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THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

CHRISTOPHER D. CLEMENT, SR.
COMMISSIONER

JEFF BRILLHART, P.E.
ASSISTANT COMMISSIONER

Bureau of Highway Design
October 10, 2012

His Excellency, Governor John H. Lynch
and the Honorable Council
State House
Concord, New Hampshire 03301

REQUESTED ACTION

Authorize the Department of Transportation to amend PO #500033 with Vanasse Hangen Brustlin, Inc., Bedford, NH and Watertown, MA, Vendor #40332, for the final design for the widening of the Spaulding Turnpike in the Town of Newington and City of Dover, by increasing the total amount payable by \$1,408,409.12 (from \$14,962,127.00 to \$16,370,536.12) for additional design services that were not anticipated in the original Agreement, effective upon Governor and Council approval through the contract's current completion date of December 31, 2013. 100% Turnpike Funds.

Funding is available as follows:

04-96-96-961017-7513	<u>FY 2013</u>
Spaulding Turnpike Expansion	
400-500870 Highway Contract Payments	\$1,408,409.12

EXPLANATION

On December 18, 2008, the Governor and Council authorized the subject engineering consulting services Agreement (Item No. 77; copy attached) in the amount of \$14,962,127.00, for the preparation of the final design, contract plans, specifications, estimates and right-of-way plans for the reconstruction and widening of an approximately 3.5-mile section of the Spaulding Turnpike, beginning just north of the Gosling Road/Pease Boulevard Interchange (Exit 1) in the Town of Newington and continuing across the Little Bay Bridges to just south of the Dover Toll Plaza in the City of Dover. This project is currently included in the State's Ten-Year Transportation Improvement Plan and Turnpike Capital Program (Newington-Dover 11238).

This proposed amendment to the Agreement is for additional highway design, bridge design, and environmental services associated with additional work efforts and out-of-scope design services to complete the development of the Little Bay Bridge rehabilitation (11238O) contract plans and the design for the Dover approach (11238Q). These work efforts include hydrodynamic modeling, an independent analysis of superstructure design, and construction stormwater analysis and design to meet current environmental requirements and expectations. The work also includes preparation of supplementary erosion control plans; extension of work on Arboretum Drive; ITS corridor design and incorporation; late revisions to contract breakout and construction sequencing; subsurface utility engineering and coordination; design modifications at several locations (sound walls, retaining walls, Boston Harbor Rd. intersection, etc.) based on additional geotechnical information and ongoing public participation; and additional project management assistance. Also, additional inspection efforts and the remaining uncompleted design and construction services (approximately \$600,000) for the General Sullivan Bridge

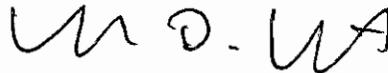
are being removed and reallocated to reduce the overall fee adjustment for the supplemental work (see attached summary). These design efforts for the rehabilitation of the General Sullivan Bridge will be pursued separately.

Vanasse Hangen Brustlin, Inc. has agreed to furnish the additional services for \$1,408,409.12. This amendment will increase the total amount payable under this Agreement from \$14,962,127.00 to \$16,370,536.12. 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.

This amended Agreement has been approved by the Attorney General as to form and execution. 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,

A handwritten signature in black ink, appearing to read "C. D. Clement, Sr.", written in a cursive style.

Christopher D. Clement, Sr.
Commissioner

Newington-Dover 11238

Vanasse Hangen Brustlin contract #500033

Fee Amendment Summary

<u>Additional Work Effort/Services</u>	<u>Cost</u>
Hydrodynamic Modeling	\$ 40,000
Independent superstructure analysis	\$ 97,000
Construction stormwater analysis and design	\$183,000
Preparation of supplementary erosion control plans;	\$133,800
Extension of work on Arboretum Drive;	\$162,000
ITS corridor design and incorporation;	\$203,300
Late revisions to contract breakout and construction sequencing;	\$555,809
Subsurface utility engineering and coordination;	\$154,000
Design modifications at several locations (sound walls, retaining walls, Boston Harbor Rd. intersection, etc.)	\$234,900
Additional project management assistance/public outreach	\$250,600
removal/reallocation of uncompleted Gen Sullivan Bridge design	<u>(\$606,000)</u>
Amendment Total	\$1,408,409



CERTIFICATE OF LIABILITY INSURANCE

OP ID: GD

DATE (MM/DD/YYYY)

10/22/12

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).

PRODUCER Poole Professional Ltd. 107 Audubon Rd. #2, Ste. 305 Wakefield, MA 01880 Christopher A. Poole	Phone: 781-245-5400 Fax: 781-245-5463	CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL ADDRESS: PRODUCER CUSTOMER ID #: VANAS-1	FAX (A/C, No):																				
	INSURED Vanasse Hangen Brustlin, Inc.; VHB Engineering, Surveying & Landscape Arch., PC, Vanasse Hangen Brustlin, LLC, MSCW, Inc. & VHB, VHB Eng. NC, PC P. O. Box 9151 Watertown, MA 02471		<table border="1"> <thead> <tr> <th colspan="2">INSURER(S) AFFORDING COVERAGE</th> <th>NAIC #</th> </tr> </thead> <tbody> <tr> <td>INSURER A:</td> <td>Travelers Indemnity Co of CT</td> <td>25682</td> </tr> <tr> <td>INSURER B:</td> <td>Travelers Property Casualty Co</td> <td>25674</td> </tr> <tr> <td>INSURER C:</td> <td>Travelers Indemnity Co America</td> <td>25666</td> </tr> <tr> <td>INSURER D:</td> <td>St Paul Fire & Marine</td> <td>24767</td> </tr> <tr> <td>INSURER E:</td> <td>Safety Insurance Company</td> <td>39454</td> </tr> <tr> <td>INSURER F:</td> <td>Travelers Indemnity Co.</td> <td>25658</td> </tr> </tbody> </table>	INSURER(S) AFFORDING COVERAGE		NAIC #	INSURER A:	Travelers Indemnity Co of CT	25682	INSURER B:	Travelers Property Casualty Co	25674	INSURER C:	Travelers Indemnity Co America	25666	INSURER D:	St Paul Fire & Marine	24767	INSURER E:	Safety Insurance Company	39454	INSURER F:	Travelers Indemnity Co.
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COVERAGES

CERTIFICATE NUMBER:

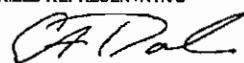
REVISION NUMBER:

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.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY	X		680-2611L561-TCT-12	05/01/12	05/01/13	EACH OCCURRENCE \$ 1,000,000	
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000	
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						MED EXP (Any one person) \$ 10,000	
	<input checked="" type="checkbox"/> Business Owners						PERSONAL & ADV INJURY \$ 1,000,000	
	<input checked="" type="checkbox"/> Contractual Liab			INSURANCE IS PRIMARY INCL. BLANKET WAIVER			GENERAL AGGREGATE \$ 2,000,000	
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COM/POP AGG \$ 2,000,000	
	<input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC						\$	
E	AUTOMOBILE LIABILITY			1501873	06/13/12	06/13/13	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000	
	<input checked="" type="checkbox"/> ANY AUTO						BODILY INJURY (Per person) \$	
B	<input checked="" type="checkbox"/> ALL OWNED AUTOS			BA-2044L84A-12-GRP	05/01/12	05/01/13	BODILY INJURY (Per accident) \$	
F	<input checked="" type="checkbox"/> SCHEDULED AUTOS			BA-2067L575-12-GRP	05/01/12	05/01/13	PROPERTY DAMAGE (Per accident) \$	
C	<input checked="" type="checkbox"/> HIRED AUTOS			BA-2043L044-12-GRP	05/01/12	05/01/13	\$	
	<input checked="" type="checkbox"/> NON-OWNED AUTOS				05/01/12	05/01/13	\$	
D	<input checked="" type="checkbox"/> UMBRELLA LIAB			UP10N67507-12	05/01/12	05/01/13	EACH OCCURRENCE \$ 10,000,000	
	<input type="checkbox"/> EXCESS LIAB						<input checked="" type="checkbox"/> OCCUR	AGGREGATE \$ 10,000,000
	<input type="checkbox"/> CLAIMS-MADE							\$
	DEDUCTIBLE						\$	
	<input checked="" type="checkbox"/> RETENTION \$ 10,000						\$	
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY		N/A	XVMPAUB-5825Y49-6-12	05/01/12	05/01/13	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input checked="" type="checkbox"/> OTHER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)						Y/N	E.L. EACH ACCIDENT \$ 1,000,000
	<input checked="" type="checkbox"/> N							E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
	if yes, describe under DESCRIPTION OF OPERATIONS below							E.L. DISEASE - POLICY LIMIT \$ 1,000,000
A	Prof. Office Packa			680-2611L561-TCT-12	05/01/12	05/01/13	Valuable Records 2,250,000	
	INSURANCE IS PRIMARY							

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
 Re: Newington-Dover NHS-027-1(37), 11238 (Part C). Interest of the State of New Hampshire DOT is included as additional insured under the above indicated policies only subject to all policy terms. Insurance is primary and non-contributory.

CERTIFICATE HOLDER**CANCELLATION**

NHDOT-1 New Hampshire Department of Transportation John O. Morton Building 1 Hazen Drive, P.O. Box 483 Concord, NH 03301-0483	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
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CERTIFICATE OF LIABILITY INSURANCE

OP ID: PB

DATE (MM/DD/YYYY)
10/23/12

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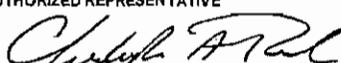
PRODUCER Poole Professional Ltd. 107 Audubon Rd. #2, Ste. 305 Wakefield, MA 01880 Christopher A. Poole	Phone: 781-245-5400 Fax: 781-245-5463	CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL ADDRESS: PRODUCER CUSTOMER ID #: VANAS-1	FAX (A/C, No):
	INSURED Vanasse Hangen Brustlin, Inc. P. O. Box 9151 Watertown, MA 02471		INSURER(S) AFFORDING COVERAGE INSURER A: XL Specialty Insurance Co. NAIC # 37885 INSURER B : INSURER C : INSURER D : 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.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$ \$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DEDUCTIBLE <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A				<input type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	ARCH./ENG. E&O			DPR9702302	07/19/12	07/19/13	AGGREGATE 2,000,000 Deduct 75,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
 For professional liability coverage, the aggregate limit is the total insurance available for all covered claims presented within the policy period. The limit will be reduced by payments of indemnity and expense.
 Re: Newington-Dover NHS-027-1 (37), 11238 (Part C).

CERTIFICATE HOLDER NHDOT-1 New Hampshire Department of Transportation John O. Morton Building 1 Hazen Drive, P.O. Box 483 Concord, NH 03301-0483	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
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THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION



CHRISTOPHER D. CLEMENT, SR.
COMMISSIONER

JEFF BRILLHART, P.E.
ASSISTANT COMMISSIONER

NEWINGTON-DOVER
NHS-0271(037)
11238
(PART C)
(Agreement Dated November 5, 2008
PO #500033)

Bureau of Highway Design
Room 200 (CMF)
Tel. (603) 271-2171
Fax (603) 271-7025

October 2, 2012

Mr. Francis S. O'Callaghan, P.E.
Vanasse Hangen Brustlin, Inc.
Kilton Road
Six Bedford Farms, Suite 607
Bedford, NH 03110-6532

Dear Mr. O'Callaghan:

This letter amends Article II, Section A (General Fee) in the above-referenced Agreement by increasing the total amount payable under this Agreement by \$1,408,409.12 as payment for additional mostly out-of-scope design services to complete the development of the Little Bay Bridge rehabilitation (11238O) contract plans and the design of the Dover approach (11238Q) to the Preliminary PS&E stage (80% complete). Also, the remaining uncompleted General Sullivan Bridge design and construction services are being removed from the scope of work and the costs associated with that work have been reallocated to reduce the overall fee adjustment for the supplemental work.

The portion of Article II, Section A (General Fee) specifying the dates for the fee and manhour estimates is being amended to read as follows:

"The total amount to be paid under this AGREEMENT shall not exceed \$16,370,536.12, the sum of the amounts shown in Article II, Section B (which amount is based on the CONSULTANT'S fee and manhour estimates of September 25, 2008, and July 11, 2012),..."

Furthermore, this fee increase revises the amounts in Article II, Section B (Summary of Fees) as follows:

- Increases the estimated amount of (a) actual CONSULTANT'S salaries, costs applicable to actual salaries, salary burden (direct and indirect) and administrative costs attributable to overhead by \$978,157.48, from \$6,854,460.03 to \$7,832,617.51.
- Increases the amount of (b) fixed fee to cover profit and non-reimbursed costs by \$91,961.11, from \$685,445.90 to \$777,407.01.
- Increases the estimated amount of (c) reimbursement for direct, out-of-pocket expenses by \$128,904.00, from \$307,230.00 to \$436,134.00.
- Changes the estimated amount of (d) reimbursement for actual cost of subconsultants as follows:
 - AECOM Technical Services, Inc. – remains unchanged at \$39,984.77.

- Amman & Whitney – decreases by \$465,773.00, from \$1,368,373.00 to \$902,600.00.
- Clough, Harbour & Associates LLP – increases by \$463,338.45, from \$3,811,738.00 to \$4,275,076.45.
- Comprehensive Environmental Incorporated – increases by \$211,821.08, from \$921,321.00 to \$1,133,142.08.
- Corven Engineering, Inc. – remains unchanged at \$96,736.00.
- Fitzgerald & Halliday, Inc. – remains unchanged at \$157,491.00.
- GM2 Associates, Inc. - remains unchanged at \$271,836.30.
- Independent Archaeological Consulting, LLC - remains unchanged at \$314,474.00.
- Lewis & Zimmerman Associates, Inc. - remains unchanged at \$133,037.00.

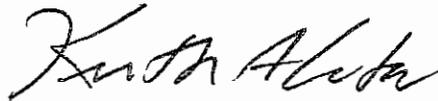
Also, the first sentence in paragraph 1 of Article II, Section C (Limitation of Costs) is being amended to read as follows:

"Costs incurred against this AGREEMENT shall not exceed \$16,370,536.12 unless otherwise authorized."

The above additional work revises the total amount payable under this Agreement, which increases from \$14,962,127.00 to \$16,370,536.12 by this amendment.

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

Sincerely,



Keith A. Cota, P.E.
Chief Project Manager



Approved: William J. Cass, P.E.
Director of Project Development

We concur in the above Amendment.

VANASSE HANGEN BRUSTLIN, INC.

By: Francis S. O'Connell

Title: EIR

AGREEMENT AMENDMENT

NEWINGTON - DOVER, NHS-0271(037) 11238 (PART C)

VANASSE HANGEN BRUSTLIN, INC.

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

Consultant

WITNESS TO THE CONSULTANT

CONSULTANT

By: *Gareth Pyle*

By: *Francis S. O'Connell*
For the Firm (Title)

Dated: *10/03/12*

Dated: *10/03/12*

Department of Transportation

WITNESS TO THE STATE OF NEW HAMPSHIRE

THE STATE OF NEW HAMPSHIRE

By: *Michelle Brown*

By: *William J. Cass*
William J. Cass, P.E.
Director of Project Development
NH DOT

Dated: *10/17/12*

Dated: *10/17/12*
DOT COMMISSIONER

Attorney General

This is to certify that the above amended AGREEMENT has been reviewed by this office and is approved as to form and execution.

Dated: *11/13/12*

By: *D. Hill*
Assistant Attorney General
David M. Hill

Secretary of State

This is to certify that the GOVERNOR AND COUNCIL on _____ approved this amended AGREEMENT.

Dated: _____

Attest:
By: _____
Secretary of State

VANASSE HANGEN BRUSTLIN, INC.

Certificate of Vote

**Newington-Dover
NHS-0271(037)
11238
(Part C)**

I, Robert Brustlin, hereby certify that I am the duly elected
President of Vanasse Hangen Brustlin, Inc.

I hereby certify the following is a true copy of Vote taken at a
meeting of the Board of Directors of the Corporation, duly called and held
on August 17, 2004, at which a quorum of the Board was present and
voting.

VOTED:

*That Francis O'Callaghan is the duly elected Executive
Vice President of Vanasse Hangen Brustlin, Inc. and is
hereby authorized to execute contracts, bonds, and
proposals in the name and behalf of said company and affix
its corporate seal thereto; and such execution of any
contract or obligation in this company's name on its behalf
under seal of the company, shall be valid and binding upon
this company.*

I hereby certify that said vote has not been amended or repealed
and remains in full force and effect as of this date, and that Francis
O'Callaghan is the duly elected Executive Vice President of this
Corporation

ATTEST:

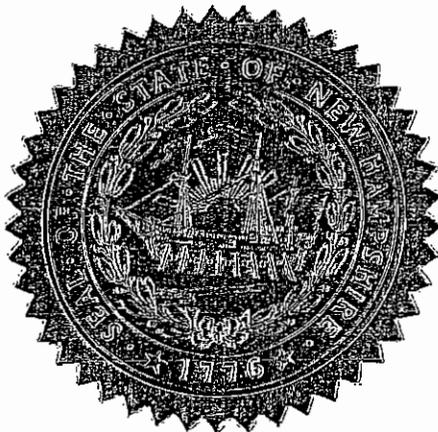
Date: 10-3-12

Robert D. Brustlin

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 VANASSE HANGEN BRUSTLIN, INC. a(n) Massachusetts corporation, is authorized to transact business in New Hampshire and qualified on December 11, 1986. 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 3rd day of October, A.D. 2012

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

William M. Gardner
Secretary of State

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NEWINGTON-DOVER
NHS-0271(037)
11238
(PART C)

AGREEMENT
FOR PROFESSIONAL SERVICES

PREAMBLE

THIS AGREEMENT made this 5 day of NOV in the year 2008 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 Vanasse Hangen Brustlin, Inc., with principal place of business at Kilton Road, Six Bedford Farms, Suite 607, in the Town of Bedford, State of New Hampshire, and 101 Walnut Street, in the City of Watertown, Commonwealth of Massachusetts, hereinafter referred to as the CONSULTANT, witnesses that:

The Department of Transportation, State of New Hampshire, hereinafter referred to as the DEPARTMENT, proposes to reconstruct and widen an approximate 3.5-mile section of the Spaulding Turnpike beginning at the north end of the Gosling Road interchange in the Town of Newington and continuing to approximately the Dover Toll Plaza, just north of Exit 6, in the City of Dover.

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 Article I of this AGREEMENT and the CONSULTANT'S scope and fee proposal dated September 25, 2008.

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

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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 reconstruction and widening of an approximate 3.5-mile section of the Spaulding Turnpike beginning at the north end of the Gosling Road interchange (Exit 1) in the Town of Newington and continuing to approximately the Dover Toll Plaza, just north of Exit 6, in the City of Dover. The project also involves the rehabilitation and widening of the Little Bay Bridges, rehabilitation of the General Sullivan Bridge, and the reconstruction / consolidation of the interchanges within the project area.

Beginning at a location just north of the Gosling Road Interchange and continuing north through the Exit 3 (Woodbury Avenue) area, the Spaulding Turnpike will be shifted slightly to the west and reconstructed from the existing four-lane facility to six lanes (three lanes in each direction). Between Exits 3 and 6, the Little Bay Bridges and the Turnpike will be reconstructed on new alignment and widened to an eight-lane facility (three general purpose lanes plus an auxiliary lane in each direction). North of Exit 6, the Turnpike will be widened to create three lanes in each direction to match into the Dover Toll Plaza. The design and construction of the proposed soundwall continues north of the Dover Toll Plaza along both sides of the Turnpike.

The work will include the construction of a reconfigured full service interchange at Exit 3, which will include a new northern access into the Pease International Tradeport, approximately 500 feet of reconstruction on Arboretum Drive, approximately 6100 feet of reconstruction and new construction on Woodbury Avenue and a new three-span bridge structure carrying Woodbury Avenue Extension over the Turnpike. Signalized intersections are envisioned at the terminus of the new southbound Exit 3 ramp as it intersects with the terminus of the extended section of Woodbury Avenue and relocated portion of

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Arboretum Drive, and at the terminus of the new northbound Exit 3 ramp as it intersects with Woodbury Avenue. The Exit 2 (Fox Run Road) on- and off-ramps will be discontinued with traffic routed to Exit 3. The Exit 4 on- and off-ramps will be modified to maintain full access at Nimble Hill Road and Shattuck Way. Access to Nimble Hill Road from properties directly adjacent to the Turnpike and adjacent to the on and off-ramps will be modified; a new local roadway will be constructed to provide access to the affected properties. Work on Nimble Hill Road will begin at the intersection with Shattuck Way and the new local road and continue approximately 600 feet to the Turnpike. The work to the existing northbound Exit 4 ramps will be limited to where the existing ramps intersect with Shattuck Way. Approximately 400 feet of Shattuck Way will be restored as part of the Shattuck Way Bridge widening. The Exit 5 ramps (Hilton Drive) will be discontinued and a new local two-way Connector Road, from Wentworth Terrace and Hilton Park, will be constructed under the Turnpike to connect with Dover Point Road. The existing ramp from Cote Drive to the Turnpike will be discontinued. Exit 6 will be reconstructed to a full service modified diamond-type interchange. The work on US 4 will begin at the southern end of the Scammell Bridge and continue over the Turnpike connecting to Dover Point Road and ending near its intersection with Homestead Lane. Signalized intersections at the southbound ramps, the northbound ramps and Dover Point Road are anticipated. The existing signalized intersection on US 4 with Boston Harbor Road and Spur Road will be modified to eliminate the traffic signal and include a raised median island that restricts movements to right-turns only. The potential to coordinate these three signalized intersections will be evaluated. A new local two-way connector road from Spur Road, beneath US 4, will be constructed to connect to Boston Harbor Road with access to the southbound on-ramps.

The existing Little Bay Bridges (nine-span 1589' long structure) will be widened and rehabilitated to provide four lanes in each direction, as well as standard 10' to 12' shoulders alongside the highway lanes. The widening is planned entirely to the west by maintaining the existing easterly edge of the current bridge. The existing profile, suitable for a 60 mph design criteria, will be maintained as will the existing navigational opening (46.7' above MHW within the center 100' of the channel). The bridge rehabilitation is envisioned to involve replacing the existing bridge decks, replacing the structural steel or

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modifying the steel girders to eliminate the pin and hanger connections, repainting the girders, and seismically retrofitting the existing pier columns.

The General Sullivan Bridge (GSB) will be rehabilitated to function as a pedestrian/bicycle/recreational facility with the ability to carry six (6) ton emergency vehicles from the Newington side. The northern approach embankment will be removed and the northern end of the bridge modified to accommodate a two-way local connector road and allow for continued pedestrian, bicycle and recreational use, in compliance with ADA requirements. The existing concrete wingwalls along the approach embankment will need to be removed, essentially exposing the back of the existing GSB bridge abutment. A retrofit of the existing abutment along with a new pedestrian/bicycle structure (approximately 155' long) will be required to connect the northerly end of the GSB with the local connector road sidewalk and Hilton Park. The GSB bridge rehabilitation is envisioned to involve a complete deck replacement and supporting structural floor system (i.e. floor beams and stringers), other miscellaneous repairs to the structural steel to arrest future corrosion, cleaning and painting the entire structure, and repairing the substructure (patching spalls and repointing the masonry). No seismic analysis or retrofit is anticipated because the GSB structure is not considered a "critical" bridge.

In addition to the LBB & GSB work, four other bridge structures are included in the work. A new 3-span bridge structure (approximately 290' long) is proposed to carry Woodbury Avenue over the Turnpike; the existing 48' long concrete structure carrying the Turnpike over Shattuck Way is proposed to be widened to accommodate the widened Turnpike; a new 2-span bridge structure (approximately 200' long) is proposed to carry US 4 over the Turnpike; and a new 50' long single span structure is proposed to carry US 4 over the local connector road.

The expansion of the Turnpike will include provisions for a future Railroad Spur over the Turnpike into the Pease International Tradeport. The railroad design will consist of the alignment, profile and topline template from the pre-preliminary through the slope and drainage submission in order to support the Right-of-way purchase plan efforts only. Right-of-way and easements will be procured as part of the

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project. The rail spur line, bridge, or other ancillary structures are not envisioned to be constructed as part of this project.

The project will maintain the Limited Access Right-of-Way layout along the Turnpike, interchanges, and the connecting roadways with modifications, as appropriate, to accommodate the proposed infrastructure improvements. No access will be allowed to the Turnpike except via the designated interchanges.

The project includes four distinct segments of sound walls in Dover totaling approximately 18,300 linear feet. The final design for these walls will need to verify the extents, location, height, and type for each wall. In addition, approximately 3,300 linear feet of retaining walls at eight (8) locations will need to be designed and constructed.

The work also involves design of detention basins and drainage facilities to minimize impacts to surface water quality and to provide flood storage capabilities. Water quality will be a particular element of concern for discharge that eventually will lead to the Bay. A design shall be maintained that will not exacerbate flooding problems on Dover Point. Special considerations for the drainage design shall take into account the “pre and post” flooding concerns on Dover Point. As many as twelve (12) extended-detention basins (7 in Newington and 5 in Dover) or other appropriate BMP’s and numerous swale locations (approximately 23) have been preliminarily identified and will need to be reviewed and designed to result in a “no net increase” in pollutant loading emanating from the proposed work.

The scope of work shall also include project wide utility coordination. The CONSULTANT shall perform utility coordination, verification of facilities and resolution of conflict locations in accordance with the DEPARTMENT’s “Utility Accommodation Manual.”

Multiple construction contracts will be required for this project. Construction sequencing and breakout recommendations will be an important service provided by the CONSULTANT. A conceptual construction breakout has been developed and will need further evaluation with respect to traffic control, drainage, earthwork balance, interrelationship with other construction contracts and durations, cost, and corridor priorities.

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The scope of work shall further include conducting a Value Engineering (VE) Study in accordance with 23 CRF 627 and shall include a team leader, with no affiliation with any of the team's firms, certified by the Society of American Value Engineers (SAVE) International, as a Certified Value Specialist (CVS). The services of an independent firm or a separate and distinct unit of the lead firm shall provide multi-disciplined assistance to the CVS in the conduct of the Study. The VE Study team shall not include any individuals involved with any other aspects of the Newington-Dover Little Bay Bridge/Spaulding Turnpike project beyond the transfer of design information. The VE Study is envisioned to be completed in two separate phases; the first to address the LBB and facilitate its aggressive design schedule, and the second to address the remaining elements of the project.

The first phase of the VE Study shall be undertaken following the completion of the Little Bay Bridge TSL and the second phase to be completed within 45 days after completion of the Pre-Preliminary roadway design.

Environmental services anticipated to be required of the CONSULTANT under this Agreement include a pollutant loading analysis using the Schueler's Simple Method spreadsheet (or other method as approved by NHDES, Watershed Bureau) to show a no net increase in pollutants emanating from the proposed work. The final design of the stream restoration for approximately 3,100 feet of Railway Brook combined with the creation of adjoining floodplain/wetlands to preclude downstream flooding is required. The stream restoration is planned as mitigation to improve the hydrologic and biologic function of Railway Brook, as well as expand and enhance the existing wetland system. A hydrologic / hydraulic modeling of the watershed and stream valley will be necessary. Final design plans for this site shall be developed to meet the expected requirements set forth in the US Army Corps of Engineers and New Hampshire Wetlands Bureau permits. The CONSULTANT shall also provide qualified staff to perform Hazardous Material Investigations for potentially contaminated properties in support of Right-of-Way appraisal and acquisition efforts. The CONSULTANT shall provide assistance to the DEPARTMENT to fulfill the mitigation commitments for impacts to environmental, archaeological and historic resources as specified in the FEIS.

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Landscaping / landscape architectural services shall include development of landscape plantings that may be required along the Turnpike (to mitigate for the loss of mature trees), the interchanges, sound wall locations, other locations resulting in property impacts requiring the replacement of existing buffers and screening, the stream restoration corridor, and the detention basin areas. During the preliminary design phase of the project, a landscape master plan will be prepared that outlines options for landscape treatments of various elements of the corridor, options for integration of the landscape with wetland mitigation and Railway Brook restoration plans, and options for integrating landscape treatments with potential water quality BMP's and drainage facilities. To the extent that proposed landscape treatments are a departure from NHDOT standard practice, the consultant will develop a maintenance specification to assist the Department in the development of maintenance procedures.

A separate consultant contract will be employed for the study and implementation of Intelligent Transportation Systems (ITS) technologies along the corridor. The ITS elements will be incorporated, in whole or in part, into the contract plans and documents for the project's design. Smart work zones, as well as a full Traffic Management Plan, in accordance with the Department's requirements, will be required for each construction contract.

The DEPARTMENT anticipates performing the geotechnical investigation and engineering for the project. In the event geotechnical assistance and services are required, the CONSULTANT shall identify geotechnical capabilities to be implemented on an as-needed basis. The required services will be addressed through supplemental contract adjustments as needed.

Coordination with the individual communities will be required, particularly concerning the design of the soundwalls and overall construction schedule and progression. The CONSULTANT shall provide assistance to the DEPARTMENT as necessary for this public involvement.

A website with domain name titled 'www.newington-dover.com' has been created for this project. The CONSULTANT will be required to maintain the website for five (5) years and post information pertinent to the project's final design and construction. The website will include:

- monthly updates of project progress

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- opportunities for questions and comments to be submitted
- links to NHDOT traffic cameras in the project areas (as available)
- a method to “push” announcements and updates of the project to an email list of interested parties

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, approved as a result of the Public Hearing, and documented in the Final Environmental Impact Statement (FEIS). The CONSULTANT shall provide management of the CONSULTANT team in support of this large project as well as provide services to the DEPARTMENT in support of the financial management plan, website, project development, scheduling, construction scheduling and sequencing, public outreach, addressing commitments, etc. The CONSULTANT shall utilize the DEPARTMENT’s base mapping ground model as required to develop the final design and contract plans. The CONSULTANT shall incorporate numerous adjustments to the ground model, such as updates to individual properties due to new developments, individual home improvements, other project survey needs, etc., as may be needed with supplemental ground survey to be done by the DEPARTMENT, as required to develop the final design and contract plans.

The CONSULTANT shall utilize 2003 existing and 2025 future average daily traffic volumes (ADT), directional design hourly volumes (DDHV), and weekday AM/PM peak hour traffic volumes previously developed for the FEIS to estimate traffic assignments for opening and interim design years. Opening and interim design year volumes will be estimated using a basic straight line growth projection between 2003 and 2025. In addition to the weekday AM/PM peak hour volumes, the CONSULTANT will perform a limited Saturday midday peak hour evaluation for intersections along Woodbury Avenue, which could experience peak operating conditions on a Saturday. The CONSULTANT shall retain a vendor to obtain the existing Saturday peak hour traffic field counts at the intersections requiring weekend traffic analyses. The CONSULTANT shall perform traffic analyses at the intersections requiring traffic analysis and/or signal coordination. The CONSULTANT shall be responsible for the development

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of signal and signal coordination design and plans for the opening-year, peak-hour volumes, including, but not limited to, the method and means for the interconnects between concurrent signals along Woodbury Avenue (at Fox Run Road and the exit 3 ramps) and along US 4 / Dover Point Road, as appropriate.

Designs shall consider temporary and permanent erosion-control measures and BMP's (consistent with current NHDES guidelines at the time of design), traffic control measures, utility coordination, drainage, treatments to minimize environmental impacts, barriers for sight and sound relief, highway signage, pavement marking, lighting, and highway and wetland landscaping.

The development of the contract plans shall be accomplished to allow separate phased construction contracts to be administered by the DEPARTMENT. Color plans for each individual construction contract shall be developed, as well as a color contract breakout plan (showing critical contract information such as contract cost and advertising date). The CONSULTANT shall be aware of possible improvements (major private and public projects) within the project area projects and shall provide assistance, as needed, to ensure design coordination and compatibility are maintained. The CONSULTANT shall also incorporate reasonable improvements necessitated by development that may take place on properties adjacent to the highways.

The CONSULTANT shall prepare the final design and contract plans, specifications and estimates for the development of wetland mitigation, involving stream restoration and required planting treatments. The CONSULTANT shall tabulate the wetland impacts for each construction project, and provide a comparison with the permitted wetland impacts. Coordination will be required between the DEPARTMENT and the STATE and Federal Natural Resource agencies to develop concurrence for the appropriate timing of wetland mitigation construction prior to, or in conjunction with, the highway/bridge projects. The timing of the mitigation construction may also be influenced by the availability of wetland material excavated as part of the highway construction.

Coordination is required between the DEPARTMENT and the communities directly impacted, as well as on the periphery, including but not limited to the Cities of Dover and Portsmouth, and the Towns

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of Newington and Durham. The CONSULTANT shall be prepared to support such efforts as required. Responsibilities of the CONSULTANT team shall include attendance at 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 has processed the project through the public hearing stage and NEPA 404 EIS process. The preliminary horizontal and vertical alignments prepared for the Approved Layout will be used as a basis for developing the final horizontal and vertical alignments in preparation of the final plans.

C. SCOPE OF WORK (GEOTECHNICAL)

None, except as described in this paragraph. The DEPARTMENT anticipates completing the full geotechnical program required for the project. In support of the DEPARTMENT's geotechnical program, the CONSULTANT will provide engineering support to include boring plan development and citings of the borings by providing the station(s) and offset(s) for proposed boring locations, potentially referencing the FEIS as well as proposed alignments. This will include borings for all bridge structures, as well as highway design elements to include but not limited to water quality BMP's, overhead signs, retaining walls, sound walls, box culverts, etc.

In addition, the CONSULTANT shall be prepared, but no work is required at this time, to more fully support the DEPARTMENT's efforts, if so directed by the DEPARTMENT after the negotiation of a scope and fee, and execution of a contract amendment for this work. These efforts may include the following tasks:

1. Submission of plan and narrative of the proposed geotechnical investigation for approval.
2. Subsurface investigation, including field inspection. The CONSULTANT will need to obtain any necessary permits for geotechnical investigations if required and not previously obtained by the DEPARTMENT. The CONSULTANT will also need to give oral notification to individual property occupant(s) prior to entering onto private property with machinery or equipment. (See Section G.9.)

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3. Field and/or laboratory testing as required.
4. Geotechnical report describing project and location, existing conditions, exploration logs, material testing results, geological features, potential geotechnical problems, and design recommendations. The report shall address excavation issues, soil types, fill requirements, foundation recommendations for all structural components of the project, slope stability, ledge limits, bearing capacities, groundwater elevation, underdrain requirements, water-quality features, erosion and sedimentation potential, artesian conditions, and other geotechnical factors affecting the design or construction of the project. The CONSULTANT shall consider economic and DEPARTMENT standards in making their recommendations. The report shall serve as an evaluation of soil conditions by which the design is influenced and shall also be available to Contractors to supplement their bid process and the construction.

Geotechnical data and draft recommendations (five sets) shall be available for developing and reviewing the Slope and Drainage submission for the highway design and the Preliminary Plans submission for the bridge design. Following review and concurrence, a final report (ten bound sets) shall be submitted prior to the Preliminary PS&E submission.

D. SCOPE OF WORK (ENVIRONMENTAL)

Wetland mitigation / stream restoration design, the design of the permanent erosion control and water-quality features, and any monitoring of the groundwater table prior to and during the design of the project shall be the responsibility of the CONSULTANT. Wetland mitigation / stream restoration design and plan development shall be in accordance with the Department's Wetland Mitigation Plan – Consultant Requirement Manual, the USACOE's April 2003 Stream Mitigation Guidelines, the NHDES' Feb 2007 Guidelines for Naturalized River Channel Design and Bank Stabilization and the NHDES' May 2006 White Paper - River Restoration and Fluvial Geomorphology. This work shall include development of a HEC-RAS model for the Railway Brook as well as a geomorphic assessment of the current brook. Where monitoring wells are required, the DEPARTMENT will be responsible for the drilling of the wells. However, the CONSULTANT will be expected to monitor the wells on a monthly basis and incorporate the

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data into the design. The CONSULTANT shall also prepare baseline documentation reports of up to four preservation properties following NHDES rules. The CONSULTANT shall also assist the Department in developing a Mitigation Report for submission to the Corps and NHDES. The objective of the report is to provide up to date information on the mitigation package to the resource agencies and to demonstrate compliance with Corps and NHDES mitigation policy in effect at the time of the permit submittal.

Temporary erosion control for the project shall be designed by others during construction of the project; however with consideration for the sensitive environmental resources within the project area (Little Bay estuary), this issue shall be addressed during final design. Permanent erosion and sedimentation control and water-quality features shall be shown at the Slope and Drainage Plans submission with design backup calculations complete. Conceptual erosion and sedimentation control and water-quality plans shall be part of the Preliminary Plans - Roadway submission. Final PS&E shall include a maintenance plan for each BMP. The CONSULTANT shall furnish pre and post development design calculations with Q2, Q10, Q25, Q50 flows and water quality volumes, as appropriate. Site locations for BMP's, 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:

- Verifying preliminary (as presented in the FEIS) noise barrier designs with the latest survey to confirm the barrier length and height at four locations. Meetings with the benefited property owners will be held to solicit their input on whether the barriers are desired or not, and to provide them with additional information on the type, height, special features, construction timeframes, etc.
- Assessment of the feasibility of using quiet pavement, including researching the issue, developing a technical memo with research findings and recommendations, and meeting attendance.
- Field verification of the classification and re-delineation of the wetland boundaries within the anticipated impact areas of the Selected Alternative, as necessary.
- GPS to be used as required to re-delineate wetland boundaries along the Selected Alternative and electronically update the base mapping.

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- Coordination of final design plan submissions and wetland impact accounting, (comparison of permitted impacts with final design impacts in tabular format per construction contract) as well as follow-up coordination on permit conditions. Wetland impact plans shall consist of the general project plans with impact areas clearly labeled. Updated impact tallies shall be submitted with the contract slope and drain submittal (for internal information only) and the final PS&E submittal (to be submitted to the Corps and NHDES) for each contract.
- Completion of a pollutant loading analysis using Schueler's Simple Method (Schueler 1987), or other method approved by NHDES, during the Preliminary Plan, Slope & Drain and subsequent stages of the project, to determine to the maximum extent practical that the project results in no net increase in the estimated pollutant loading relative to the existing conditions. The pollutant loading calculations shall be based upon the "Interim Guidance for the Design of Structural Stormwater Best Management Practices needed to Achieve Results of Pollutant Loading Analyses" dated May 24, 2007. Pollutant loading calculations shall address pre- and post-construction TSS, TN and phosphorus loading only.
- Incorporation of water quality treatment measures (i.e. extended detention basins, wet ponds, gravel wetlands, and swales) into the overall project design.
- Presentation of pollutant analysis and water quality treatment measures (per construction contract) to the NHDES Watershed Management Bureau for their concurrence with the conditions of the Section 401 Water Quality Certificate.
- Evaluation of the feasibility (and incorporation, if feasible) of constructing a closed drainage system on the widened LBB to minimize the direct stormwater discharge to the Little Bay and Piscataqua River.
- Impacts to floodplain areas shall be minimized to the greatest extent practicable during the project's final design.
- Infiltration measures as part of the drainage system shall be investigated and evaluated as to their feasibility and prudence. Such measures would allow stormwater to infiltrate back into the ground

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following treatment. If such measures are determined feasible and prudent, they should be considered for incorporation into the final design.

- Consideration of cultural resources (historic and archeological) building on the previous study with confirmation of sensitive and probable sensitive areas through follow-up background research, site inspections, and test pits, the need to minimize impacts, and mitigation, as necessary and dictated in the FEIS Section 4(f) Evaluation and Project Commitments.
- Performing Phase 1B and Phase 2 archaeological investigations, as necessary, at identified sensitive areas along the Selected Alternative. Assisting NHDOT with coordination efforts with the NESHPO in their determination of the effects and need for future mitigation (Phase 3 investigations).
- The CONSULTANT will provide a state version of Level II HABS documentation of the Ira Pinkham House and Barn (archival photographs, scaled floor plans, and descriptive and analytical narrative) in Dover prior to impacts to this property as well as and photo-documentation and abutment research and accompanying narrative for the General Sullivan Bridge.
- The CONSULTANT will provide archival photographs of the General Sullivan Bridge prior to impacts to this property and will research and prepare a narrative on the significance of the abutments.
- The CONSULTANT shall also provide design plans for review of the General Sullivan Bridge, the Beane Farm, the Isaac Dow House and the Portsmouth Water Booster Station, to ensure compliance with project commitments and the stipulations of the final Section 106 mitigation MOA.
- The CONSULTANT shall perform preliminary assessments of properties within the work area for the presence of hazardous materials and will be responsible to input all information on such sites into the Department's RASCAL database.
- Initial Site Assessments (ISAs) shall be performed for properties that could pose a risk related to potential contamination, if encountered during construction. The nature and approximate extent of

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any soil or groundwater contamination that may be present in anticipated areas of disturbance during construction, and within properties or Right of Way to be acquired will be evaluated.

- The CONSULTANT will be responsible for designing a sediment sampling and analysis program in anticipated areas of disturbance within Little Bay to evaluate potential impacts from suspension of contaminated sediments. The CONSULTANT shall assist the DEPARTMENT with the program and in consultations with State and Federal resource agencies, as required to address any contamination issues.
- Following the completion of ISAs, if determined warranted, Preliminary Site Investigations (PSIs), shall be performed to determine if contaminants require remediation in accordance with NHDES regulations.

The CONSULTANT'S plans shall include all commitments made in the FEIS documents and in FHWA's Record of Decision (ROD), to the extent practicable.

E. SCOPE OF WORK (FINAL DESIGN)

The scope of work proposed by this AGREEMENT includes:

1. The development of base plans drafted by the CONSULTANT using updated ground survey and photogrammetric mapping provided by the DEPARTMENT. The CONSULTANT shall develop plans at the scale of 1" = 50', unless otherwise noted, inclusive of the local road connections and traffic control plans. 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. All interchange crossroads shall be developed at a scale of 1" = 50'. 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.

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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 and cost estimates within the contract plans to include stick diagrams, cross sections, as well as final design based on shop drawings provided by the Contractor), drainage facilities (including Best Management Practices for permanent erosion- and sedimentation-control and water-quality features), temporary and permanent traffic signals (including phasing, conduit, signal coordination, foundations, and other signalization issues), landscaping plans and appurtenances, in accordance with the policy and procedures of the DEPARTMENT and the provisions of this AGREEMENT. The plans shall include all commitments made in the FEIS documents to the extent practicable.
5. The design and development of all permanent guide, warning and regulatory signs, including the quantity summary sheets with guidance from the DEPARTMENT. Interim and ultimate contract signing will need to be developed, and shall include site reviews and documentation of the existing signing into the DEPARTMENT's Database. 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. The sign text layout details shall be formatted and submitted in a manner acceptable to the DEPARTMENT. The DEPARTMENT will develop the permanent construction sign package, with the CONSULTANT responsible for incorporation into the summary tables. 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 drainage-system locations to avoid conflicts and to determine which support system will be required to install the signs. The

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CONSULTANT will be responsible to identify all conflicts and to make necessary adjustments to highway signing. The CONSULTANT shall update the existing sign(s) from previous contracts within overlapping sections.

6. 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, including identifying the location of overhead sign structures, shall be shown on the Traffic Control Plans. The CONSULTANT shall be responsible for the design of all necessary overhead sign structure foundations with guidance on the foundation loading provided by the DEPARTMENT.
7. The design of signal coordination for the opening year, peak-hour(s) volumes, as well as, developing plans and specifications showing the method and means of interconnection between adjacent signals, as appropriate.
8. The design and development of all pavement marking layouts, item numbers, item description, and quantities for inclusion into each contract with appropriate summary tables within the plan sets. The pavement markings shall be progressed such that the design, to be reviewed and approved by the DEPARTMENT, can be incorporated into the PPS&E submission.
9. The design of all supporting members for utilities that traverse any bridge structure.
10. The direct coordination of all utility issues and the incorporation of utility relocations, as designed by others into the contract plans. Municipal utility relocations (e.g., sewer and/or water), as provided by the DEPARTMENT, shall be included, as necessary, into the contract plans, summary sheets and estimate. Municipal utility relocation items, as incorporated into the contract plans, shall be kept separate from the highway and/or bridge items in the estimates submitted. The unit item numbers and unit prices to be used for the utility relocations shall be provided by the DEPARTMENT.

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

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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. In addition, the CONSULTANT shall make a continuous effort, during each phase of the design, to monitor costs, and seek ways to minimize the overall cost of the project.

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. Right-of-way abstracting will be furnished to the CONSULTANT in Microstation format.

All horizontal alignment notes including traverse-line notes furnished by the DEPARTMENT shall be computed by the CONSULTANT to include coordinates.

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 and Bridge Construction (2001), 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.

Frequent visits to the site shall be made during the design to detect changed field conditions and, if required, additional surveys will be performed by the DEPARTMENT upon request. The DEPARTMENT will process additional survey requests to the extent necessary to ensure continuity between new and current detail model files. The CONSULTANT will be given these files and shall be responsible for the incorporation of these files into the current detail base plans and digital terrain models

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(DTM). The incorporation of additional survey information shall include all drafting, labeling, detailing and field-checking of the detail of all survey requests.

The CONSULTANT shall adjust design plans to reflect the new as-built conditions between construction contracts for horizontal and vertical alignments, typical sections, and cross-sections. The CONSULTANT shall take into account, but not limited to, traffic control, earthwork utilization, drainage pipes (permanent and temporary) and structures between construction contracts.

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 conflicts 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" checking.

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.

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F. SCOPE OF WORK (UTILITIES)

The CONSULTANT shall perform utility coordination with utility owners from the verification of existing facilities phase through the final relocation designs by utility owners. All correspondence shall conform to the DEPARTMENT's Utilities Section's format. The DEPARTMENT will provide sample electronic documents.

Description of Duties:

1. Fill out Utility Process Guide as project progresses. Copy the DEPARTMENT's Utilities Section on all correspondence. The DEPARTMENT's Utilities Section will distribute in-house copies.
2. Verification of existing facilities phase:
 - A. Distribute plans (two (2) per utility) to utility companies for verification of existing utilities (list of utilities furnished by the DEPARTMENT) with cover letter.
 - B. Review returned verification plans to confirm information requested has been provided.
 - C. Monitor schedules of submission returns (as outlined in the Utility Process Guide and as listed below):
 - a) Two weeks prior to due date of verification plans, contact the Utility owner for status report; copy the DEPARTMENT via telecom memo.
 - b) If needed, one week past due date contact the Utility owner for status; copy the DEPARTMENT via telecom memo.
 - c) If needed, two weeks past due date contact the Utility owner via written letter for status; copy the DEPARTMENT.
3. Determination of conflicts and relocation designs:
 - A. The CONSULTANT shall identify conflicts for each utility.
 - B. The CONSULTANT shall highlight all utility conflicts on two (2) sets of plans to be used as office copies.
 - C. The CONSULTANT shall review the Public Hearing transcript for any commitments impacting utility relocations. Such commitments shall be stated in relocation request letters.

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- D. The CONSULTANT shall meet with the DEPARTMENT to review the conflicts prior to sending the relocation request to the Utility owners.
- E. After the meeting with the DEPARTMENT, the CONSULTANT shall submit one (1) set of highlighted plans, showing all utility conflicts, to the DEPARTMENT (office copy).
- F. The CONSULTANT shall forward, to each Utility owner a relocation request containing a cover letter, two (2) sets of plans and cross sections with all of the conflicts corresponding to that utility highlighted. The cover letter to the Utility owners shall itemize these conflicts. Only conflicts of the appropriate Utility owners shall be highlighted on the relocation requests.
 - a) Meet with Utility companies prior to return of relocation design to provide updated plans and design revisions and review relocation design concepts.
- G. Upon return of the relocation design from the Utility owner, the CONSULTANT will verify conflicts have been addressed in accordance to NHDOT relocation policy.
- H. Submissions shall be monitored in accordance with 2-C above.
- 4. The CONSULTANT shall schedule meetings with the DEPARTMENT to review utility designed relocations as submissions are returned (after verifying that conflicts have been addressed).
- 5. Upon approval, of the relocation design, the CONSULTANT shall send out approval letters. This letter shall also request schedules and time frames for the construction of the relocations.
- 6. The CONSULTANT shall prepare the Utilities portion of the Prosecution of Work, containing Utility contacts, relocation schedules and time frames and any project specific issues that may effect the Contractor's operations.
- 7. The CONSULTANT shall prepare a draft of all Force Account Agreements. The DEPARTMENT will finalize and execute the Agreement.
- 8. The CONSULTANT shall prepare a utility certificate defining all utility impacts that have been identified and the appropriate resolution.
- G. MATERIAL FURNISHED BY THE DEPARTMENT OF TRANSPORTATION

The DEPARTMENT will furnish the following data to the CONSULTANT:

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1. Electronic files in English units of the following information in accordance with the current DEPARTMENT'S CAD/D Procedures and Requirements, for incorporation into the plans by the CONSULTANT.
 - a. All existing survey and baseline data on disk, notes and note reductions in the format outlined in the current DEPARTMENT'S CAD/D Procedures and Requirements. An electronic ground model will be provided, along with all existing information that can be used to create a model (ASCII point file, SDR data files, etc.).
 - b. Electronic survey-data-file notes (meaning an unprocessed, survey-data dump) of all additional surveys requested by any party during the design process. The CONSULTANT shall be responsible for the reduction, editing and incorporation of this data into the ground-terrain model and the plans. This data will be provided in a format as indicated in paragraph 1.a. above. Upon completion, the CONSULTANT shall confirm that the survey is correct by conducting appropriate field inspections.
 - c. Electronic preliminary horizontal and vertical alignments for the project limits as envisioned. This data will be in MX format and coordinate (x, y, z) data (ASCII) format, in accordance with the DEPARTMENT'S CAD/D Procedures and Requirements.
 - d. Any additional surveys of adjacent parcels, mitigation sites, wetland boundaries or other pertinent items deemed necessary and processed by the DEPARTMENT. Incorporation of this information into the ground-terrain model and plans shall be the responsibility of the CONSULTANT.
 - e. 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.
 - f. 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

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electronic format) into the plans, in accordance with the DEPARTMENT'S CAD/D Procedures and Requirements.

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.

1. Prints of the following information:

- a. Any additional information (e.g., abstracting, utilities, etc.) for the CONSULTANT to incorporate into the plans, in accordance with the DEPARTMENT'S CAD/D Procedures and Requirements.
 - b. Available critical cross-sections 100 feet left and right of the existing baseline or within the current limits of ground data. The CONSULTANT shall be responsible for any remaining coverage necessary.
2. Reproducible sheets of roadway typical cross-sections and other available detail sheets for inclusion in the contract plans.
 3. Roll-plan print(s) of the project details and profiles of existing ground at the survey line at a scale of 1" = 50'.
 4. 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.
 5. Electronic drawings in Microstation format of the Right-of-way data, property lines and parcel owners.
 6. 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.
 7. An up-to-date existing sign inventory for the Spaulding Turnpike extending from Exit 1 to a point approximately 0.5 mile north of the Dover Toll Plaza.

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8. Necessary traffic data and counts as established by the Seacoast Travel Demand Model.
9. Proposal for bidding and Standard Specifications for Road and Bridge Construction, Standard Plans for Road and Bridge Construction, plus supplemental specifications and special provisions that the DEPARTMENT currently has.
10. Geotechnical investigations and recommendations.
11. The location of all existing utilities through direct contact with the various utility companies prior to execution of AGREEMENT.
12. The DEPARTMENT will serve on the team with the CONSULTANT in developing 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 the Traffic Control Plans as it relates to complications with concurrent work, utilities and closures. The CONSULTANT shall complete the final design and the associated quantity calculations, as well as the development of an inclusive Traffic Management Plan consistent with Work Zone Mobility Rules.
13. 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.
14. 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.
15. ITS concept plans and specifications for incorporation into the final design plans as appropriate.

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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 20th 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 first construction contract, construction of new Little Bay Bridge and supporting roadwork, is intended to be a fast track design contract to meet the current construction advertising date.

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

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All plan drawings, including size of sheets, lettering, symbols and scale of said drawings, shall conform with 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. Final construction plans 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 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).

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1. Roadway Design Submissions

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

a. Pre-Preliminary Plans – Roadway

This submission, made by the CONSULTANT, shall cover work through the 15 - 20% completion stage. The submission shall consist of the newly created base plan (with all pertinent existing ground detail, utilities, environmental resources, existing right-of-way and boundary lines, etc. shown) overlaid with the conceptual alignments, horizontal layouts, and profiles developed through, and in response to, the Public Hearing and environmental process. During this stage, several “working sessions” (short, conceptual presentations by the CONSULTANT to the DEPARTMENT on work to date, with feedback on direction coming from the DEPARTMENT) are anticipated with the DEPARTMENT. The submission shall include the following:

- 1) Information on the alternative solutions proposed by the CONSULTANT. Each respective alternative shall be dimensioned to delineate travel-lane widths and various geometric features and include the average daily traffic (ADT) for both the opening year and 2025 design year and the directional design hourly volumes (DDHV) for the design year.
- 2) Preliminary level-of-service calculations and coordination analysis shall be performed at intersections and roundabouts at three (3) locations along Route 4, as appropriate.
- 3) Conceptual traffic control plan for each alternative solution.
- 4) Study profiles with original-ground information and proposed grade lines.
- 5) Critical cross-sections containing original-ground cross-sections with the top line of template showing finished grades and any other information deemed necessary by the DEPARTMENT to assess the respective alternatives' impact on adjacent properties to support the respective alternatives.

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6) "Study" estimates as appropriate and relevant for use in evaluating the various alternatives.

7) A narrative shall be furnished describing each alternative design solution's advantages and disadvantages. The CONSULTANT shall make a recommendation with qualifying statements justifying the preferred alternative. The CONSULTANT will be expected to support their design proposal in any issues resulting from review by the DEPARTMENT and Federal agencies with alternate studies and reasonably itemized study cost comparisons for alternatives.

The DEPARTMENT will review this submission (two sets of roll prints) and any revisions requested shall be made by the CONSULTANT. At this time, the DEPARTMENT will select the alternative for further development.

b. Preliminary Plans - Roadway

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 Best Management Practices for erosion- and sedimentation-control and water-quality issues, 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, including local roads.

2) All roadway cross-sections (50-foot intervals, except at 25-foot intervals in ledge areas) and drive cross-sections 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 recut and reordered for subsequent submissions when

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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 intersection plans, including proposed lane use, with traffic assignments and circulation plans, pavement layouts and major control elements.
- 4) Proposed treatment of local roadways affected by the project, along with significant construction appurtenances and other design features.
- 5) The alignment (horizontal and vertical) of major detours or construction phases that will have significant implications for the project in the final design. The location and lane use of temporary signals if warranted. 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.
- 6) Conceptual Best Management Practices for erosion and sedimentation control and water-quality issues shall be shown with approximated flows. A presentation and narrative will be required to explain the pollutant loading, drainage and peak flow control concept for approval.
- 7) Roll plans shall show where match lines are anticipated for future cut sheets.
- 8) Preliminary typical sections with top-line template.
- 9) Proposed limits and recommendations for letting the construction under separate contracts, including cost estimates, areas of overlap, maintenance of traffic, drainage, etc.
- 10) 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.
- 2) Erosion- and sedimentation-control measures (permanent and temporary).

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- 3) Water-quality treatment.
- 4) Mitigation areas and wetland impacts.
- 5) Earthwork balances and availability.
- 6) Potential closed drainage and underdrain outlets, and cover over drainage structures.
- 7) Right-of-way involvement.
- 8) Potential conflicts with major utilities.
- 9) Proposed present and future signal interconnection and coordination.
- 10) Separate construction contracts.

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.

The CONSULTANT shall indicate on the plans all traffic assignments at intersections together with the AM and PM turning motions. Limited Saturday traffic assignments shall be indicated on plans relative to signals on Woodbury Avenue. The traffic assignments shall be expressed in terms of average daily traffic (ADT) for both the current and design years and directional design hourly volumes (DDHV) for the design year.

This submission shall include the CONSULTANT'S recommendations for the limits of the construction contract(s), together with preliminary estimates as appropriate and relevant for each contract recommended. It is anticipated that this project will be constructed under multiple contracts resulting in eight (8) potential contracts to be determined by the CONSULTANT through coordination with the DEPARTMENT to best facilitate highway construction, wetland mitigation, and traffic management. A preliminary assessment of the project has identified a number of potential construction contracts. This construction contract breakout is conceptual and the final contract breakout should take into consideration issues

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such as logical construction sequence, traffic control, unique construction activity (i.e. bridge, landscaping, earthwork, etc.), prioritization of needs, construction cost and funding availability. Estimates for this submission shall be reasonably itemized to cover roadways, structures, drainage and other construction items as well as costs of railroad and 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 Drainage Plans - Roadway

Upon written approval by the DEPARTMENT of the Preliminary Plans Submission, the Consultant shall initiate the developing of the Slope and Drainage Plans. This submission shall consist of five sets of roll plans (paper prints 8 ft. to 10 ft. in length) showing slope lines, drainage-system details and drainage features, and proposed right-of-way lines, including drainage, slope and/or construction easements. The roll plans shall include typical sections, plan views, profiles, guardrail locations, and cross-sections with complete template plotted and appropriate references on the plans relative to 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 Practices and pollutant loading analysis for permanent erosion and sedimentation control features and water-quality appurtenances shall be shown accompanied by backup calculations. 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.

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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 showing temporary slopes, lane uses and widths, overhead-sign structures, temporary traffic signals, including emergency pre-empt as may be necessary, temporary guardrail and barrier locations, temporary drainage, temporary easements, profiles, temporary drives, detour cross-sections and superelevations, etc. with backup calculations. Construction phasing shall be shown with narratives for each phase.

The project will be constructed under multiple construction contracts, as such, the Slope and Drainage submission shall include a drainage design and report addressing the drainage proposed for the overall project when construction is complete. The CONSULTANT shall also submit an interim Slope and Drainage plan submission, without pollutant loading, for three individual contracts, noting the construction phasing, traffic control and water-quality commitments. The intent of the interim Slope and Drainage submission is to address the slope and drainage needs for the contract overlap areas of the individual contracts. All temporary drainage features shall have backup calculations submitted with each contract submitted. The CONSULTANT shall show how the design plans will be adjusted to reflect the new as-built conditions between construction contracts for horizontal and vertical alignments, typical sections, and cross-sections.

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At this submission, a modified itemized estimate shall be prepared and submitted by the CONSULTANT based on the best information and design features shown in this submission relative to the anticipated construction including any detours or temporary widenings.

Following incorporation of the DEPARTMENT'S comments on the Slope and Drainage Submission, the CONSULTANT shall submit plans showing permanent and temporary impacts for each wetland for each phased construction contract for comparison with the ACOE wetland permit plans. These areas shall be identified on the general plans for the project. 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 each construction contract and the final build-out for this project, for comparison with the permitted wetland impacts.

d. Utility Plans

Following submission and review of the Slope and Drainage submission, the CONSULTANT shall incorporate DEPARTMENT comments into the design layout and assemble the plans into a cut-sheet format. The CONSULTANT shall then furnish 2 sets of cut-sheet plans (paper prints) of front sheet, plans, profiles and one (1) set of cross-sections for use by each utility Company and two (2) sets of plans and cross-sections for the DEPARTMENT. 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, 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 signal conduit. Also, the plans shall reflect all existing detail, existing drainage and existing

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utilities. The CONSULTANT shall provide a list of revised utility conflicts to the DEPARTMENT. The intent is to have incorporated all comments from the preliminary right-of-way submission and the Slope and Drainage 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. This plan set will not be reviewed and comments will not be given to the CONSULTANT for this submission by the DEPARTMENT. Copies of this plan set shall be forwarded to the Design Services Section for record purposes. The Consultant is to utilize these plans to finalize the utility relocations, as required. The plans shall show the status of the design prior to preparation of the Preliminary PS&E submission.

e. Preliminary PS&E - Roadway

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, all plan sheets, profile sheets, curb- and pavement-marking-layout plans, traffic signal plans, complete traffic control plans, cross-section sheets and necessary detail sheets. Also, landscaping, seeding and grading plans shall be included, if required. 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, 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

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Preliminary PS&E submission for each construction contract. An electronic copy of the spreadsheet shall be submitted for each estimate. 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 Drainage Plans submission and issues that appear during final design. One bound copy of the drainage computations and pollutant loading book (as revised, based on Slope and Drainage comments) including temporary drainage computations for each contract 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, one bound copy of the revised quantities book, 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. Contract Plans (Mylars) and Consultant Documents

For each construction contract, 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 PS&E review. The CONSULTANT shall be prepared to incorporate all comments, furnish drafting services for omissions found and 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

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for each contract. The final contract plans submitted shall include one set of mylars and one set of paper prints. The paper set shall be submitted prior to the final mylars so that the DEPARTMENT can complete a final "three-way" check. Also, all CONSULTANT backup documents shall be resubmitted to reflect the final PS&E 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.
- (4) Plan and profile sheets.
- (5) Detail sheets and/or special sheets required.
- (6) 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 studies, design and development of the contract documents shall be progressed separately for each bridge (separate plans for each unit at site with multiple bridges) to permit construction of each bridge under a separate construction contract or as part of a larger contract including highway and/or other bridges and related works.

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

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The CONSULTANT shall perform a load and resistance-rating analysis for each bridge using the AASHTO Load and Resistance Factor Rating Method (Load and Resistance Factor Rating or LRFR), 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)

Preliminary PS&E Plans (80% complete)

PS&E Plans (95% complete)

Contract Plans (Mylars)

a. TSL (Type-Span-Location) Studies

As part of the TSL Study, the CONSULTANT shall prepare a conceptual pre-TSL plan sheet for use by the Value Engineering Team. The plan sheet shall depict the plan and elevation of the proposed bridge(s) at each location showing the span lengths, structural material, bridge cross-section and assumed foundation type.

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 this project.

TSL study plans shall be prepared for each bridge showing the selected structure and shall include the plan, elevation and typical bridge section. Plans developed for the pre-TSL submission may be used if appropriate. The plan and elevation shall generally be drawn to a

ARTICLE I

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. A preliminary estimate for each bridge using the Slope Intercept method or other improved method, as approved, shall be submitted.

At those locations where an existing bridge is adjacent to or where 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 Plan 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 - Bridge

Preliminary plans for each bridge shall be prepared following acceptance of the TSL Study plan and Boring Layout by the DEPARTMENT, the completion of the subsurface explorations and the 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 investigations. Also included in this phase shall be the development of the survey plan for the bridge location, and this plan shall include the existing surface contours, boring

ARTICLE I

locations, sub- and superstructure layout, slope limits, existing utilities, 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 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 - Bridge

Upon receipt of written approval of the Preliminary Plans, final design and preparation of contract plans shall be commenced. 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 summarized for each bridge.

Upon completion of these contract plans, except for quantities, 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 - Bridge

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.

ARTICLE I

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.

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. The limits of the right-of-way plans are the same as the limits of work as described in Article I-A.

Final right-of-way plans shall be developed as two individual sets with each covering Dover and Newington. The plan sets shall include:

- a. Front sheet
- b. Property-layout plan sheets 1"=200'-scale showing existing detail, complete parcel boundaries, proposed roadway layout, parcel numbers, property owners' names and access points granted
- c. Summary sheets
- d. Purchase Plan sheets showing all impacts (temporary or permanent)
- e. Registry Plans

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. The preparation of the right-of-way plans in stages shall coincide with the limits and scope of the corresponding phased-construction contract plans. Right-of-way plans shall be in English units.

ARTICLE I

The CONSULTANT shall be prepared to provide working (progress) right-of-way plans (front sheet, summary sheets, plan sheets) (three sets of paper prints) concurrent with the Slope and Drainage Plans submission for each roadway contract, if requested. Easements need not be calculated for this set. Where the proposed right-of-way lines have been firmly established, acquisition calculations shall be performed. Acquisition and easement calculations may be submitted in handwritten format. The purpose of this working (progress) submission is to show anticipated areas of acquisition and easements, as well as the correct format of the right-of-way plans.

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 specific Slope and Drainage 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.

The right-of-way purchase plans shall be submitted after the CONSULTANT has received and incorporated the DEPARTMENT'S Slope and Drainage, and preliminary right-of-way plan comments. The CONSULTANT shall be prepared to make corrections and/or revisions as required. Upon DEPARTMENT review and written approval of the purchase plan submission, nine sets of paper prints will be required for use by the DEPARTMENT'S Bureau of Right-of-Way. The CONSULTANT shall be prepared to make revisions to the final right-of-way plans based on the DEPARTMENT'S negotiations with property owners. The Consultant shall modify the final negotiated purchase plans to develop the registry plans based on the Inter Department Communication memo dated May 31, 2007. The final mylars (as described previously) of the registry plans shall be submitted with the mylars of the Contract Plans submission.

In the event, none anticipated, that the DEPARTMENT needs to acquire a particular parcel in advance of completing the right-of-way plan process, the CONSULTANT shall be prepared to submit a working (progress) print(s) containing the parcel(s) in question. The working (progress)

ARTICLE I

print(s) are intended to be construction plans showing the impacts, easements, etc., with summary boxes illustrating impacts to the parcel(s). Upon completion of the negotiation process, the CONSULTANT shall revise the ROW plans to allow for recordation at the registries. Revisions shall include the removal of hatching, miscellaneous text, etc.

J. SCOPE OF WORK (CONSTRUCTION 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 therefor, 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 the CONSULTANT'S 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.

2. Shop Drawings

The CONSULTANT shall:

- a. Review and provide comment on 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

- b. Design and prepare drawings for the substructure elements required for overhead sign structures. The Contractor shall submit fabrication plans and design parameters for overhead sign structures which, in combination with soils information obtained by the DEPARTMENT, shall be used by the CONSULTANT to develop the designs and drawings for substructure elements.

3. Signal Coordination

The CONSULTANT shall:

- a. Be available to assist with inspecting traffic signal equipment, the timing and phase settings, and monitor the operation of the coordination system.

4. Wetland Mitigation Monitoring

The CONSULTANT shall:

- a. Furnish advice and guidance to the DEPARTMENT during construction of wetland mitigation to assure compliance with permit requirements and the intent of the design.

K. DATE OF COMPLETION

The date of completion for the design services rendered under this AGREEMENT shall be December 31, 2013. Completion of construction services shall be in accordance with Article I-J. - Construction Services

ARTICLE II

ARTICLE II - COMPENSATION OF CONSULTANT FOR COST PLUS FIXED FEE AGREEMENTS

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.
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.
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

ARTICLE II

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, specifies the FTR automobile milcage 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 \$14,962,127.00, 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 September 25, 2008), including reimbursement to Disadvantaged Business Enterprises, except by agreement of all parties made after supplemental negotiations. 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) shall only change when there has been a significant increase or decrease in the scope of work outlined in this AGREEMENT.

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

ARTICLE II

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.

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 and copies thereof shall be furnished if requested.

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 \$7,015,187.00. For billing purposes, salary burden and overhead costs are currently estimated at 159.64% of actual salaries.
- b. A fixed fee to cover profit and non-reimbursed costs at \$701,519.00.
- c. Reimbursement for direct, out-of-pocket expenses estimated at \$309,000.00.

ARTICLE II

d. Reimbursement for actual cost of subconsultants estimated as follows:

• Amman & Whitney	\$1,368,373.00 ✓
• Clough, Harbour & Associates LLP	\$3,811,738.00 ✓
• Comprehensive Environmental Incorporated	\$921,321.00 ✓
• Fitzgerald & Halliday, Inc.	\$157,491.00 ✓
• GM2 Associates, Inc.	\$229,987.00 ✓
• Independent Archaeological Consulting, LLC	\$314,474.00 ✓
• Lewis & Zimmerman Associates, Inc.	\$133,037.00* ✓

(* to be paid as a lump sum, with 42% paid after approval of Phase I completed services.)

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.

C. LIMITATION OF COSTS

1. Costs incurred against this AGREEMENT shall not exceed \$14,962,127.00 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.
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.

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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 may be included as the pro rata share of charges for the period invoiced.
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 current Design Manuals of the DEPARTMENT, Standard Specifications for Road and Bridge Construction and Standard Plans for Road and Bridge Construction of the DEPARTMENT and the current Standard Specifications for Highway Bridges of the American Association of State Highway and Transportation Officials and amendments thereto, 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 FEDERAL HIGHWAY ADMINISTRATION – 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 Kilton Road, Six Bedford Farms, Suite 607, Bedford, New Hampshire.

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

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payments in excess of such available appropriated funds. In the event of a reduction or termination of those funds, the STATE shall have the right to terminate this AGREEMENT.

2. Termination

The DEPARTMENT shall have the right at any time, and for any cause, to terminate the work required of the CONSULTANT by this AGREEMENT, by written notice of such termination provided to the CONSULTANT by the DEPARTMENT, and, in the event of such a termination of this AGREEMENT, without fault on the part of the CONSULTANT, the CONSULTANT shall be entitled to compensation for all work theretofore satisfactorily performed, pursuant to this AGREEMENT, such compensation to be fixed, insofar as possible based upon the work performed prior to termination. If no contract or contracts for construction of the project contemplated by this AGREEMENT is entered into within two (2) years after satisfactory completion of the services outlined in Article I, the rendering of further services as required by Article I-I hereof shall be waived, and, in such event, all of the services contemplated by this AGREEMENT shall be deemed to have been completed. It shall be a breach of this AGREEMENT if the CONSULTANT shall fail to render timely the services required under this AGREEMENT, in accordance with sound professional principles and practices, to the reasonable satisfaction of the DEPARTMENT, or shall be in such financial condition as to be unable to pay its just debts as they accrue, or shall make an assignment for the benefit of creditors, or shall be involved in any proceeding, voluntary or involuntary, resulting in the appointment of a receiver or trustee over its affairs, or shall become dissolved for any cause. In the event of the happening of any one or more of the foregoing contingencies or upon the substantial breach of any other provisions of this AGREEMENT by the CONSULTANT, its officers, agents, employees and subconsultants, the DEPARTMENT shall have the absolute right and option to terminate this AGREEMENT forthwith, and, in addition, may have and maintain any legal or equitable remedy against the CONSULTANT for its loss and damages resulting from such breach or breaches of this AGREEMENT; provided, however, that as to all plans, drawings, tracings, estimates,

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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 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;

ARTICLE IV

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.

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G. SUBLETTING

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

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

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

J. CONTRACTUAL RELATIONS

1. Independent Contractor

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

2. Claims and Indemnification

a. Non-Professional Liability Indemnification

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

b. Professional Liability Indemnification

The CONSULTANT agrees to 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.

ARTICLE IV

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.

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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.

ARTICLE IV

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 or national origin in the selection and retention of subconsultants, including procurements of materials and leases of equipment specific to this project. The CONSULTANT shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the REGULATIONS, including employment practices when the AGREEMENT covers a program set forth in Appendix B of the REGULATIONS.
- (3) Solicitations for Subcontracts, Including Procurements of Materials and Equipment:
In all solicitations either by competitive bidding or negotiation made by the CONSULTANT for work to be performed under a subcontract, including procurements of materials or leases of equipment specific to the project, each potential subconsultant or supplier shall be notified by the CONSULTANT of the CONSULTANT'S obligations under this AGREEMENT and the REGULATIONS relative to nondiscrimination on the grounds of race, color 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

ARTICLE IV

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

ARTICLE IV

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

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

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

N. DISADVANTAGED BUSINESS ENTERPRISE POLICY 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,

ARTICLE IV

national origin, or sex in the award and performance of agreements financed in whole or in part with Federal funds.

3. Sanctions for Non-Compliance. The CONSULTANT is hereby advised that failure of the CONSULTANT, or any Subconsultant performing work under this AGREEMENT, to carry out the requirements set forth in paragraphs 1 and 2 above shall constitute a breach of agreement and, after the notification of the United States Department of Transportation, may result in termination of this AGREEMENT by the STATE or such remedy as the STATE deems appropriate.

O. DOCUMENTATION

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

P. CLEAN AIR AND WATER ACTS

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

**CERTIFICATION WITH REGARD TO THE PERFORMANCE OF
PREVIOUS CONTRACTS OR SUBCONTRACTS SUBJECT TO
THE EQUAL OPPORTUNITY CLAUSE AND THE FILING OF REQUIRED REPORTS**

The CONSULTANT X, proposed subconsultant _____, hereby certifies that it has X, has not _____, participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Order 11246 and that it has X, has not _____, filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

VANASSE HANGEN BRUSTON INC
(Company)

By: Francis S. O'Callaghan
Sen Vice Pres
(Title)

Date: 11/05/08

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.**

**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.

11/05/08

(Date)

Francis S. O'Callaghan

(Signature)

CERTIFICATION OF CONSULTANT/SUBCONSULTANT

I hereby certify that I am the Sen Vice Pres and duly-authorized representative of the firm of VANASSE HANGEN BRUSTLIN, 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 ineligible 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.

11/05/08
(Date)

Francis S. O'Callaghan
(Signature)

CERTIFICATION OF STATE DEPARTMENT OF TRANSPORTATION

William J. Cass, P.E.
Director of Project Development
NHDOT

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):

11/6/08
(Date)


(Signature)

**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.

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

(SEAL)

Consultant

WITNESS TO THE CONSULTANT

By: Robt Cj

Dated: 11/5/08

CONSULTANT

By: Francis S. O'Callaghan
Sen Vice Pres
(TITLE)

Dated: 11/05/08

Department of Transportation

WITNESS TO THE STATE OF NEW HAMPSHIRE

By: Michelle Down

Dated: 11/6/08

THE STATE OF NEW HAMPSHIRE

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

Dated: 11/6/08

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: 12/1/08

By: [Signature]
Assistant Attorney General

Secretary of State

This is to certify that the GOVERNOR AND COUNCIL on DEC 18 2008 approved this AGREEMENT.
DEC 18 2008

Dated: _____

Attest:
By: [Signature]
Secretary of State

DEPUTY SECRETARY OF STATE

VANASSE HANGEN BRUSTLIN, INC.

Certificate of Vote

**Newington-Dover
NHS-0271(037), 11238
(Part C)**

I, Robert Brustlin, hereby certify that I am the duly elected President of Vanasse Hangen Brustlin, Inc.

I hereby certify the following is a true copy of Vote taken at a meeting of the Board of Directors of the Corporation, duly called and held on August 17, 2004, at which a quorum of the Board was present and voting.

VOTED:

That Francis O'Callaghan is the duly elected Senior Vice President of Vanasse Hangen Brustlin, Inc. and is hereby authorized to execute contracts, bonds, and proposals in the name and behalf of said company and affix its corporate seal thereto; and such execution of any contract or obligation in this company's name on its behalf under seal of the company, shall be valid and binding upon this company.

I hereby certify that said vote has not been amended or repealed and remains in full force and effect as of this date, and that Francis O'Callaghan is the duly elected Senior Vice President of this Corporation

ATTEST:

Date: 11/05/08

R. Brustlin

State of New Hampshire
Department of State

CERTIFICATE

I, William M. Gardner, Secretary of State of the State of New Hampshire, do hereby certify VANASSE HANGEN BRUSTLIN, INC. is a New Hampshire corporation duly incorporated under the laws of the State of New Hampshire on December 11, 1986. I further certify that all fees and annual reports required by the Secretary of State's office have been received and that articles of dissolution have not been filed.



In TESTIMONY WHEREOF, I hereto
set my hand and cause to be affixed
the Seal of the State of New Hampshire,
this 28th day of August, A.D. 2008

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

William M. Gardner
Secretary of State

ACORD CERTIFICATE OF LIABILITY INSURANCE OPID PB VANAS-1 DATE (MM/DD/YYYY) 08/27/08

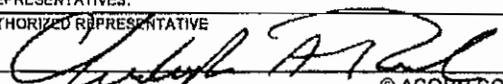
PRODUCER Poole Professional Ltd. 17 Audubon Rd. #2, Ste. 305 Keefe MA 01880 Phone: 781-245-5400 Fax: 781-245-5463	THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.												
INSURED Vanasse Hangen Brustlin, Inc. Eschbacher VHB Engineering, Surveying & Landscape Arch., PC, VHB Pioneer Environmental Assoc. P. O. Box 9151 Watertown MA 02471	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">INSURERS AFFORDING COVERAGE</th> <th style="text-align: left;">NAIC #</th> </tr> <tr> <td>INSURER A: Travelers Indemnity Co. of Ann</td> <td>25658</td> </tr> <tr> <td>INSURER B: Charter Oak Fire Ins. Co.</td> <td>25615</td> </tr> <tr> <td>INSURER C: St Paul Fire & Marine</td> <td>24767</td> </tr> <tr> <td>INSURER D: Safety Insurance Company</td> <td>39454</td> </tr> <tr> <td>INSURER E: Travelers Indemnity Co of CT</td> <td>25682</td> </tr> </table>	INSURERS AFFORDING COVERAGE	NAIC #	INSURER A: Travelers Indemnity Co. of Ann	25658	INSURER B: Charter Oak Fire Ins. Co.	25615	INSURER C: St Paul Fire & Marine	24767	INSURER D: Safety Insurance Company	39454	INSURER E: Travelers Indemnity Co of CT	25682
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COVERAGES

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. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS

INSR ADD'L LTR	INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
A	X	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Prod/Compl Ops Contract. Liab. GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC	680-2611L561-08 INSURANCE IS PRIMARY INCL. BLANKET WAIVER	05/01/08	05/01/09	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COM/OP AGG \$ 2,000,000
D	X	AUTOMOBILE LIABILITY				COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
		<input type="checkbox"/> ANY AUTO				
D	X	ALL OWNED AUTOS	1501873	06/13/08	06/13/09	BODILY INJURY (Per person) \$
A	X	SCHEDULED AUTOS	BA2044L64A CT, NH, RI, FL, VT	05/01/08	05/01/09	BODILY INJURY (Per accident) \$
D	X	HIRE AUTOS	BA2043L055 NO&H - MA	05/01/08	05/01/09	PROPERTY DAMAGE (Per accident) \$
E	X	NON-OWNED AUTOS	BA2067L575 VA	05/01/08	05/01/09	
		GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT \$
		<input type="checkbox"/> ANY AUTO				OTHER THAN EA ACC \$
						AUTO ONLY: AGG \$
C	X	EXCESS/UMBRELLA LIABILITY				EACH OCCURRENCE \$ 10,000,000
		<input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE	QK06501795	05/01/08	05/01/09	AGGREGATE \$ 10,000,000
		<input type="checkbox"/> DEDUCTIBLE				\$
		<input checked="" type="checkbox"/> RETENTION \$10,000				\$
B		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? If yes, describe under SPECIAL PROVISIONS below	XVMP0UB-5825Y49-6-08	05/01/08	05/01/09	<input checked="" type="checkbox"/> WC STATU- TORY LIMITS <input type="checkbox"/> OTH- ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
A		OTHER Prof. Office Packa	680-2611L561 INSURANCE IS PRIMARY	05/01/08	05/01/09	Valuable Records \$2,250,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS
 Re: Newington-Dover NHS-027-1(37) 11238 (Part C). Interest of the New Hampshire Department of Transportation is included as additional insured under the above indicated policies only subject to all policy terms and conditions.

CERTIFICATE HOLDER NHDOT-1 New Hampshire Department of Transportation 1 Hazen Drive, P.O. Box 483 Concord NH 03301-0483	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES. AUTHORIZED REPRESENTATIVE 
--	---

ACORD CERTIFICATE OF LIABILITY INSURANCE

OP ID PB
VANAS-1

DATE (MM/DD/YYYY)
11/25/08

PRODUCER

Poole Professional Ltd.
107 Audubon Rd. #2, Ste. 305
Lakefield MA 01880
Phone: 781-245-5400 Fax: 781-245-5463

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURERS AFFORDING COVERAGE

NAIC #

INSURED

Vanasse Hangen Brustlin, Inc.
P. O. Box 9151
Watertown MA 02471

INSURER A:	XL Specialty Insurance Co.	37885
INSURER B:		
INSURER C:		
INSURER D:		
INSURER E:		

COVERAGES

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. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR ADD'L LTR INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
	GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC.				EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS				COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	GARAGE LIABILITY <input type="checkbox"/> ANY AUTO				AUTO ONLY - EA ACCIDENT \$ OTHER THAN EA ACC \$ AUTO ONLY: AGG \$
	EXCESS/UMBRELLA LIABILITY <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE DEDUCTIBLE RETENTION \$				EACH OCCURRENCE \$ AGGREGATE \$ \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? If yes, describe under SPECIAL PROVISIONS below				<input type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	ARCH./ENG. E&O	DPR9613184	07/19/08	07/19/09	AGGREGATE \$2,000,000 Deductibl \$75,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

For professional liability coverage, the aggregate limit is the total insurance available for all covered claims presented within the policy period. The limit will be reduced by payments of indemnity and expense. Re: Salem-Manchester, 10418-C, Newington-Dover, 11238 Part B, Manchester, 12110, Bedford, 10018-C and Newington-Dover, 11238 Part C NHS-027-1-(37)

CERTIFICATE HOLDER

New Hampshire Department
of Transportation
John O. Morton Building
7 Hazen Drive, P.O. Box 483
Concord NH 03301-0483

NHDOT-1

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE



THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
 Bureau of Highway Design



GEORGE N. CAMPBELL, JR.
 COMMISSIONER

JEFF BRILLHART, P.E.
 ASSISTANT COMMISSIONER

November 4, 2008

His Excellency, Governor John H. Lynch
 and the Honorable Council
 State House
 Concord, New Hampshire 03301

Requested Action

Authorize the Department of Transportation to enter into an Agreement with Vanasse Hangen Brustlin, Inc., Bedford, NH and Watertown, MA, Vendor #40332, in the amount of \$14,962,127.00, for the final design for the widening of the Spaulding Turnpike in the Town of Newington and City of Dover, effective upon Governor and Council approval, through December 31, 2013. 100% Turnpike Funds.

Funding is available in account, Spaulding Turnpike Expansion, as follows with the authority to adjust encumbrances in each of the State fiscal years through the Budget Office if needed and justified:

017-096-7513-400-0104	Spaulding Tpk. Exp.	<u>FY 2009</u>	<u>FY 2010</u>
		\$3,100,000.00	\$3,400,000.00
		<u>FY 2011</u>	<u>FY 2012</u>
		\$3,400,000.00	\$3,400,000.00
			<u>FY 2013</u>
			\$1,662,127.00

EXPLANATION

The Department requires engineering and environmental consultant services for the preparation of the final design, contract plans, specifications, estimates and right-of-way plans for the reconstruction and widening of an approximately 3.5-mile section of the Spaulding Turnpike, beginning just north of the Gosling Road/Pease Boulevard Interchange (Exit 1) in the Town of Newington and continuing across the Little Bay Bridges to just south of the Dover Toll Plaza in the City of Dover. This project is currently included in the State's Ten-Year Transportation Improvement Plan and Turnpike Capital Program (Newington-Dover 11238).

The project design effort involves reconstructing this section of the Spaulding Turnpike from the existing four-lane facility to eight lanes (three general purpose lanes plus an auxiliary lane in each direction between Exits 3 and 6); reconstructing and widening the Little Bay Bridges on new alignment to an eight-lane facility; rehabilitating the General Sullivan Bridge to function as a pedestrian/bicycle/recreational facility; discontinuing the Exit 2 ramps (Fox Run Road); reconstructing Exit 3 (Woodbury Avenue) to a full service interchange that includes a new northern access into the Pease International Tradeport; modifying the Exit 4 ramps to maintain full access at Nimble Hill Road and Shattuck Way; discontinuing the Exit 5 ramps (Hilton Drive) and constructing a new local two-way Connector Road from Wentworth Terrace and Hilton Park under the Turnpike to connect with Dover Point Road; and reconstructing Exit 6 (US 4 and Dover Point Road) to a full service modified diamond-type interchange.

The final design will also include seismic retrofit and design of all bridges except the General Sullivan Bridge; utility coordination; environmental design elements including wetland mitigation, stream restoration, archaeological investigations, hazardous material investigations, pollutant loading analysis, and stormwater treatment and management; Incident Management and Intelligent Transportation Systems integration; traffic modeling and traffic signal coordination; soundwall design; aesthetic and landscaping considerations; constructability and traffic management considerations; provisions for future elevated rail into Pease Tradeport; coordination and support for a value engineering study; continued project website development and management; and construction support services.

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 the final design for the Newington-Dover 11238 project. The assignment was listed as a "Possible Action Project" on the Department's website on October 12, 2007, 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 13, 2007 for consideration and approval by the Assistant Commissioner. Upon receipt of that approval, three shortlisted firms were notified on January 4, 2008 through a technical "Request For Proposal" (RFP). Interviews with the three shortlisted firms were conducted on March 12, 2008. Committee members individually rated the firms on March 13, 2008 using a written ballot to score each firm/team on the basis of comprehension of the assignment, clarity of the proposal and interview, capacity to perform in a timely manner, quality and experience of the project manager and the team, and overall suitability for the assignment. 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, 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 five (5) consultant firms/teams that were considered for this assignment, with the three (3) short-listed firms/teams shown in bold, is as follows:

<u>Consultant Firm/Team</u>	<u>Office Location</u>
Fay, Spofford & Thorndike LLC/ T.Y. Lin International	Bedford, NH
Maguire Group Inc./PB Americas, Inc./ CLD Consulting Engineers, Inc./DMJM Harris	Portsmouth, NH
McFarland-Johnson, Inc./HNTB Corporation/ Carol R. Johnson Associates	Concord, NH
Parsons Transportation Group/ Jacobs Edwards & Kelecy/GM2 Associates Inc./ The Smart Associates Inc./ Public Archaeology Laboratory, Inc.	Concord, NH
Vanasse Hangen Brustlin, Inc./ Clough Harbour & Associates LLP/Ammann & Whitney	Bedford, NH

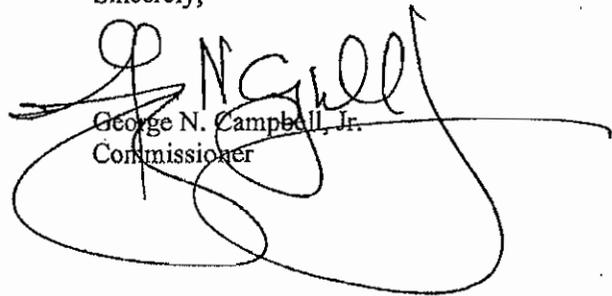
The firm of Vanasse Hangen Brustlin, Inc. has been recommended for this contract. This firm has an excellent reputation and has demonstrated their capability to perform the necessary engineering and technical services for this assignment, having satisfactorily completed both the feasibility study for future transportation improvements and the preliminary design services for this project. Background information on this firm is attached.

Vanasse Hangen Brustlin, Inc. has agreed to furnish the required services for a total fee not to exceed \$14,962,127.00. 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 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,



George N. Campbell, Jr.
Commissioner

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 Vanasse Hangen Brustlin, Inc. (VHB)			3. YEAR ESTABLISHED 1979	4. DUNS NUMBER 093874384
2b. STREET 6 Bedford Farms Drive, Suite 607			5. OWNERSHIP a. TYPE Corporation	
2c. CITY Bedford	2d. STATE NH	2e. ZIP CODE 03110	b. SMALL BUSINESS STATUS N/A	
6a. POINT OF CONTACT NAME AND TITLE Martin F. Kennedy, P.E.			7. NAME OF FIRM (If block 2a is a branch office) Vanasse Hangen Brustlin, Inc.	
6b. TELEPHONE NUMBER (603) 644-0888	6c. E-MAIL ADDRESS mkennedy@vhb.com			
8a. FORMER FIRM NAME(S) (If any)			8b. YR. ESTABLISHED	8c. DUNS NUMBER

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			
08	CADD Technician	35	10	B02	Bridges	6
12	Civil Engineer	179	8	E01	Ecological & Archaeological Investigation	8
	Ecologist	14		E09	Environmental Impact Studies	8
	Environmental Engineer	17		E11	Environmental Planning	5
29	GIS Specialist	25	1	E12	Environmental Remediation	6
32	Hydraulic Engineer	7		G04	Geographic Information Systems	7
62	Water Resources Engineer	8	1	H07	Highways; Streets; Airfield Paving	4
47	Planner: Urban/Regional	26	1	H09	Hospitals & Medical Facilities	
15	Construction Inspector	11	4	I04	Intelligent Transportation Systems	8
39	Landscape Architect	10	1	L02	Land Surveying	8
48	Project Manager	74	6	L03	Landscape Architecture	
24	Environmental Scientist	39	4	P05	Planning (Community, Regional, Areawide, State)	5
57	Structural Engineer	23	9	R03	Railroad; Rapid Transit Studies	7
38	Land Surveyor	29	6	S10	Surveying; Platting; Mapping; Flood Plain Studies	1
60	Transportation Engineer	152	20	S11	Sustainable Design	4
	Pavement Engineer	15		S13	Stormwater Handling & Facilities	5
	Rail Engineer	9		T03	Traffic and Transportation Engineering	8
61	Value Engineer	4		U03	Utilities (Gas and Steam)	2
	Other Employees	173	4	V01	Value Analysis; Life Cycle Costs	4
	Total	950	75	Z01	Zoning/Land Use Studies	6

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUE OF FIRM FOR LAST 3 YEARS

(Insert revenue index number shown at right)

a. Federal Work	7
b. Non-Federal Work	10
c. Total Work	10

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than \$100,000
2. \$100,000 to less than \$250,000
3. \$250,000 to less than \$500,000
4. \$500,000 to less than \$1 million
5. \$1 million to less than \$2 million
6. \$2 million to less than \$5 million
7. \$5 million to less than \$10 million
8. \$10 million to less than \$25 million
9. \$25 million to less than \$50 million
10. \$50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE

Martin F. Kennedy

AND TITLE

Martin F. Kennedy, P.E.
Principal & Office Manager

b. DATE

June 25, 2007

Peter A. Clary, P.E.

Project Manager

I-93 Widening Final Design, Salem to Manchester, NH

Highway Task Manager for the final design of I-93 from the state line north four miles including the interchanges at Exit 1 and 2. This project is widening the existing four-lane divided interstate to an eight-lane divided interstate with considerations for an HOV land and railroad corridor. The interchanges are being fully reconstructed to improve capacity and safety.

NH Route 26 Reconstruction, Colebrook, NH

Project Manager for reconstruction of 3 miles of NH Route 26 along the Mohawk River. This final design project required the development of all highway related plans and the coordination with the NHDOT bridge design team.

U.S. Route 3 and NH Bypass 28, Hooksett, NH

Project Manager for the roadway improvements to the corridors of US Route 3 and NH Bypass 28, in the Town of Hooksett. The project is in an urbanized area with improvements involving several major intersections, roadway widening, pavement reconstruction, and interconnecting and coordinating several sets of signals.

I-93 at I-293 and Bodwell Road, Manchester, NH

Senior Design Engineer responsible for final design of approximately 3.2 miles (5.2 km) of improvements to the I-93 northbound and southbound merge/diverge with I-293 and widening of the I-93 bridges over Bodwell Road for present and future lane requirements in Manchester, NH. Coordination and incorporation of water and sewer lines, telephone conduit and other utility relocations within the Bodwell Road corridor.

Stratham-Exeter, NH: NH 101/108 Interchange Reconstruction

Reconstruction a two lane main arterial roadway into a four-lane divided highway with a single point diamond interchange at a construction cost of \$22 million.

I-93 Widening Wetland Mitigation, Salem to Manchester, NH

Project Manager for the wetland mitigation sites for the future I-93 widening from Salem to Manchester. Entailed the design and construction phase services to create and preserve wetlands on sites in Salem and Londonderry.

Greenland Road Bridge and Roadway Improvements, Portsmouth, NH

Highway Task Manager for this NHDOT Municipally managed project. The project involves a study and preliminary and final design for the bridge replacement over the B&M Railroad and highway safety and capacity improvements for approximately one mile of Greenland Road and various side roads. The project includes roadway widening, signalization at several intersections, sidewalk improvements, intersection relocation, and landscaping improvements.

Roadway Reconstruction, Portsmouth, NH

Project Manager for this NHDOT municipally managed preliminary and final design project for the reconstruction of Court Street within the Historic District, considering the impacts associated with historical structures, archeological concerns, relocation of aerial utilities underground where practicable, replacement of the underground water line and combined sewer and stormwater systems, landscaping brick sidewalks and period lighting. This project also included an extensive public participation process, environmental documentation and bid document preparation.

Mr. Clary is a Sr. Project Manager in VHB's Bedford, New Hampshire office. With a varied background in the transportation industry. His planning, preliminary and final design experience of highways, along with his experience in the construction of highway and bridge projects, enables him to balance the needs of each project. Mr. Clary's previous employment with the NHDOT has equipped him with a comprehensive understanding of State standards and requirements.

Parkway Construction, Concord, NH

Project Manager for the roadway construction of Langley Parkway South and the reconstruction of Clinton Street. The project encompassed preliminary design through final design, including the public meeting process, environmental permitting, right-of-way negotiation, and bid document development.

Oak Street and Rollins Road, Dover-Hollinsford, NH

Project Manager for the reconstruction and widening of the Oak Street and Rollins Road intersection. This high-accident intersection is being widened to accommodate turn lanes and upgrades the signals that will improve the safety of this intersection.

Pettingill and Harvey Roads Improvements, Manchester, NH

Project Manager/Senior Design Engineer for the design of roadway improvements to Pettingill and Harvey Roads to facilitate the capital improvement program at the Manchester Airport. This project constructs a 36' typical roadway with provisions for a future 4-way intersection and a five lane typical section. The design of a temporary detour roadway and coordination with the airport design controls were also considered during the design period.

Roadway Improvements, Portsmouth, NH

Project Manager for the roadway reconstruction, realignment and widening of the Peverly Hill Road intersection with Mirona and Banfield Roads. The project encompasses preliminary design through final design, including the public meeting process and bid document development.

.....
Education

B.S., Civil Engineering, Clarkson University, Potsdam, NY, 1987
Moss and MXRoads Training
ITE Traffic Signal Design Seminar
Urban Drainage Design Seminar
Roadside Design Guide Seminar
Hazardous Waste Seminar
Roundabout Design Seminar
Tire Shred Seminar
Microstation Training

Affiliations

American Society of Civil Engineers, Member
New Hampshire Public Works and Municipal Engineering Association, Member

Registration

Registered Professional Engineer: New Hampshire, Maine



THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION



JRGEN N. CAMPBELL, JR.
COMMISSIONER

JEFF BRILLHART, P.E.
ASSISTANT COMMISSIONER

NEWINGTON-DOVER
NHS-0271(037)
11238
(PART C)

Bureau of Highway Design
Room 200 (CMF)
Tel. (603) 271-6675
Fax (603) 271-7025

December 18, 2008

Mr. Francis S. O'Callaghan, P.E.
Vanasse Hangen Brustlin, Inc.
Kilton Road
Six Bedford Farms, Suite 607
Bedford, NH 03110-6532

Dear Mr. O'Callaghan:

In accordance with Article I, Section H (Work Schedule and Progress Reports) of the above subject Agreement, you are hereby authorized to proceed.

The effective date of this Notice to Proceed is December 18, 2008. In accordance with the Governor & Council Resolution authorizing this Agreement, the completion date is December 31, 2013.

Please contact me at your earliest convenience to arrange a turnover of the materials to be furnished by the Department. We are looking forward to working with you on this Contract.

Sincerely,

Christopher M. Waszczuk, P.E.
Chief Project Manager

CMW/wjh

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THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION



GEORGE N. CAMPBELL, JR.
COMMISSIONER

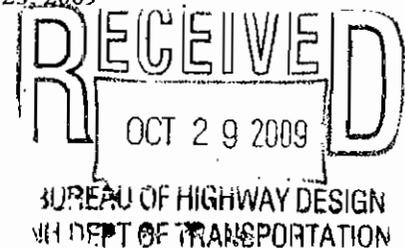
JEFF BRILLHART, P.E.
ASSISTANT COMMISSIONER

NEWINGTON-DOVER
NHS-0271(037)
11238
(PART C)
(Agreement Dated November 5, 2008
Contract No. 866125)

Bureau of Highway Design
Room 200 (CMF)
Tel. (603) 271-6675
Fax (603) 271-7025

October 23, 2009

Mr. Francis S. O'Callaghan, P.E.
Vanasse Hangen Brustlin, Inc.
6 Bedford Farms Drive, Suite 607
Bedford, NH 03110-6532



Dear Mr. O'Callaghan:

This letter amends Article II, Section A (General Fee) in the above-referenced Agreement by reapportioning specific contract funds in the amount of \$178,570.07 for the addition of two new subconsultant firms as well as an adjustment to the fee for an existing subconsultant. Of the above amount, \$39,984.77 is the fee for AECOM Technical Services, Inc. for hydrodynamic modeling services; \$96,736.00 is the fee for Corven Engineering, Inc. for the independent analysis of the new southbound Little Bay Bridge superstructure design; and \$41,849.30 is being added to the previous amount for GM2 Associates to correct an oversight in the original agreement. The fee for Vanasse Hangen Brustlin, Inc. is correspondingly being reduced by \$178,570.07 to balance the increases outlined above.

The portion of Article II, Section A (General Fee) specifying the dates for the fee and manhour estimates is being amended to read as follows:

"The total amount to be paid under this AGREEMENT shall not exceed \$14,962,127.00, the sum of the amounts shown in Article II, Section B (which amount is based on the CONSULTANT'S fee and manhour estimates of September 25, 2008 and October 7, 2009),..."

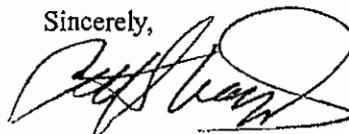
Furthermore, this fee reapportionment revises the amounts in Article II, Section B (Summary of Fees) as follows:

- Decreases the estimated amount of (a) actual CONSULTANT'S salaries, costs applicable to actual salaries, salary burden (direct and indirect) and administrative costs attributable to overhead by \$160,726.97, from \$7,015,187.00 to \$6,854,460.03.
- Decreases the amount of (b) fixed fee to cover profit and non-reimbursed costs by \$16,073.10, from \$701,519.00 to \$685,445.90.
- Decreases the estimated amount of (c) reimbursement for direct, out-of-pocket expenses by \$1,770.00, from \$309,000.00 to \$307,230.00.

- Changes the estimated amount of (d) reimbursement for actual cost of subconsultants as follows:
 - AECOM Technical Services, Inc. - services to be added for an estimated fee of \$39,984.77.
 - Amman & Whitney - remains unchanged at \$1,368,373.00.
 - Clough, Harbour & Associates LLP - remains unchanged at \$3,811,738.00.
 - Comprehensive Environmental Incorporated - remains unchanged at \$921,321.00.
 - Corven Engineering, Inc. - services to be added for an estimated fee of \$96,736.00.
 - Fitzgerald & Halliday, Inc. - remains unchanged at \$157,491.00.
 - GM2 Associates, Inc. - increases by \$41,849.30, from \$229,987.00 to \$271,836.30.
 - Independent Archaeological Consulting, LLC - remains unchanged at \$314,474.00.
 - Lewis & Zimmerman Associates, Inc. - remains unchanged at \$133,037.00.

The above reapportionment of the fee does not change the total amount payable under this Agreement, which remains at \$14,962,127.00 by this amendment.

Sincerely,



Christopher M. Waszczuk, P.E.
Chief Project Manager



Approved: William J. Cass, P.E.
Director of Project Development

We concur in the above Amendment.

VANASSE HANGEN BRUSTLIN, INC.

By: Francis S. O'Callaghan

Title: Exec VP

**STATE OF NEW HAMPSHIRE
INTER-DEPARTMENT COMMUNICATION**

FROM: Christopher M. Waszszuk, P.E.
Chief Project Manager

DATE: October 23, 2009
AT (OFFICE): Department of Transportation
Bureau of Highway Design
(CMF)

SUBJECT: NEWINGTON-DOVER
NHS-0271(037)
11238
(PART C)
(Agreement Dated November 5, 2008 - Contract No. 866125)

TO: William J. Cass, P.E.
Director of
Project Development

ATTENTION: Michelle Drouin

THRU: William P. Janelle, P.E.
Assistant Director of
Project Development

MEMORANDUM

Transmitted with this memo is a letter to Vanasse Hangen Brustlin, Inc. (VHB) on the above-noted project (final design of the widening of an approximately 3.5-mile section of the Spaulding Turnpike in the Town of Newington and City of Dover) authorizing an amendment to the contract to reapportion the distribution of specific contract funds in the amount of \$178,570.07 for the addition of two new subconsultant firms as well as an adjustment to the fee for an existing subconsultant. Of the above amount, \$39,984.77 is the fee for AECOM Technical Services, Inc. for hydrodynamic modeling services; \$96,736.00 is the fee for Corven Engineering, Inc. for the independent analysis of the new southbound Little Bay Bridge superstructure design; and \$41,849.30 is being added to the previous amount for GM2 Associates to correct an oversight in the original agreement. The fee for Vanasse Hangen Brustlin, Inc. is correspondingly being reduced by \$178,570.07 to balance the increases outlined above. The reapportionment of the fee was requested by the Consultant in their letter dated October 7, 2009. Department approval for this fee reapportionment amendment was requested by the previous memorandum dated October 22, 2009.

Governor and Council approval is not required for this reapportionment of the fee since it does not change the previously-authorized total amount payable under the agreement, which remains at \$14,962,127.00.

No Federal Highway Administration approval is required since the Preliminary Engineering for this project is being funded with Turnpike funds.

The attached letter (three originals) is ready for execution and forwarding to the Consultant.

Upon execution of the letter, please make the same distribution as you did of the original Agreement.

CMW/wjh
Attachments

s:\newington\11238\memo\vhb 10-17-08 ram.doc

