

THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION



18A Bearlow

VICTORIA F. SHEEHAN COMMISSIONER WILLIAM CASS, P.E. ASSISTANT COMMISSIONER

Bureau of Highway Design July 19, 2016

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

REQUESTED ACTION

Authorize the Department of Transportation to amend PO #4003160, with Parsons Brinckerhoff, Inc., New York, NY, and Manchester, NH, Vendor #164158, to complete the final design of the roadway and bridges comprising the northern section of the Salem-Manchester I-93 improvement project beginning in the Town of Windham and ending in the City of Manchester, by increasing the total amount payable by \$521,218.03 (from \$11,122,780.50 to \$11,643,998.53) for additional design services that were not anticipated in the original scope of work, effective upon Governor and Council approval through the contract's original completion date of February 28, 2018. 100% Other Funds.

Funding is available as follows:

04-96-96-963515-1843

FY 2017

Garvee I-93 Construction Project 046-500463 Eng Consultants Non-Benefit

\$521,218.03

EXPLANATION

This project, Salem-Manchester 10418V (Northern Design Section), begins in the vicinity of the existing weigh stations located approximately one mile south of North Lowell Road in the Town of Windham and runs northerly approximately twelve miles to the I-93/I-293 split in the City of Manchester. The above limits exclude a segment in the Town of Londonderry in the vicinity of Exit 5 that is currently under construction. Funding for this design effort is currently included in the State's Ten-Year Transportation Improvement Plan.

On February 20, 2013, the Governor and Council authorized the subject engineering and environmental consultant services Agreement (Item #88; copy of Resolution attached) in the amount of \$9,358,904.06 to complete the final design for the five (5) individual construction projects by preparing contract plans, specifications, special provisions, estimates of quantities and costs, right-of-way plans, and supplying construction support services. A previous 2005 final design services Agreement that was completed in 2011 brought the final design to an approximately 50% complete stage. At the time, given the funding uncertainties for constructing the remaining capacity improvements associated with this northern section, it was deemed prudent to delay pursuing the remaining design effort until needed. In addition to the typical final design tasks, this Agreement also includes Right-of-Way Acquisition services. More specifically, the Agreement includes: project management and coordination; public involvement and support; Right-of-Way procurement; calculation and documentation of environmental impacts; Phase III Archaeological Evaluations; sound wall evaluations; traffic capacity analysis and traffic demand management; drainage design, including pollutant loading and construction stormwater assessments; geotechnical services; river hydraulics with LOMR; utility relocation and coordination; traffic control for construction; constructability evaluations; CPM scheduling; in-depth cost estimating; and ITS accommodations.

On December 3, 2014, the Governor and Council authorized an amendment to the Agreement (Item #31; copy of Resolution attached) to increase the fee by \$975,664.17 for addition services that included a revised recreational trail design that provides a safer solution by eliminating travel along the shoulder of North Lowell Road,

replacement of the Beaver Brook Bridges rather than extending the culverts as originally proposed, designing a solution for the replacement of the Cohas Brook Culverts 41 & 42 due to the T-Wall originally proposed not being a viable solution, additional bridge design efforts for Bridges 38, 39, & 40, design for an additional 2,250 feet of soundwall, overhead sign structure and choice lane at NB I-93 / I-293 split, design refinements to the Kendall Pond Access Road, additional project management resources, development of a Conditional Letter of Map Revision (CLOMR) to the FEMA Flood Insurance Rate Map for the floodway area of Wheeler Brook near Exit 4. The amendment increased the total amount payable from \$9,358,904.06 to \$10,334,568.23.

On October 21, 2015, the Governor and Council authorized an amendment to the Agreement (Item #22; copy of Resolution attached) to increase the fee by \$788,212.27 for addition services that included Traffic Control Plans (TCP) revisions due to the elimination of the "borrow a barrel" method of construction in favor of constructing a NB segment out of traffic, Emergency Access Roads & Beaver Brook Bridge adjustments to design temporary NB ramps and revise the bridge design from a 52' span using cantilevered abutments to a 75' span using integral abutments, revised lane transitions at the northern project limits of the 14633I contract to maintain three NB and four SB travel lanes through the Exit 5 interchange, and additional Right-of-Way abstracting work. The amendment increased the total amount payable from \$10,334,568.23 to \$11,122,780.50.

This amendment to the Agreement is for additional work associated with the following items:

Wheeler Pond CLOMR (Contract 14633D) - Additional hydraulic modeling, additional mapping/ survey and additional coordination with FEMA are needed to complete the CLOMR at Wheeler Pond near Exit 4 in Londonderry. (\$24,106.13)

<u>Utility Coordination (Contract 14633D, 14633I)</u> – Additional work is required to complete the remaining utility coordination. The utility coordination efforts have been significantly more time consuming than estimated due to utility relocations that were not anticipated at the time of the original contract, and also because the intermediate completion date of completion for final design services was previously extended from March 2016 to December 2016. (\$117,722.53)

Revisions to the Traffic Sign Plans (Contract 14633D, 14633I) - Additional plan work, design work, and calculations are required to address design issues related to a revised supplemental specification for traffic signs. (\$15,720.81)

<u>Corthell Site Preservation (14633D)</u> - A grading plan is required to preserve the remnants of an archaeological site. (\$10,822.05)

<u>Project Management/Project Administration & Controls</u> - Additional monthly administration, meetings, reports and schedule updates are required due to the intermediate completion date of completion for final design services being previously extended from March 2016 to December 2016. (\$153,255,80)

Additional Direct Expenses - Printing costs were higher than anticipated by the consultant for the printing of the two remaining contracts. (\$59,500.00)

Additional Archaeological Work - This task is to complete the remaining reports and archaeological site cards for the field work that was performed by subconsultant IAC for the Corthell Site and the Towns-Hunnewell Site. (\$90,589.92)

Redesign of TCP Crossovers (14633D, 14633I) – As a result of a change in the design speed, design revisions for the Traffic Control Plan are required. Due to design schedule delays, changes in the coordination, phasing, and match point between the two contracts are required. (\$49,500.79)

The increase in fee as proposed is commensurate with the revised scope of work and the corresponding additional engineering and technical services to be furnished. Preliminary Engineering costs will be funded with 2012 Garvee Bond proceeds. Debt Service will be paid with 100% Federal funds at 80% reimbursement rate and 20% match using Turnpike Toll Credits.

This amended 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 amended 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 amend this Agreement for consulting services as outlined above.

Sincerely,

Victoria F. Sheehan

Commissioner



THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION



VICTORIA F. SHEEHAN COMMISSIONER

WILLIAM CASS, P.E. ASSISTANT COMMISSIONER

SALEM-MANCHESTER
IM-IR-0931(174)
10418C (Northern Section - 2013 Contract)
(Agreement Dated February 20, 2013, PO 4003160)
(Fee Increase Amendment #3)

Room 200 (CMF) Tel. (603) 271-2171 Fax: (603) 271-7025

July 13, 2016

Mr. Robert D. Klimm, P.E. Parsons Brinckerhoff, Inc. 650 Elm Street Manchester, NH 03101

Dear Mr. Klimm:

This letter amends Article I – Description of Professional Services to be Rendered and Article II – Firm Fixed Price Line Item Compensation of Consultant in the above-referenced Agreement. This amendment increases the total fee not to exceed for this Agreement by \$521,218.03 (from \$11,122,780.50 to \$11,643,998.53) as payment for additional design services not anticipated under the original agreement.

Article I, Section E – Scope of Work (Final Design), page 12, is being amended to include Attachment C, dated March 25, 2016, a detailed description of additional services for this contract amendment.

Article II, Section A - General Fee, page 37, is being amended to revise the Unit Prices and Totals as follows:

- Item #A1-9, Wheeler Brook CLOMR/LOMR (from Amendment #1). The Unit Price remains unchanged at \$33,032.02. The quantity increases from 1 unit to 1.73 units. The total increases by \$24,106.13, from \$33,032.02 to \$57, 138.15.
- Item #1, Final Design of Roadways. The Unit Price (Quantity = 1) and Total increase by \$396,643.46, from \$3,731,513.67 to \$4,128,157.13.
- Item #9, Right-of-Way Plans (Preliminary, Purchase, & Registry). The Unit Price (Quantity = 1) and Total decrease by \$54,648.66, from \$823,473.14 to \$768,824.48.
- Item #15, Soundwall Evaluation by Request. The Unit Price (Quantity = 1) and Total decrease by \$5,794.88, from \$11,589.76 to \$5,794.88.
- Item #19, Phase III Archaeological Assessment Corthell Homestead and Towns Hunnewell Sites. The Unit Price (Quantity = 1) and Total increase by \$101,411.98, from \$140,500.00 to \$241,911.98.

• Item #27, Direct Expenses - Other. The Unit Price (Quantity = 1) and Total increase by \$59,500.00, from \$124,965.00 to \$184,465.00.

The above fee increase revises the total amount payable under this Agreement, which increases from \$11,122,780.50 to \$11,643,998.53 by this amendment.

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

Sincerely,

Wendy A. Johnson, P.E.

Wengage

Project Manager

Approved:

Peter E. Stamnas, P.E.

Director of Project Development

We concur in the above Amendment.

PARSONS BRINCKERHOFF, INC.

Bv:

Title: VICE PRESIDERT | AREA MANAGOR

WAJ/wjh attachments

AGREEMENT AMENDMENT

SALEM-MANCHESTER, IM-IR-0931(174), 10418-C

PARSONS BRINCKERHOFF, INC.

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

Consultant		
By: Well Berton Principal Proj. Mgr. /V.P Dated: Jahy 14, 2016	Ву:	CONSULTANT Mules President Rass Many office) Dated: July 14, 2016
Department of Transportation		
, , 4.		THE STATE OF NEW HAMPSHIRE Oirector of Project Development FOR DOT COMMISSIONER Dated: 1/21/16
Attorney General		
This is to certify that the above-amended AGREEMEN and execution. Dated: Scot. 27, 2010		Assistant Attorney General
Secretary of State		
This is to certify that the GOVERNOR AND COUNC. AGREEMENT.	IL on	approved this amended
Dated: At	ttest:	
	By:	Secretary of State

I-93 Widening North Supplement #3-1 Scope of Work

Line Item #A1-9 - Wheeler Pond CLOMR (a.k.a. Tributary O to Beaver Brook)

FEMA Map Revisions for I-93 Widening Project Narrative Scope Discussion for Additional Work

Background

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) indicates a Zone AE Floodplain and Floodway for the subject stream (defined as Tributary O to Beaver Brook on the FIRM). Limits of detailed study and mapped boundaries of the Floodplain and Floodway extend to the downstream end of the existing 60" RCP crossing under I-93 at the Pillsbury Street (Ash Street) crossing. The project includes widening of I-93, filling in the upper extents of the Floodplain and Floodway, and extending the existing culvert down the median and under the new northbound barrel of I-93.

Forms need to certify that the downstream Floodplain and Floodway boundaries will not be affected or increased by the change. The upstream end of the brook beyond the culvert is not a mapped Floodplain or Floodway so there is not a FEMA restriction on the upstream effect of the project. In addition, there are no relevant Town regulations that would govern this area; however, significant upstream impacts at the Q_{100} storm event are not anticipated.

The original approved Scope of Work for the required Conditional Letter of Map Revision (CLOMR) was dated 9/2/2014 (Amendment A1-9 Wheeler Pond CLOMR). Since that time, additional tasks have been identified that will be required to complete the CLOMR application. This following Scope of Work details these additional tasks, which are outside the original A1-9 Scope of Work.

Existing Conditions HEC-RAS Modeling

The original Scope of Work anticipated that the original FEMA hydraulic modeling (HEC-2) for this stream, completed in 1985, could be obtained and duplicated, and that there is no discrepancy between the published values and limits of the floodway / floodplain to actual current conditions. Upon initial investigations with FEMA and the Town of Londonderry, this information was not readily available. Following research by CLD staff, an error in stream labeling for Wheeler Brook (labeled Tributary D in all the modeling, but labeled as Tributary O in the published FIRM and Flood Insurance Study (FIS)); the information available for Tributary D was obtained. The cross-section location and data is not comprehensive enough to provide enough existing detail to reproduce the existing mapping for the required limits of the study. In addition, the existing Floodplain and Floodway boundaries do not incorporate an existing ditch that takes some flow from the main channel around the back of an existing developed parcel. This separated flow joins back to the main channel downstream of the limits for the survey of the project.

In order to provide the required existing conditions hydraulics models and sufficient correlation between the historical FEMA analyses and these models, as summarized below, it is anticipated that significant additional work will be required to develop, trouble-shoot and finalize the models, due to the lack of existing sufficient HEC-2 data.

Existing Conditions Models required are:

- "Duplicate Effective Model" will be developed using the limited data from 1985 HEC-2 models supplemented by existing conditions survey modified to represent 1985 existing conditions. Additional research through historical mapping locations is anticipated in order to develop the existing conditions surface model. Water surface elevation results must be within 0.5-feet of published value; therefore, it is anticipated that the model will need to be refined in an iterative manner to gain this correlation.
- "Corrected Effective Model" will modify the "Duplicate Effective Model" to represent the current existing conditions to compare changes to the post-project conditions modeling. This model will incorporate the existing drainage ditch behind the building adjacent to the stream, which was not included in the original HEC-2 analyses.

Proposed Conditions HEC-RAS Modeling

The post-project modeling has been completed under the initial Scope of Work. The existing project survey was combined with additional data obtained from Town mapping contours as well as proposed topography to provide a complete surface of the defined study area for the proposed conditions. This surface was geo-referenced into HEC-RAS to provide the basis for the "Post-Project Conditions Model". NHDOT has identified that additional field survey will be obtained to cover the areas not included in the existing project survey. The post-project model will need to be updated to incorporate this additional survey.

Submittals / Meetings

Additional interim submittals will be required and will include HEC-RAS models as well as the CLOMR Narrative, CADD and XML files to define the surface, as well as the Floodplain Boundary Map to delineate the recommended boundary changes. Following NHDOT review of the submitted materials, follow-up and coordination meeting with NHDOT, CLD and PB staff is also required in order to agree upon final revisions to the modeling for development of the draft CLOMR application and supporting materials. On-going coordination with local FEMA representatives is required to discuss this unique situation to assist in finalizing modeling and study limits that might be required to prepare and process the CLOMR application.

Sign-off by the Towns will be required prior to submittal of the CLOMR application to FEMA. It has been determined that a presentation meeting to the Towns of Londonderry and Derry will be the most efficient way to discuss the application and implications to abutting property owners, as well as gather and address any comments provided by the Towns.

I-93 Widening North Supplement #3-2 Scope of Work

Line Item #1 – Final Design of Roadways

Utility Coordination

Due to the approval of the contract completion date extension to December 31, 2016, PB will incur more utility coordination effort than originally estimated. In addition to the general increase in time, the following tasks will require more effort and involvement than originally anticipated.

- Derry force main under I-93 The Derry force main under I-93 was always a part of the utility impacts, however, it was expected the town would replace or sleeve that portion of the force main under the proposed I-93 NB barrel consisting of a relatively straightforward 150' segment of the force main. The town has decided to replace and upsize a significant section of the force main from Buyck Ave. to Trolley Car Lane, a distance of approximately 550'. This replacement impacts or may impact additional design elements including construction sequencing, drainage facilities, natural resources, town roads, a large sanitary sewer structure, and a small stream. All of these impacts or potential impacts will require additional meetings, communications, reviews of plans, estimates and specifications and incorporation of these elements into the project documents.
- Londonderry gravity main under NH 102 The sanitary sewer gravity main crossing NH Route 102 near Action Boulevard is quite deep and was never expected to be impacted by the proposed work, and indeed, it wasn't. It is only being repaired/replaced because it is causing the town problems. PB expects to have at least two meetings, numerous communications, review of plans and specifications, will need to complete a utility agreement for the crossing and incorporate the plans into the project plan set.
- Extra meetings and coordination for telephone duct bank under I-93 Although it was understood that the telephone duct bank(s) would need to be moved off the existing bridge, there was no reason to believe that they wouldn't be simply carried under the new bridge as they had been on the existing. In order to facilitate the construction sequencing of the relocation, it was determined by the department to proceed with a directional drilling under the existing I-93 barrels. This will necessitate additional meetings, communications, reviews of the proposed specifications, and working out numerous details of the utility requirements with those of the department.
- More coordination than expected with the Eversource crossing of I-93 for Line 365 at Exit 4A The original expectation was that this would be a straightforward relocation consisting, most likely, of increasing the height of several poles. With the utility's submittal of their scope of work and estimate to perform the engineering for this crossing, it is apparent that the relocation will be much more involved than previously believed. Many environmental and resource issues are being investigated, all of which will generate additional meetings, communications, reviews, and complexity to the utility agreements that will be required.

In addition to the above additional coordination activities, the following out of scope design work has been requested by the department:

• Design and Plans for FairPoint Underground Duct Bank

Final design of the profile and horizontal alignment for the underground telephone duct bank, including details and quantities:

- 1. Design, plans profile and details. PB will need to incorporate details of the manholes and duct bank and their installation requirements along with details of the duct bank restraints required by the utility.
- 2. Additional unanticipated quantities will need to be calculated, such as directional drilling, significant rock excavation, casing, conduit, common excavation, and items for access to the two manholes.
- 3. Extra meetings
- Incorporation of Maintenance Shed 528 Site Work and Sanitary Sewer Force Main The Design (Civil) files for the redevelopment of Shed 528 will need to be incorporated into the I-93 cross sections and plans. We will need to update the site with the proposed information, and label as per shed 528 redevelopment plans. This will include adjustments to the right-of-way fencing, gate, and any other items we may be impacting.

Plans and cross sections from Shed 528 to the Charleston Ave pump station (approximately 1200') will need to be revised to reflect the new sewer force main. All sanitary sewer items needed for the force main extension and completion will need to be incorporated into Contract D.

- 1. Incorporate all site elements such as new grading, fencing, etc. into Contract D plans to reflect a new existing condition
- 2. Revise all cross sections and plans between the maintenance facility and Charleston Ave pump station
- 3. Incorporate estimate, design narrative, review specifications and prosecution of the work.
- 4. Incorporate plans provided by the consultant into the project documents.

Traffic Sign Plans

The Traffic Bureau submitted a proposed supplemental specification for Section 615 to change how traffic signs are quantified (signs are no longer referred to as A, B and C-type). New item numbers and descriptions are currently being developed. These changes will affect estimates and plan sets.

• Sign Summary Boxes will need to be revised.

- Sign Calculation sheets will need to be revised.
- Sign text layout sheet item numbers will need to be revised. This will result in going from 1 pay item up to 3 pay items.
- Sign calculation sheets will need to be revised.

Corthell Site Preservation

The Department reviewed the survey and has developed the following recommendations for preserving the remnants of the historic archaeological Corthell site as described below.

House site, east of the woods road:

It is recommended that trees in the area immediate to and surrounding the approximately atgrade stone house foundation and chimney fall be cut (not stumped) and fill laid over the area (as deep as appropriate to cover and protect cultural features) between Stations 1655+15 and 1655+60.

Barn site, west of the woods road:

The west half of the barn foundation will be filled following excavation for infrastructure, including two trenches for RCP drainpipe (less than 20" in diameter) and two small 4" electrical conduit trenches.

It is recommended that trees in the area immediate to and surrounding the stone foundation (particularly the east half) be cut (not stumped) and fill laid over the area (as deep as appropriate to cover and protect cultural features) between Stations 1655+90 and 1656+60 extending to the dirt woods road on the east.

Since the 50 ft cross sections we currently have do not adequately represent the work described in the recommendations the Department collected additional survey to be incorporated into the existing survey data. We will need to develop proposed contours to reflect the grading required. It appears that the best way to address this is to use a single unit item to pay for all of this mitigation work.

- Incorporate new survey into the current surface information.
- Develop appropriate grading per the recommendations.
- Use item 670.321 Sensitive Area Mitigation (specification to be developed by NHDOT)
- Will need to include a summary box for this item that includes all of the items involved (non-pay), and PB will develop the unit cost based on these specific quantities

Project Management/Project Administration & Controls

Due to the approval of the contract completion date extension to December 31, 2016, PB will incur more project management, administration and reporting effort than assumed in the original contract. Additional scheduling and reporting efforts have also been requested beyond the assumptions in the original contract.

- Project Management and Administration
- Monthly Meetings & Report
- Monthly Schedule Updates

Redesign of TCP Crossovers

Redesign of TCP Crossovers are required due to a change in the design speed, and construction schedules for the 14633D and 14633I Contracts, as described below:

- Change in Design Speed: Crossovers 1 and 2, the Ash St/Pillsbury Road
 crossovers, were developed for the Contract D Slope and Drain submission to a
 design speed of 55 mph. Subsequently, the Department changed the design speed
 requirement to 65 mph requiring the crossovers to be completely redesigned
 including alignments, profiles, plans, cross sections and quantities.
- Change in Schedule: For the PPS&E submittals it was assumed based on discussions with the Department, that construction of the 14633I Contract would be initiated following completion of the 14633D Contract. The current construction schedules are such that the 14633D and 14633I Contracts will be under construction during similar periods. This requires the redesign of Crossovers 2 and 4, as well as significant changes to the permanent plans regarding the limit of work. The changes will affect alignments, profiles, plans, cross sections and quantities for both the 14633D and 14633I Contracts.

Line Item #19 – Archaeological Assessment – Corthell and Towns – Hunnewell Sites

IAC Supplement

Independent Archaeological Consulting, LLC

On March 13, 2013, Independent Archaeological Consulting, LLC (IAC) signed a contract with Parsons-Brinckerhoff (P-B) to complete a Phase III data recovery at the L. H. Corthell Farmstead in Londonderry, New Hampshire. The 2006 Phase II Determination of Eligibility survey had found the site NR eligible, and recommended additional testing if the site could not be avoided. The original premise and direction for the data recovery focused on the hypothesis that three Corthell sons turned to the production of alcohol at their family home, to hedge against the Great Depression and make money during the Prohibition. This would account for the high volume of

bottle glass IAC had collected during the Phase II DOE, where archaeologists collected 6,121 artifacts in 2006, in addition to the 2,560 they retrieved the Phase IB investigation.

In November 2014, IAC began fieldwork for the data recovery, but once fieldwork was under way, it quickly became apparent that the expected number of artifacts far exceeded what had been anticipated. IAC consulted the newly available 1940 federal population census and learned that two of the brothers, Alden and Everett Corthell, were listed as "garbage collectors." The site therefore served as a collection point for late-nineteenth and twentieth-century trash that was unrelated to the Corthell household consumption, which made the site less significant. In discussions with NHDOT and NHDHR, the project was "downgraded" to a supplemental Phase II, and IAC began to draft a strategy for the analysis and curation of 11,643 artifacts collected in 2014.

To complete the supplemental Phase II at the Corthell site requires the selective analysis of individual artifact classes, rather than the entire assemblage. IAC has proposed a plan to choose which classes to de-accession prior to analysis, which classes to analyze, and which to de-accession following analysis. The plan will include the 8,681 artifacts from the Phase IB/II efforts, for the comprehensive treatment of 20,234 artifacts, many of which are redundant. This study plan needs to be reviewed and approved by NHDOT and NHDHR.

NHDOT has requested these additional tasks to be completed that are out of the scope of the original proposal:

- Complete Phase II and supplemental Phase II report for the Towns-Hunnewell site;
- Update Chapters 1 and 5 for Phase II overall report for I-93 project (adding in new information from Towns-Hunnewell report and Corthell report);
- Complete References and Chapter 16 for Phase II overall report for I-93 project (adding in new information from Towns-Hunnewell report and Corthell report);
- Update and revise site cards for the Phase II sites.

Line Item #27 – Direct Expenses

Additional Direct Expenses

The size of the submissions and materials required to be submitted to the department were unanticipated in the original contract estimate. Future expenses yet to incur:

- Contract D PS&E, DCPs, and CPs Printing, Reproduction and Supplies.
- Contract I PS&E, DCPs, and CPs Printing, Reproduction and Supplies.
- Other Printing associated with misc. submissions/OTS materials (ROW Plans, Erosions Control Plans, Construction Storm Water Analysis, Traffic Control Plans, Etc.)

I-93 Widening North Supplement #3-3 Scope of Work

As a follow up to discussions held at our meeting on March 18, 2016, with the Commissioner and NHDOT staff, we respectfully request the following budget reallocations be made to the contract. These reallocations are required to balance the budget between tasks to better reflect effort required due to a better understanding of the scope of work. We request the follow changes at this time:

Line Item #9 - Right-of-Way Plans (Preliminary, Purchase)

Please transfer the remaining unbilled amount of \$54,648.66 (\$31,738.09 allotted to 14633D and \$22,910.58 allotted to 14633D into Task 1 – Subtask 1D – PS&E (to be allotted to 14633D PS&E). The R.O.W. Registry Plans are no longer required and the effort for the PS&E submittal is greater than anticipated.

Line Item #15 – Soundwall Evaluation by Request

Please transfer the remaining unbilled amount of \$5,794.88 into Task 1 – Subtask 1D – PS&E (to be allotted to 14633I PS&E). A second soundwall evaluation is no longer anticipated and the effort for the PS&E submittal is greater than anticipated.

PARSONS BRINCKERHOFF, INC.

SECRETARY'S CERTIFICATE

I, Hillary Jassey, Secretary of Parsons Brinckerhoff, Inc. (the "Corporation"), do hereby

certify on behalf of the Corporation and not in my individual capacity that on June 1, 2015 the

Board of Directors of the Corporation adopted the following resolution:

"RESOLVED, that parties authorized by the Delegation of Authority may

sign RFPs, RFQs and any resulting project contracts or amendments in

accordance with the Delegation of Authority."

I further certify that the resolution has not been revoked and that, as a Vice President and Area

Manager of the Corporation, Richard F. O'Brien is authorized by the Delegation of Authority to

sign Amendment #3, Salem-Manchester I-93 Widening, IM-IR-0931(174), 10418C (Northern

Section – 2013 Contract) between the State of New Hampshire, Department of Transportation

and the Corporation.

Hillary Jassey

Secretary

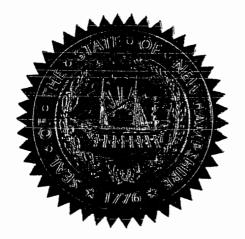
July 14, 2016

Date

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 Parsons Brinckerhoff, Inc. a(n) New York corporation, is authorized to transact business in New Hampshire and qualified on June 20, 1977. 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 14th day of July, A.D. 2016

William M. Gardner Secretary of State



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

7/14/2016

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

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

	or o					
PRODUCER		CONTACT JLT Service Team				
JLT Specialty Insurance Services Inc. 5847 San Felipe St.		PHONE (A/C, No, Ext): (713) 325-7615	13) 789-0415			
Suite 2800		E-MAIL ADDRESS: wsppbcertrequest@jltus.com				
Houston, TX 77057		INSURER(S) AFFORDING COVERAGE		NAIC#		
		INSURER A : Zurich American Insurar	16535			
PARSONS BRINCKERHOFF, INC.		INSURER B : Liberty Insurance Corpo	ration	42404		
		INSURER C :				
4139 Oregon Pike Ephrata, PA 17522	ike	INSURER D :				
	7522	INSURER E :	- PPPAN			
		INSURER F :				
COVERAGES	CERTIFICATE NUMBER:	REVIS	ON NUMBER:			

COVERAGES	CFR	TIFICATE	NUMBE

REVISION NUMBER:

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

INSR LTR	TYPE OF INSURANCE	ADDL			POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	rs	
A	X COMMERCIAL GENERAL LIABILITY					!	EACH OCCURRENCE	\$	2,000,000
	CLAIMS-MADE X OCCUR	X	X	GLO9835819-03	04/01/2016	04/01/2017	DAMAGE TO RENTED PREMISES (Ea occurrence)	5	300,000
	X Contractual Liab.						MED EXP (Any one person)	5	5,000
							PERSONAL & ADV INJURY	s	2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	s	5,000,000
	POLICY X PRO-						PRODUCTS - COMP/OP AGG	\$	2,000,000
	OTHER:							\$	
	AUTOMOBILE LIABILITY	i					COMBINED SINGLE LIMIT (Ea accident)	\$	2,000,000
.	X ANY AUTO	X	X	AS7-621-094060-035	10/01/2015	11/01/2016	BODILY INJURY (Per person)	\$	
. [ALL OWNED SCHEDULED AUTOS AUTOS	-					BODILY INJURY (Per accident)	\$	
	HIRED AUTOS AUTOS				,		PROPERTY DAMAGE (Per accident)	\$	
		1						\$	
	UMBRELLA LIAB OCCUR						EACH OCCURRENCE	\$	
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	\$	
	DED RETENTION \$							\$	
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						X PER OTH-		
В	ANY PROPRIETOR/PARTNER/EXECUTIVE	N/A	X	WA7-62D-094060-015	10/01/2015	11/01/2016	E.L. EACH ACCIDENT	\$	2,000,000
į.	(Mandatory in NH)						E.L. DISEASE - EA EMPLOYEE	S	2,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below	-					E.L DISEASE - POLICY LIMIT	\$	2,000,000
<u>i</u>									

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) THIRTY (30) DAYS NOTICE OF CANCELLATION

(PB #52625); I-93 SALEMOMANCHESTER; SALEM-MANCHESTER IM-IR-0931(174) 10418C (NORTHERN SECTION) (2013 CONTRACT). STATE OF NEW HAMPSHIRÉ IS ADDITIONALLY INSURED AS RESPECTS TO GENERAL LIABILITY, AS REQUIRED BY WRITTEN CONTRACT.

CERT	TFIC/	ATE	HOL	DER

CANCELLATION

NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION JOHN O. MORTON BUILDING 7 HAZEN DRIVE

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

P.O. BOX 483 CONCORD, NH 03302 AUTHORIZED REPRESENTATIVE

© 1988-2014 ACORD CORPORATION. All rights reserved.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

7/14/2016

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

If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s). JLT Service Team JLT Specialty Insurance Services Inc. 5847 San Felipe St. PHONE (A/C, No, Ext): (713) 325-7615 FAX (A/C, No): (713) 789-0415 ADDRESS: wsppbcertrequest@jltus.com **Suite 2800** Houston, TX 77057 INSURER(S) AFFORDING COVERAGE NAIC # 11515 INSURER A: QBE Specialty Insurance Company INSURED INSURER B : INSURER C : PARSONS BRINCKERHOFF, INC. 4139 Oregon Pike INSURER D Ephrata, PA 17522 INSURER E : INSURER F **COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:** THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. ADDL SUBR POLICY EFF POLICY EXP TYPE OF INSURANCE POLICY NUMBER LIMITS INSD WVD COMMERCIAL GENERAL LIABILITY EACH OCCURRENCE DAMAGE TO RENTED CLAIMS-MADE OCCUR \$ PREMISES (Ea occurrence) MED EXP (Any one person) 5 PERSONAL & ADV INJURY \$ GEN'L AGGREGATE LIMIT APPLIES PER GENERAL AGGREGATE POLICY LOC PRODUCTS - COMP/OP AGG S \$ OTHER: COMBINED SINGLE LIMIT (Ea accident) AUTOMOBILE LIABILITY S BODILY INJURY (Per person) ANY ALITO ALL OWNED AUTOS SCHEDULED BODILY INJURY (Per accident) \$ AUTOS NON-OWNED PROPERTY DAMAGE (Per accident) s HIRED AUTOS AUTOS \$ UMBRELLA LIAB OCCUR EACH OCCURRENCE \$ **FXCESS LIAB** CLAIMS-MADE **AGGREGATE** \$ DED RETENTION S \$ WORKERS COMPENSATION STATUTE AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE E.L. EACH ACCIDENT OFFICER/MEMBER EXCLUDED? E.L. DISEASE - EA EMPLOYEE \$ f yes, describe under DESCRIPTION OF OPERATIONS below E.L. DISEASE - POLICY LIMIT 11/01/2015 | 11/01/2016 | Per Claim/Aggregate QPL0022630 Professional Liab. 4,000,000 DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) THIRTY (30) DAYS NOTICE OF CANCELLATION (PB #52625); I-93 SALEMOMANCHESTER; SALEM-MANCHESTER IM-IR-0931(174) 10418C (NORTHERN SECTION) (2013 CONTRACT). \$75,000 DEDUCTIBLE APPLIES. **CERTIFICATE HOLDER** CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION ACCORDANCE WITH THE POLICY PROVISIONS. JOHN O. MORTON BUILDING 7 HAZEN DRIVE P.O. BOX 483 AUTHORIZED REPRESENTATIVE CONCORD, NH 03302



THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION



WILLIAM CASS, P.E. ASSISTANT COMMISSIONER

> Bureau of Highway Design September 2, 2015

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

REQUESTED ACTION

Authorize the Department of Transportation to amend PO #4003160, with Parsons Brinckerhoff, Inc., New York, NY, and Manchester, NH, Vendor #164158, to complete the final design of the roadway and bridges comprising the northern section of the Salem-Manchester I-93 improvement project beginning in the Town of Windham and ending in the City of Manchester, by increasing the total amount payable by \$788,212.27 (from \$10,334,568.23 to \$11,122,780.50) for additional design services that were not anticipated in the original scope of work, effective upon Governor and Council approval through the contract's original completion date of February 28, 2018. 47% Other Funds, 53% State Funds.

Funds to support this request are anticipated to be available in the following accounts in State FY 2016 and State FY 2017 upon the availability and continued appropriation of funds in the future operating budget, with the ability to adjust encumbrances between State Fiscal Years through the Budget Office, if needed and justified:

04-96-96-963515-1843

FY 2016

FY 2017

Garvee I-93 Construction Project

046-500463 Eng Consultants Non-Benefit

\$212,000.00

\$157,381.27

04-96-96-963515-3311 Non Par I-93

046-500464 Consultants

\$418,831.00

EXPLANATION

This project, Salem-Manchester 10418V (Northern Design Section), begins in the vicinity of the existing weigh stations located approximately one mile south of North Lowell Road in the Town of Windham and runs northerly approximately twelve miles to the I-93/I-293 split in the City of Manchester. The above limits exclude a segment in the Town of Londonderry in the vicinity of Exit 5 that is currently under construction. Funding for this design effort is currently included in the State's Ten-Year Transportation Improvement Plan.

On February 20, 2013, the Governor and Council authorized the subject engineering and environmental consultant services Agreement (Item #88; copy of Resolution attached) in the amount of \$9,358,904.06 to complete the final design for the five (5) individual construction projects by preparing contract plans, specifications, special provisions, estimates of quantities and costs, right-of-way plans, and supplying construction support services. A previous 2005 final design services Agreement that was completed in 2011 brought the final design to an approximately 50% complete stage. At the time, given the funding uncertainties for constructing the remaining capacity improvements associated with this northern section, it was deemed prudent to delay pursuing the remaining design effort until needed. In addition to the typical final design tasks, this Agreement also includes Right-of-Way Acquisition services. More specifically, the Agreement includes: project management and coordination; public involvement and support; Right-of-Way procurement; calculation and documentation of environmental impacts; Phase III Archaeological Evaluations; sound wall evaluations; traffic capacity analysis and traffic demand management; drainage design, including pollutant loading and construction stormwater assessments; geotechnical services; river hydraulics with LOMR; utility relocation and coordination; traffic control for construction; constructability evaluations; CPM scheduling; in-depth cost estimating; and ITS accommodations.

On December 3, 2014, the Governor and Council authorized an amendment to the Agreement (Item #31; copy of Resolution attached) to increase the fee by \$975,664.17 for addition services that included a revised recreational trail design that provides a safer solution by eliminating travel along the shoulder of North Lowell Road, replacement of the Beaver Brook Bridges rather than extending the culverts as originally proposed, designing a solution for the replacement of the Cohas Brook Culverts 41 & 42 due to the T-Wall originally proposed not being a viable solution, additional bridge design efforts for Bridges 38, 39, & 40, design for an additional 2,250 feet of soundwall, overhead sign structure and choice lane at NB I-93 / I-293 split, design refinements to the Kendall Pond Access Road, additional project management resources, development of a Conditional Letter of Map Revision (CLOMR) to the FEMA Flood Insurance Rate Map for the floodway area of Wheeler Brook near Exit 4. The amendment increased the total amount payable from \$9,358,904.06 to \$10,334,568.23.

This amendment to the Agreement is for additional work associated with the following items:

Traffic Control Plan (TCP) Revisions (Contract 14633H & I) - The original TCP concept for both contracts involved a "borrow a barrel" method of construction. As the design for the 14633H project was advanced, it became evident that the construction costs for the crossovers exceeded the savings that would be realized for the segment of I-93 NB constructed out of traffic. A similar situation existed in the 14633I contract. TCP lane width guidance provided by the Department's Consultant Review Section resulted in a construction pavement joint located several feet to one side of the ultimate crown line. After review with the Department's Pavement Management Section staff and Construction staff, it was decided to revise the design to locate pavement joints at the crown line to eliminate constructability issues and enhance long term pavement performance. This results in the need to modify the TCP using reduced shoulder widths (variable 2'-6') to minimize temporary widening, as well as designing emergency pull offs to provide designated areas for disabled vehicles. (\$224,783)

Emergency Access Roads & Beaver Brook Bridge adjustments - The TCP concept for both contracts involves a "borrow a barrel" method of construction. This approach eliminates existing access to the northbound barrel at North Lowell Road and, by way of the median crossover, just south of Kendall Pond Road. This work effort includes design and details for temporary ramps to the northbound barrel at both locations. New information was uncovered during the preliminary design stage that would allow the Department to advance a different design that could save from \$600,000 to \$800,000 in construction costs. This work effort would reproduce the preliminary design of the bridge from a 52' span using cantilevered abutments to a 75' span using integral abutments. (\$113,628)

Lane Transitions (Contract 14633 I)

The task involves revisions to the northern project limits of 14633I contract. The NB limit of work will be extended approximately 3,380 feet in order to maintain three travel lanes through the Exit 5 NB off ramp and match to the southerly limit of the 14633H contract. The SB limit of work will be extended approximately 11,965 feet to the north to perpetuate the four lane configuration through Exit 5 and match to the southern limit of 14633H four lane section. These design revisions result from a decision to modify the lane use through the Exit 5 interchange that was made subsequent to the final fee negotiations for the existing Agreement. (\$30,970)

Right-of-Way Abstracting - Additional work outside of the original scope is required to complete the ROW abstracting, documentation and plan development tasks. This work involves completion of the ROW abstracting and alignment development required to establish the existing ROW and basis for accurate ROW acquisition plan development. (\$418,831)

Additionally, the contract's intermediate date of completion for final design services is being amended from October 31, 2015 to December 31, 2016. The final date of completion for all services including construction support and right-of-way acquisition remains unchanged at February 28, 2018.

The increase in fee as proposed is commensurate with the revised scope of work and the corresponding additional engineering and technical services to be furnished. Preliminary Engineering costs will be funded with 2012 Garvee Bond proceeds. Debt Service will be paid with 100% Federal funds at 80% reimbursement rate and 20% match using Turnpike Toll Credits. Right-of -Way costs for this amendment are 100% State funds.

This amended 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 amended 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 amend this Agreement for consulting services as outlined above.

Sincerely,

William Cass, P.E. Assistant Commissioner



THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION



CHRISTOPHER D. CLEMENT, SR. COMMISSIONER

JEFF BRILLHART, P.E. ASSISTANT COMMISSIONER

Bureau of Highway Design November 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 amend PO #4003160, with Parsons Brinckerhoff, Inc., New York, NY, and Manchester, NH, Vendor #164158, to complete the final design of the roadway and bridges comprising the northern section of the Salem-Manchester I-93 improvement project beginning in the Town of Windham and ending in the City of Manchester, by increasing the total amount payable by \$975,664.17 (from \$9,358,904.06 to \$10,334,568.23) for additional design services that were not anticipated in the original scope of work, effective upon Governor and Council approval through the contract's original completion date of February 28, 2018. 100% Other Funds.

Funding is available as follows:

04-96-96-963515-1843

FY 2015

Garvee I-93 Construction Project

046-500463 Eng Consultants Non-Benefit

\$975,664.17

EXPLANATION

This project, Salem-Manchester 10418V (Northern Design Section), begins in the vicinity of the existing weigh stations located approximately one mile south of North Lowell Road in the Town of Windham and runs northerly approximately twelve miles to the I-93/I-293 split in the City of Manchester. The above limits exclude a segment in the Town of Londonderry in the vicinity of Exit 5 that is currently under construction. Funding for this design effort is currently included in the State's Ten-Year Transportation Improvement Plan.

On February 20, 2013, the Governor and Council authorized the subject engineering and environmental consultant services Agreement (Item #88; copy of Resolution attached) in the amount of \$9,358,904.06 to complete the final design for the five (5) individual construction projects by preparing contract plans, specifications, special provisions, estimates of quantities and costs, right-of-way plans, and supplying construction support services. A previous 2005 final design services Agreement that was completed in 2011 brought the final design to an approximately 50% complete stage. At the time, given the funding uncertainties for constructing the remaining capacity improvements associated with this northern section, it was deemed prudent to delay pursuing the remaining design effort until needed. In addition to the typical final design tasks, this Agreement also includes Right-of-Way Acquisition services. More specifically, the Agreement includes: project management and coordination; public involvement and support; Right-of-Way procurement; calculation and documentation of environmental impacts; Phase III Archaeological Evaluations; sound wall evaluations; traffic capacity analysis and traffic demand management; drainage design, including pollutant loading and construction stormwater assessments; geotechnical services; river hydraulics with LOMR; utility relocation and coordination; traffic control for construction; constructability evaluations; CPM scheduling; in-depth cost estimating; and ITS accommodations. The intermediate completion date for the design services is October 31, 2015. The final completion date for the R.O.W. acquisition and construction support services is February 28, 2018.

This amendment to the Agreement is for additional work associated with the following items:

Recreation Trail Design (Contract 14633B) – The Windham Greenway trail improvements will provide a means to connect the existing trail on the west side of I-93 to the Windham Depot on the east side of I-93. Providing this connectivity is a project commitment. The revised design will construct a 135'-long x 12'-wide x 12'-high box culvert under the NB and SB barrels to provide the connectivity in lieu of 1900'-long trail connection included in the original scope of work. The construction costs are similar for both alternatives, but the revised design provides a safer solution by eliminating travel along the shoulder of North Lowell Rd. (\$70,365)

Beaver Brook Bridges (Contract 14633D) – The original scope included design efforts to extend the existing northbound and southbound culverts to accommodate the widening of the mainline. A rating analysis of the existing culverts identified structural deficiencies. Hydraulic studies also identified unacceptable headwater conditions due to the limited size and conveyance of the culverts. These factors resulted in the decision to replace the culverts with conventional steel stringer bridges. (\$450,331)

Cohas Brook Culverts 41 & 42 (Contract 14633H) - Culvert #41 – The original scope of work excluded this structure. Mainline roadway widening resulted in steep slopes and additional fill on the concrete box culvert. A rating analysis of the existing culvert identified structural deficiencies. This task will design a solution to resolve the structural deficiencies. Culvert #42 – The original scope for Culvert #42 included development of a precast concrete T-Wall on and off the existing culvert. Preliminary Plans were submitted utilizing a precast concrete T-Wall. Department review of the Preliminary Plan submission determined a T-Wall on soil off the culvert is not viable and other options needed to be evaluated. This task will design a viable solution. (\$132,136)

Bridges 38, 39 & 40 (Contract 14633H) - Br. No 38 (NB/Cohas Bk), Br. No 39 (NB/Bodwell Rd) and Br. No. 40 (SB/Bodwell Rd) all require additional bridge design efforts, not originally anticipated, to widen an additional 2 feet to account for new LRFD requirements relative to impact loads on soundwalls. (\$107,895)

Soundwall Evaluation/Design (Contract 14633H) - Additional highway design efforts are required to accommodate soundwall revisions resulting from further noise analysis. The revisions result in an additional 2,250 feet of soundwall design and related elements, which were not originally anticipated. (\$50,158)

Overhead Sign Structure (OHSS) Relocations and Choice Lane at NB I-93/I-293 Split (Contract 14633H) - The project design originally proposed to maintain two dedicated left turn lanes onto I-293 WB and to provide a third through lane to continue on I-93 NB. After review with the Preliminary Design section and the Bureau of Traffic, the Department decided to revise the design to provide a "choice" lane that provides motorists with additional "decision" time at the I-93/I-293 split. This modification results in revised locations for the OHSS (guide signs) to accommodate the new striping layout. The additional design efforts include striping redesign, guardrail and drainage modifications to accommodate the new OHSS locations, cross section updates, and sign modifications. (\$15,640)

Kendall Pond Access Road (Contract 14633B) — This effort relates to design refinements to the BMP access road that is designed along the west side of I-93 between Kendall Pond Road and BMP 3558. The efforts are beyond the scope of typical BMP access road designs, considering the length (1500') and resultant drainage requirements and cross section development (both mainline and access road). (\$30,687)

<u>Project Management Resources</u> – This task provides for a continuation of technical services related to Public Outreach, Traffic Management and the Financial Plan on the I-93 Salem to Manchester project. (\$85,420)

Wheeler Brook CLOMR – Impacts to a floodway near Exit 4 requires a Conditional Letter of Map Revision (CLOMR) to the FEMA Flood Insurance Rate Map for the area. These impacts were not known prior to the start of the design effort and therefore these efforts are beyond the existing scope of work. (\$33,032)

The increase in fee as proposed is commensurate with the revised scope of work and the corresponding additional engineering and technical services to be furnished. Preliminary Engineering and Right-of-Way costs will be funded with 2012 Garvee Bond proceeds. Debt Service will be paid with 100% Federal funds at 80% reimbursement rate and 20% match using Turnpike Toll Credits.

This amended 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 amended 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 amend this Agreement for consulting services as outlined above.

Sincerely,

Christopher D. Clement, Sr.

Commissioner



THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION





CHRISTOPHER D. CLEMENT, SR. COMMISSIONER

JEFF BRILLHART, P.E. ASSISTANT COMMISSIONER

Bureau of Highway Design January 4, 2013

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 Parsons Brinckerhoff, Inc., New York, NY, and Manchester, NH, Vendor #164158, for a total fee not to exceed \$9,358,904.06, to complete the final design of the roadway and bridges comprising the northern section of the Salem-Manchester I-93 improvement project beginning in the Town of Windham and ending in the City of Manchester, effective upon Governor and Council approval, through February 28, 2018. 100% Other Funds.

Funding is available as follows:

04-96-96-963515-1843

FY 2013

Garvee I-93 Construction Project 046-500463 Eng Consultants Non-Benefit

\$9,358,904.06

EXPLANATION

This project, Salem-Manchester 10418V (Northern Design Section), begins in the vicinity of the existing weigh stations located approximately one mile south of North Lowell Road in the Town of Windham and runs northerly approximately twelve miles to the I-93/I-293 split in the City of Manchester. The above limits exclude a segment in the Town of Londonderry in the vicinity of Exit 5 that is currently under construction. Funding for this design effort is currently included in the State's Ten-Year Transportation Improvement Plan.

The Department requires professional engineering design and environmental consultant services to complete the final design for the five (5) individual construction projects by preparing contract plans, specifications, special provisions, estimates of quantities and costs, right-of-way plans, and supplying construction support services. A previous 2005 final design services Agreement that was completed in 2011 brought the final design to an approximately 50% complete stage. At the time, given the funding uncertainties for constructing the remaining capacity improvements associated with this northern section, it was deemed prudent to delay pursuing the remaining design effort until needed. In addition to the typical final design tasks, this Agreement also includes Right-of-Way Acquisition services. More specifically, the Agreement includes: project management and coordination; public involvement and support; Right-of-Way procurement; calculation and documentation of environmental impacts; Phase III Archaeological Evaluations; sound wall evaluations; traffic capacity analysis and traffic demand management; drainage design, including pollutant loading and construction stormwater assessments; geotechnical services; river hydraulics with LOMR; utility relocation and coordination; traffic control for construction; constructability evaluations; CPM scheduling; in-depth cost estimating; and ITS accommodations. The intermediate completion date for the design services is October 31, 2015. The final completion date for the R.O.W. acquisition and construction support services is February 28, 2018.

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 preliminary engineering design and associated environmental services for the Salem-Manchester 10418C I-93 Improvements – North project. The assignment was listed as a "Project Soliciting for Interest" on the Department's website on December 9, 2011, asking for letters of interest from qualified firms. From the list of firms that submitted letters of interest, the Committee prepared a long and then short list of Consultants on December 28, 2011 for consideration and approval by the Assistant Commissioner. Upon receipt of that approval, three shortlisted firms were notified on December 29, 2011 through a technical "Request For Proposal" (RFP). Committee members individually rated the firms on February 3, 2012 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 six (6) consultant firms that were considered for this assignment, with the three short-listed firms shown in bold, is as follows:

Consultant Firm

The Louis Berger Group
Fay, Spofford & Thorndike, LLC
Maguire Group, Inc.
McFarland-Johnson, Inc.
Parsons Brinckerhoff, Inc.
Vanasse Hangen Brustlin, Inc.

Office Location

Manchester, NH Bedford, NH Portsmouth, NH Concord, NH Manchester, NH Bedford, NH

The firm of Parsons Brinckerhoff, 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.

Parsons Brinckerhoff, Inc. has agreed to furnish the required services for a total fee not to exceed \$9,358,904.06. 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.

Preliminary Engineering and Right-of -Way costs will be funded with 2012 Garvee Bond proceeds. Debt Service will be paid with 100% Federal funds at 80% reimbursement rate and 20% match using Turnpike Toll Credits.

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