current specifications are not available from the DEPARTMENT, and a Preliminary PS&E estimate of quantities and costs. The plans shall include title sheet, typical sections, detail sheets, all plan sheets, profile sheets, curb and pavement layout plans, pavement marking and signing plans, signal plans (including coordination), ITS infrastructure, complete traffic control plans, and cross section sheets (including TCP sections). Also, landscaping, seeding and grading plans shall be included, if required. The plans shall also include utility relocations, if available.

Quantity Summary sheets shall be submitted. All item summary boxes for drainage, clearing and grubbing, earthwork, surfacing and select materials, curbing, guardrail, sidewalks, traffic signs, construction signs and warning devices, pavement markings, conduit and pull boxes,

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ITS components, landscaping and slope protection, bounds, fencing, delineation and witness markers, and other items that are nearly complete shall be shown and note line-entries completed. Rounding and totals are not required. Item summary boxes of expected work not listed above shall be included and shown without line-entries completed. In developing the plans to the Preliminary PS&E stage, the DEPARTMENT will require an estimate of the quantities, expected unit costs, and total costs prepared in the form and manner prescribed by the DEPARTMENT for the Preliminary PS&E submission. An electronic copy of the spreadsheet shall be submitted for the estimate in Excel format. Roadway items shall be kept separate from bridge items. Two bound copies of the quantity calculations shall be furnished with the estimate. The plans shall reflect all comments from the Slope and Drain Plans submission and issues that appear during final design. Two bound copies of the drainage computations book (as revised, based on Slope and Drainage comments) including temporary drainage computations shall be submitted with the Preliminary PS&E submission.

f. PS&E - Roadway

Upon approval in writing by the DEPARTMENT of the Preliminary PS&E submission, the CONSULTANT shall proceed to prepare and submit to the DEPARTMENT for approval the PS&E submission, which shall consist of three complete sets of paper prints of construction plans, two bound copies of the revised quantity books, and a PS&E estimate. Special Provisions shall be submitted in both electronic format (Microsoft Word-compatible) and hard copy for all items not in the Standard Specifications for Road and Bridge Construction of the STATE and for which a current special provision is not available.

g. Draft Contract Plans (Prints)

Upon approval of the foregoing in writing by the DEPARTMENT, the CONSULTANT shall proceed to prepare and submit to the DEPARTMENT for approval the Draft Contract Plan submission, which shall consist of three complete sets of paper prints of the construction plans, one bound copy of the revised quantity book, any final special provisions required and a draft final estimate of costs. These draft contract plans and documents shall reflect all comments resulting from the PS&E review.

h. Contract Plans (Mylars) and Consultant Documents

Upon approval of the foregoing in writing by the DEPARTMENT, the CONSULTANT shall make the final submission of contract plans, any final special provisions required and a final PS&E estimate of costs. These final contract plans and documents shall reflect all comments resulting from the Draft Contract Plans (Paper Mylar) review. The CONSULTANT shall be prepared to incorporate all comments, furnish drafting services for omissions found and

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generally assist the DEPARTMENT in finalizing the contract plans. If changes are requested to be made to the CONSULTANT'S plans by the DEPARTMENT, the CONSULTANT shall be prepared to update the corresponding electronic files and submit them to the DEPARTMENT. Final acceptance of the contract plans will be made in writing. The final contract plans submitted shall include one mylar Front Sheet and two sets of paper prints. The first paper set and the mylar Front Sheet shall be submitted prior to the final set, so that the DEPARTMENT can complete a final "three-way" check. Also, all CONSULTANT backup documents shall be resubmitted to reflect the final Draft Contract Plans (Paper Mylar) comments and final contract plan conditions. The CONSULTANT shall also submit two bound copies of the final Drainage Calculations as well as two bound copies of the final Quantities Books.

The final contract plans shall include:

- (1) A front sheet.
- (2) Typical sections of improvement.
- (3) Summary of quantities sheets.
- (3) Detail Sheets and/ or special sheets required.
- (4) Plan and profile sheets required.
- (5) Cross section sheets (shall be submitted on quality paper prints)

Each of the plan sheets shall be labeled with its corresponding electronic file name.

### 2. Bridge Design Submissions

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

The content, completeness, and scales for all drawings shall be as approved by the DEPARTMENT and shall be such as to accurately portray the placement and positioning of components and surfaces, and the general appearance of the structural units. Large-scale details shall be employed as directed for congested areas or connections between components.

The CONSULTANT shall perform a load-rating analysis for each bridge using the appropriate AASHTO Method, or as directed by the DEPARTMENT, to be submitted on a form provided by the DEPARTMENT.

The phases for the development of the project are as follows:

- TSL (Type-Span-Location) Study Plan
- Boring Layout
- Preliminary Plans (30% complete)

## ARTICLE I

- Preliminary PS&E Plans (80% complete)
- PS&E Plans (95% complete)
- Contract Plans (Mylars)

### a. TSL (Type-Span-Location) Studies

The alignments and profiles developed during the preliminary design of the highway portion of the project will, after approval of the preliminary highway plans by the DEPARTMENT, serve as a base for determining the types of structures that may be utilized and the arrangement of the structure and its components with respect to span lengths, clearances, alignments, etc., which may affect the interface between the bridge and the highway or other features at the bridge location. These "other" features may include existing bridges, drainage facilities, buildings, streets, utilities, etc., or new structures and roadways, ramps, etc., that will be part of the project.

TSL study plans shall be prepared for each bridge showing the selected structure and shall include the plan, elevation, and typical bridge section. The plan and elevation shall generally be drawn to a scale as approved by the DEPARTMENT and shall accurately portray the location and size of the structural components, pavement and slope lines, center and grade lines, vertical and horizontal clearances, etc. The typical bridge section shall portray the components of the superstructure, materials of construction, beam spacing and locations, and dimensions of pavement, curbs, etc.

At those locations where an existing bridge is adjacent to or a second bridge is proposed, sufficient detail shall be provided for the second bridge to clearly and accurately show the relationship between the two structures.

### b. Boring Layout

Following the review and acceptance of the TSL Study by the DEPARTMENT, a boring layout plan shall be prepared for each bridge, the layout being based on the approved TSL Plan. This proposed boring layout plan shall be submitted to the DEPARTMENT for approval.

The results of the subsurface explorations shall be plotted, indicating the materials encountered (by description and blow counts), water table, approximate construction elevations, etc. These subsurface data sheets shall be further developed for inclusion in the preliminary and final contract plans.

### c. Preliminary Plans

Preliminary plans for each bridge shall be prepared following acceptance by the DEPARTMENT of the TSL Study and Boring Layout, completion of the subsurface explorations, and preparation of the subsurface data sheets.

The preliminary structural designs, completed as part of the TSL phase, shall be refined to incorporate the review comments, minor changes in profile and/or alignment, and the results of soils

## ARTICLE I

investigations. Also included in this phase shall be the development of the survey plan for the bridge location. This plan shall include the existing surface contours, boring locations, sub- and superstructure layout, slope limits, and major topographical items.

The plan and elevation sheets developed in the TSL phase shall be refined as necessary (including addition of plans). Profiles shall be developed for each alignment and shall include the appropriate section of the bridge, including substructure and foundation details.

Additional items to be included are the typical approach sections for the facilities over and under the bridge and the developed view of the abutments showing foundation treatment and rock lines, as appropriate. These items shall become part of the final PS&E plans.

Reproducible prints of these Preliminary Plans and estimated quantities and construction costs shall be submitted for approval by the DEPARTMENT prior to progressing to final design of the bridge.

d. Preliminary PS&E

Upon receipt of written approval of the Preliminary Plans, the final design and preparation of contract plans shall commence. This final design shall incorporate revisions, if any, in the Preliminary Plans as approved by the DEPARTMENT.

The plan and elevation, survey plan and profiles, and boring logs as submitted for the Preliminary Plans shall be refined as necessary and become a part of the final contract plans.

Estimates of quantities shall be prepared for all materials of construction and shall be tabulated on the plans and summarized for each bridge.

Upon completion of these contract plans, except for quantities and reinforcing-bar lists, copies of the plans shall be submitted to the DEPARTMENT for review and comment, the plans at this stage representing about 80% completion.

e. PS&E

Comments resulting from the DEPARTMENT's review of the Preliminary PS&E submission shall be incorporated into the design and contract plans. The estimate of quantities shall be completed and tabulated and the reinforcing-bar schedules shall be completed.

Upon completion of these contract plans, copies of the plans shall be submitted to the DEPARTMENT for review and comment, the plans at this stage representing about 95% completion.

f. Contract Plans (Mylars)

Comments resulting from the DEPARTMENT's review of the PS&E submission shall be incorporated into the design and contract plans.

Upon completion of these contract plans, they shall be submitted to the DEPARTMENT, the plans at this stage representing 100% completion.

## ARTICLE I

### 3. Right-of-Way Plans

Right-of-way plans shall consist of a separate set of plans for the purpose of negotiating, defining and recording the required right-of-way for the project. In order to expedite right-of-way acquisitions by the DEPARTMENT, it may be necessary to complete the Right-of-Way plans in stages, with work in some areas being accomplished very early in the project schedule. Right-of-Way plans shall be in imperial units.

The Preliminary Right-of-Way submission (three sets of paper prints) shall be submitted concurrently with, or shortly after, the CONSULTANT'S submission of the contract Slope and Drain plans. The Preliminary Right-of-Way plans shall include a front sheet, summary sheets and all plan sheets. Acquisition and easement areas shall be calculated and summary boxes filled in. Handwritten format is acceptable.

Right-of-Way Purchase Plans shall be submitted after the Consultant has received and incorporated the DEPARTMENT'S Preliminary Right-of-Way submission comments and Slope and Drainage Plan comments, or as otherwise approved by the DEPARTMENT. The CONSULTANT shall be prepared to make corrections as required. The CONSULTANT shall be prepared to make revisions to the Right-of-Way plans based on design changes and the DEPARTMENT'S negotiations with property owners. Acquisition and easement areas shall be calculated and summary boxes filled in.

The Right-of-Way Purchase Plans and Recordable Registry Plan set shall include:

- a. Front sheet
- b. Standard Symbol Sheets (Purchase Plans, only)
- c. Right-of-Way Summary Sheets (Purchase Plans, only)
- d. Property Layout Sheets (scale: 1"=200')
- e. Geometric Layout Sheets
- f. Right-of-Way plan sheets showing all impacts (temporary or permanent)
- g. Cross sections (Purchase Plans, only)

The final Right-of-Way Purchase Plans shall contain all of the sheets noted above, including a front sheet, standard symbol sheets, summary sheets, property layout sheets, geometric layout sheets and Right-of-Way plan sheets and shall be submitted after the DEPARTMENT has completed negotiations with property owners. The Registry Plans depicting new right-of-way lines shall be prepared and recorded by the CONSULTANT in accordance with RSA 230:32 Required Filing, RSA 478:1-a Plat Law (prepared and certified by a Licensed land Surveyor), and Department procedures. A draft (paper) set of Registry Plans shall be submitted with the first formal Right-of-Way Purchase Plans submission for the entire project. The mylars of the final Right-of-Way

## ARTICLE I

Plans and a copy of the Registry Plans shall be submitted with the final Construction Contract Plans submission.

In the event that acquisitions are necessary in advance of completing the right-of-way plan process described above, the CONSULTANT shall be prepared to submit a working (progress) print(s) containing the parcel(s) in question. The working (progress) print(s) are intended to be right-of-way plan cut sheets showing the impacts, easements, etc., with summary boxes illustrating impacts to the affected parcel(s).

### **J. SCOPE OF WORK (CONSTRUCTION SUPPORT SERVICES)**

If a contract for construction of the project, or part of it, is entered into within two years after completion by the CONSULTANT of the services outlined in Articles I, III and IV, the CONSULTANT shall, without additional compensation therefore, render services to the DEPARTMENT, including, but not restricted to, the following:

#### **1. Construction**

If and when required by the DEPARTMENT during the construction of the project, the CONSULTANT shall:

- a. At the CONSULTANT'S sole expense, correct and resolve errors and/or omissions within the contract plans and specifications found during construction.
- b. Render interpretations, as necessary, of the contract plans and specifications and submit recommendations for necessary modifications in either or both and, upon approval of recommendations by the DEPARTMENT, revise the contract plans and specifications to cover same and prepare other detailed drawings as may be needed to supplement the contract plans in order to permit the proper completion of the project. This work effort, if required, will be viewed as additional services, subject to an adjustment in the fee.
- c. Install monumentation for new right-of-way as shown in the Registry Plans.
- d. Provide support for signal coordination timing adjustments.

#### **2. Shop Drawings**

The CONSULTANT shall:

- a. Review, check and approve all working drawings prepared by others including the construction contractors or their subcontractors subject to the provisions of Section 105. Only that work designed by the DEPARTMENT will be excluded from this requirement.

## ARTICLE I

### ~~3. Transportation Management Plan Monitoring~~

~~The CONSULTANT shall:~~

#### **K. DATE OF COMPLETION**

In accordance with the Governor and Council Resolution authorizing this AGREEMENT, the date of completion for the professional design services rendered under this AGREEMENT is March 31, 2017. Completion of construction support services shall be in accordance with Article I-I - Construction Support Services.



## 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 (except as otherwise herein provided) 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. A list of those personnel working on the project with their classifications and current salary rates shall be submitted to the DEPARTMENT for approval. The rates of any additional personnel working on the project, if any, shall require written approval of the DEPARTMENT prior to working on the project. The CONSULTANT shall submit classifications and rates for any additional personnel a minimum of 14 days prior to using the additional personnel.

\*In accordance with DEPARTMENT policy, the maximum direct-labor rate allowed for all positions under this AGREEMENT shall be \$50.00 per hour, unless a waiver to the salary cap has been specifically approved for specialty services.

2. Costs that are directly applicable to the salaries, salary burden, and direct and indirect costs, including administration costs. These costs may be applied to only straight-time salary extensions where overtime is employed. These amounts shall be based on actual costs to the CONSULTANT for such items during the period of the AGREEMENT and those allowable in accordance with the applicable cost principles contained in Federal Acquisition Regulations Subpart 31.2 and Subpart 31.105. Further, any overtime required for this project shall have the prior written approval of the DEPARTMENT.
3. A fixed fee amount as shown in Article II, Section B for profit and non-reimbursed costs. The fixed fee shall be a negotiated amount based on the estimated risk to be borne by the CONSULTANT (maximum 10.00% of total labor + total overhead).
4. Reimbursement for direct expenses, including work performed by other parties, such as borings, laboratory tests, field survey, special electronic computer services, services of other specialists, printing, photogrammetry, traffic counts, 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 Regulations. The General Services Administration (GSA), Regulation 41 CFR Part 301-4,

## ARTICLE II

specifies the FTR automobile mileage reimbursement. Mileage and per diem costs shall be subject to approval by the DEPARTMENT.

All costs as described in the foregoing paragraphs are to be determined by actual records kept during the term of the AGREEMENT, which are subject to 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 total amount to be paid shown in the following paragraph and in Article II, Section C.1. All Subconsultant costs may also be subject to audit by the STATE and Federal Governments.

The total amount to be paid under this AGREEMENT shall not exceed \$1,472,643.18, the sum of the amounts shown in Article II, Section B (which amount is based on the CONSULTANT'S fee and man-hour estimates of June 12, 2014), 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 by more than one (1) year, the general fee may be renegotiated; however, the fixed fee (b) shall not change for reasons of work duration alone. The fixed fee (b) may only be adjusted (increased or decreased) if there is a significant change in the scope or character of the work outlined in this AGREEMENT, as determined by the DEPARTMENT.

All salaries and increases thereof paid to technical or other employees assigned to this project shall be the result of a company-wide evaluation of all employees and shall not be restricted to employees assigned to this project.

If, in the opinion of the DEPARTMENT, any salary or increase thereof of engineering or technical personnel assigned to this project is unreasonable, it shall notify the CONSULTANT of its opinion with regard thereto and request the CONSULTANT to justify said salary or increase thereof. In the event that the CONSULTANT furnishes justification satisfactory to the DEPARTMENT for said salary or increase thereof, then such salary or increase thereof shall be approved as a payroll expense.

The DEPARTMENT shall have the right to exercise the power of review and approval of salary increases thereof, for a period of thirty (30) days after the submission of a monthly invoice by the CONSULTANT. Unless the DEPARTMENT notifies the CONSULTANT in writing during the thirty-day period that such salary increase thereof is, in its opinion, unreasonable, such lack of notice shall constitute approval of said salary increase thereof from the first day of the preceding month.

The DEPARTMENT shall have the right, at the time of audit, to review all items charged to overhead 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 cost.

## ARTICLE II

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 contract period and for three (3) years from the date of final voucher payment 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 Regulation (FAR) in Title 48 of the Code of Federal Regulations (Subpart 31.2 and Subpart 31.105).

### **B. SUMMARY OF FEES**

The STATE, through the DEPARTMENT, hereby agrees to pay and the CONSULTANT agrees to accept as full compensation the following:

- a. Actual CONSULTANT'S salaries\*, costs applicable to actual salaries, salary burden (direct and indirect), and administrative costs attributable to overhead, the sum of which is estimated at \$1,206,628.23. For billing purposes, salary burden and overhead costs are currently estimated at 153.52% of actual salaries.
- b. A fixed fee to cover profit and non-reimbursed costs at \$120,662.82.
- c. Reimbursement for direct, out-of-pocket expenses estimated at \$6,450.00.
- d. Reimbursement for actual cost\* of subconsultants estimated as follows:
  - Ironwood Design Group \$51,021.80.
  - Doucet Survey \$87,880.33.

The actual amount payable under each category (a), (c) and (d) is only estimated and shall be changed only upon mutual agreement of the DEPARTMENT and CONSULTANT and documented by a formal amendment to the AGREEMENT.

\*In accordance with DEPARTMENT policy, the maximum direct-labor rate allowed for all positions under this AGREEMENT shall be \$50.00 per hour, unless a waiver to the salary cap has been specifically approved for specialty services.

### **C. LIMITATION OF COSTS**

1. Costs incurred against this AGREEMENT shall not exceed \$1,472,643.18 unless otherwise authorized. The CONSULTANT shall give the DEPARTMENT a ninety (90)-day written notice when it appears that this limit will be exceeded.
2. It is expected that the total cost to the STATE shall be the cost set forth under Article II, Section A and the CONSULTANT agrees to use its best efforts to perform the work specified in the AGREEMENT and all obligations under this contract within such limiting amount.
3. The STATE shall not be obligated to reimburse the CONSULTANT for costs incurred in excess of the limiting amount set forth in Article II, Section A.

## ARTICLE II

4. Change orders issued under this Contract shall not be considered an authorization to the CONSULTANT to exceed the limiting amount set forth in the Summary in the absence of a statement in the change order, or other contract modifications, increasing the limiting amount.

### **D. PAYMENTS**

Payments on account of services rendered under this AGREEMENT shall be made as follows:

1. Monthly payments on account may be made upon written request by the CONSULTANT. Detailed vouchers shall include certification of man-hours of effort by employee classification and actual salaries and other costs incurred accompanied by satisfactory evidence of work performed during the period. Actual salaries paid and percentage factor shown in Article II, Section B, part (a) as well as for all approved subconsultants, including those listed in part (d) of Section B, shall be used until such time as true costs of salary burden and overhead are fixed by audit. At that time, payments shall be adjusted to agree with the percentage factors as determined by audit for the period in which the work was performed, as approved by the DEPARTMENT. The fixed fee shall be invoiced during the billing period based upon the overall percent complete of the project's scope of work as approved by the DEPARTMENT.
2. The CONSULTANT shall submit a final voucher upon completion of services required by this AGREEMENT, which includes any unbilled portion of the allowable costs or fixed fee and adjustments, if necessary, for audited actual costs and deliver all required plans, documents and records.

## 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, including recording and filing of surveys and plats, enter into all necessary agreements with railroads, public utilities, municipalities, agencies of the Federal Government or others, and make orders of takings and financial settlements with owners of properties affected.

#### B. CONTRACT PROPOSALS

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

## ARTICLE IV

### **ARTICLE IV - STANDARD PROVISIONS**

#### **A. STANDARD SPECIFICATIONS**

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

#### **B. REVIEW BY STATE AND FHWA – CONFERENCES - INSPECTIONS**

It is mutually agreed that all portions of the work covered by this AGREEMENT shall be subject to the inspection of 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, 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 performed prior to termination. It shall be a breach of this AGREEMENT if the CONSULTANT

## ARTICLE IV

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 therefore 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 to the extent that the revised alignment will lie completely or 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

## ARTICLE IV

perform services other than those necessary in order to adapt said plans, reports or documents to conditions observed during field inspections and encountered during construction; the CONSULTANT shall be entitled to compensation therefore in accordance with Article II, Section B, 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 B.

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 of the DEPARTMENT, reimburse the CONSULTANT for such additional design services in accordance with the provisions of Article II, Section B.

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 and 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.

### **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



## ARTICLE IV

working on wetland evaluations, mapping, noise studies and air-quality studies, the minimum limits of their professional liability (errors and omissions) insurance coverage shall be not less than \$1,500,000 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 \$25,000. A copy of each subcontract shall be submitted for the DEPARTMENT'S files.

### **H. GENERAL COMPLIANCE WITH LAWS, ETC.**

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

### **I. BROKERAGE**

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

## ARTICLE IV

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 negligent acts or omissions of the CONSULTANT or its subconsultants in the performance of professional services covered by this AGREEMENT.

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

### 3. Insurance

#### a. Required Coverage

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

1. Commercial or comprehensive general liability insurance including contractual coverage, for all claims of bodily injury, death or property damage, in policy amounts of not less than \$250,000 per occurrence and \$2,000,000 in the aggregate (STATE to be named as an additional insured); and
2. comprehensive automobile liability insurance covering all motor vehicles, including owned, hired, borrowed and non-owned vehicles, for all claims of bodily injury, death or property damage, in policy amounts of not less than \$500,000 combined single limit; and
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.

## ARTICLE IV

### 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 AGREEMENT. The duties, obligations and responsibilities of the parties to this AGREEMENT with respect to third parties shall remain as imposed by law. No portion of this AGREEMENT shall be understood to be a waiver of the STATE'S sovereign immunity.

### 5. Construction of AGREEMENT

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

### **K. AGREEMENT MODIFICATION**

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

### **L. EXTENSION OF COMPLETION DATE(S)**

If, during the course of the work, the CONSULTANT anticipates that it cannot comply with one or more of the completion dates specified in this AGREEMENT, 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

## ARTICLE IV

of the REGULATIONS, including employment practices when the AGREEMENT covers a program set forth in Appendix B of the REGULATIONS.

- (3) Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the CONSULTANT for work to be performed under a subcontract, including procurements of materials or leases of equipment specific to the project, each potential subconsultant or supplier shall be notified by the CONSULTANT of the CONSULTANT'S obligations under this AGREEMENT and the REGULATIONS relative to nondiscrimination on the grounds of race, color, religion, age, sex, handicap, sexual orientation, or national origin.
- (4) Information and Reports: The CONSULTANT shall provide all information and reports required by the REGULATIONS or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the DEPARTMENT or the Federal Highway Administration to be pertinent to ascertain compliance with such REGULATIONS, orders and instructions. Where any information required of a CONSULTANT is in the exclusive possession of another who fails or refuses to furnish this information, the CONSULTANT shall so certify to the DEPARTMENT or the Federal Highway Administration, as appropriate, and shall set forth what efforts it has made to obtain the information.
- (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

## ARTICLE IV

REGULATIONS (41 CFR Part 60), shall be applicable to this AGREEMENT and any subagreements hereunder.

- (8) Incorporation of Provisions: The CONSULTANT shall include the provisions of paragraphs (1) through (7) in every subcontract, including procurements of materials and leases of equipment specific to the project, unless exempt by the REGULATIONS, or directives issued pursuant thereto.

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

### **N. DISADVANTAGED BUSINESS ENTERPRISE POLICY AGREEMENT 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.

## ARTICLE IV

### **O. DOCUMENTATION**

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

### **P. CLEAN AIR AND WATER ACTS**

If the amount of the AGREEMENT or subcontract thereunder exceeds \$100,000, the CONSULTANT or subconsultant shall comply with applicable standards, orders or requirements issued under Section 306 of the Federal Clean Air Act (43 U.S.C. 1857(h)), Section 508 of the Federal Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR Part 15), which prohibit the use under non-exempt Federal contracts, grants or loans of facilities included on the EPA List of Violating Facilities. The CONSULTANT or subconsultant shall report violations to the FHWA and to the U. S. Environmental Protection Agency Assistant Administrator for Enforcement (EN-329).

*Attachment 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 \_\_\_\_\_, proposed subconsultant \_\_\_\_\_, hereby certifies that it has \_\_\_\_\_, 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 \_\_\_\_\_, 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.

The Louis Berger Group, Inc.

\_\_\_\_\_  
(Company)

By: \_\_\_\_\_

Aboud J. Alzaim, PE

Senior Vice President

\_\_\_\_\_  
(Title)

Date: August 12, 2014

**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*

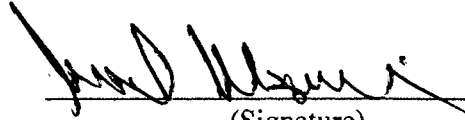
**CONSULTANT DISCLOSURE STATEMENT  
FOR PREPARATION OF  
ENVIRONMENTAL EVALUATIONS**

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.

August 12, 2014

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

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



Attachment 3

**CERTIFICATION OF CONSULTANT/SUBCONSULTANT**

I hereby certify that I am the Senior Vice President and duly-authorized representative of the firm of The Louis Berger Group, 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.

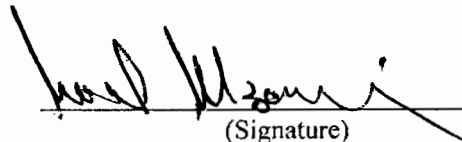
except as here expressly stated (if any):

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.

August 12, 2014

(Date)

  
(Signature)

Attachment 4

**CERTIFICATION OF STATE DEPARTMENT OF TRANSPORTATION**

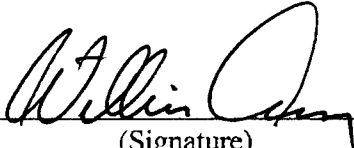
**William J. Cass, P.E.**  
**Director of Project Development**  
N.H.DOT

I hereby certify that I am the \_\_\_\_\_ 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):

\_\_\_\_\_  
8/20/14  
(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.

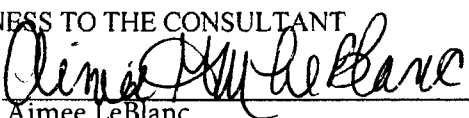
The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower-tier subcontracts which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

Attachment 9

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

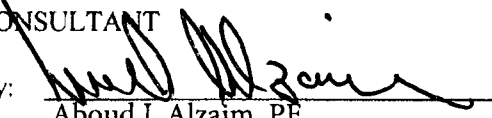
**Consultant**

WITNESS TO THE CONSULTANT

By:   
Aimee LeBlanc  
Executive Assistant

Dated: August 12, 2014

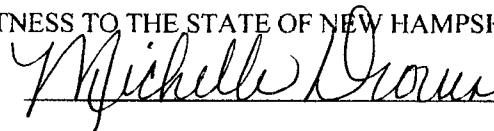
CONSULTANT

By:   
Aboud J. Alzaim, PE  
Senior Vice President  
(TITLE)

Dated: August 12, 2014


**Department of Transportation**

WITNESS TO THE STATE OF NEW HAMPSHIRE

By: 

Dated: 8/20/14

THE STATE OF NEW HAMPSHIRE


By:   
William J. Cass, P.E.  
Director of Project Development  
For DOT COMMISSIONER

Dated: 8/20/14

**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: 8/26/14

By:   
Assistant Attorney General  
John J. Conforti

**Secretary of State**

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

Dated: \_\_\_\_\_

Attest:  
By: \_\_\_\_\_  
Secretary of State



Louis Berger

**Certificate to Vote**

I, James G. Bach, hereby certify that I am the duly elected as Secretary and Director of The Louis Berger Group, Inc.

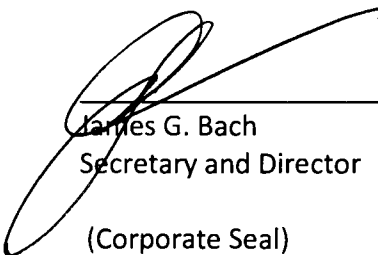
I hereby certify the following is a true copy of a Resolution adopted by Unanimous Written Consent in Lieu of a Meeting of the Board of Directors of The Louis Berger Group, Inc. dated August 12, 2014, which shall have the same force and effect as if unanimously adopted at a meeting of the Board of Directors at which all Directors were present.

VOTED:

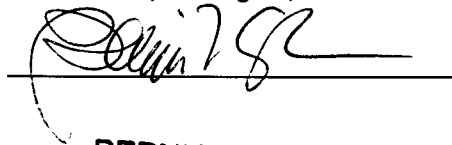
**RESOLVED**, that **ABOUD J. ALZAIM**, Senior Vice President of this company, be and he hereby is authorized to execute the Agreement for Final Design for Improvements to a 2-mile segment of NH 101 from Wallace Road to NH 114 in the Town of Bedford, New Hampshire [Agreement: Bedford 13953 X-A000 (143)], in the name and behalf of said company, and execution of this agreement in this Company's name on its behalf by such Senior Vice President, shall be valid and binding upon this Company.

I hereby certify that said vote has not been amended or repealed and remain in full force and effect as of August 12, 2014 and that Aboud J. Alzaim is duly appointed Senior Vice President, respectively, of this corporation.

DATED: August 12, 2014

  
James G. Bach  
Secretary and Director  
(Corporate Seal)

Sworn to and Subscribed Before Me  
this 12<sup>th</sup> day of August, 2014.



**BERNICE V. CALPO-MELEE**  
NOTARY PUBLIC OF NEW JERSEY  
ID# 2077129  
My Commission Expires 06/20/2015

**The Louis Berger Group, Inc.**

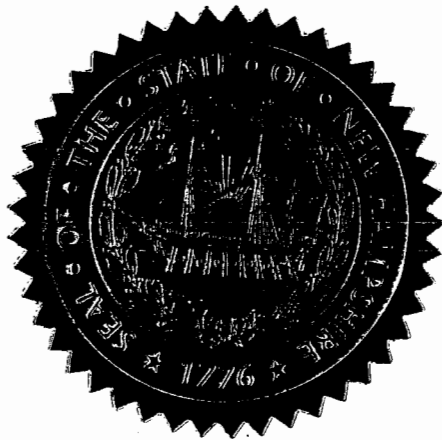
412 Mount Kemble Avenue | Morristown | New Jersey | 07962-1946 | USA | Tel +1.973.407.1000

[louisberger.com](http://louisberger.com)

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 THE LOUIS BERGER GROUP, INC. a(n) New Jersey corporation, is authorized to transact business in New Hampshire and qualified on September 20, 1999. I further certify that all fees and annual reports required by the Secretary of State's office have been received.



In TESTIMONY WHEREOF, I hereto set my hand and cause to be affixed the Seal of the State of New Hampshire, this 13<sup>th</sup> day of August, A.D. 2014

A handwritten signature in cursive script, appearing to read "William M. Gardner".

William M. Gardner  
Secretary of State





**ADDITIONAL REMARKS SCHEDULE**

AGENCY <b>Willis of Pennsylvania, Inc.</b>		NAMED INSURED <b>The Louis Berger Group, Inc. 412 Mount Kemble Avenue PO Box 1946 Morristown, NJ 07962</b>	
POLICY NUMBER <b>SEE PAGE 1</b>		EFFECTIVE DATE: <b>SEE PAGE 1</b>	
CARRIER <b>SEE PAGE 1</b>	NAIC CODE <b>SEE P 1</b>		

**ADDITIONAL REMARKS**

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,  
FORM NUMBER: ACORD 25 FORM TITLE: Certificate of Liability Insurance

**Description of Operations/Locations/Vehicles:**

The Insured shall notify the Certificate Holder at least thirty (30) days prior to making any change(s) to the within shown policy(ies) that would cause said policy(ies) to no longer meet the requirements of this subject contract.