



JEFF BRILLHART, P.E.
ACTING COMMISSIONER

THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

MAR 31 11 54 AM 12:34



JB

Beard

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

Bureau of Materials & Research
March 23, 2015

REQUESTED ACTION

Authorize the Department of Transportation to amend a **sole-source** Cooperative Project Agreement (CPA) with the UNH Sponsored Programs Administration (Vendor 177867) Durham, New Hampshire by extending the completion date from June 30, 2015 to December 31, 2015, effective upon Governor and Council approval. The original Agreement was approved by Governor and Council on January 15, 2014, Item #69. This is a time extension only, requiring no additional funds. *100% Federal Funds*

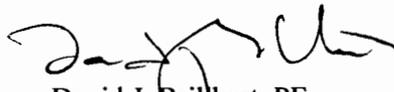
EXPLANATION

The Department is collaborating with UNH to conduct a cooperative research study to validate pollutant load estimates from highways and roads. As stormwater runoff regulatory limits become more specific, it is important to have accurate pollutant mass load information to account for mass load reduction credit achieved through stormwater treatment practices. Pollutant transport characteristics for New Hampshire will provide the Department with a collection of real time data that will serve to validate the pollutant mass loading and credit from stormwater best management treatment practices. UNH is uniquely qualified to conduct this study because of its comprehensive knowledge directly aligned with a particular area of University expertise. In addition, the Principal Investigator is a nationally recognized expert in his field.

On January 15, 2014, the original CPA was approved by Governor and Council (Item #69; copy of resolution attached). This requested action extends the completion date of the second project only, Statewide-SPR 15680Y, Validating Pollutant Load Estimates from Highways and Roads, from June 30, 2015 to December 31, 2015. Stormwater monitoring and sampling performed by the researchers from UNH is dependent on weather conditions. Last year's sampling window did not provide enough rain events to meet required tasks. A second season of monitoring is planned to capture stormwater runoff from low, medium, and high volume roadways. Additional time is required for sample collections, data analysis, and final report.

This amended Agreement has been approved by the Attorney General as to form and execution. 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. Your approval of this extension is respectfully requested.

Sincerely,


David J. Brillhart, PE
Acting Commissioner

Attachments

**AMENDMENT #1 to
COOPERATIVE PROJECT AGREEMENT**
between the
STATE OF NEW HAMPSHIRE, Department of Transportation
and the
University of New Hampshire of the UNIVERSITY SYSTEM OF NEW HAMPSHIRE

The Cooperative Project Agreement, approved by the State of New Hampshire Governor and Executive Council on 1/15/14, item # 69, for the Project titled "Validating Pollutant Load Estimates for Highways and Roads," Campus Project Director, Dr. Thomas Ballestero, is and all subsequent properly approved amendments are hereby modified by mutual consent of both parties for the reason(s) described below:

Purpose of Amendment (Choose all applicable items):

- Extend the Project Agreement and Project Period end date, at no additional cost to the State.
- Provide additional funding from the State for expansion of the Scope of Work under the Cooperative Project Agreement.
- Other:

Therefore, the Cooperative Project Agreement is and/or its subsequent properly approved amendments are amended as follows (Complete only the applicable items):

- Article A. is revised to replace the State Department name of _____ with _____ and/or USNH campus from _____ to _____.
- Article B. is revised to replace the Project End Date of 6/30/15 with the revised Project End Date of 12/31/15, and Exhibit A, article B is revised to replace the Project Period of G&C approval – June 30, 2015 with G& C approval – December 31, 2015.
- Article C. is amended to expand Exhibit A by including the proposal titled, " _____ ," dated _____.
- Article D. is amended to change the State Project Administrator to _____ and/or the Campus Project Administrator to _____.
- Article E. is amended to change the State Project Director to _____ and/or the Campus Project Director to _____.
- Article F. is amended to add funds in the amount of \$ _____ and will read:
Total State funds in the amount of \$ _____ have been allotted and are available for payment of allowable costs incurred under this Project Agreement. State will not reimburse Campus for costs exceeding the amount specified in this paragraph.
- Article F. is amended to change the cost share requirement and will read:
Campus will cost-share _____ % of total costs during the amended term of this Project Agreement.
- Article F. is amended to change the source of Federal funds paid to Campus and will read:
Federal funds paid to Campus under this Project Agreement as amended are from Grant/Contract/Cooperative Agreement No. _____ from _____ under CFDA# _____ Federal

regulations required to be passed through to Campus as part of this Project Agreement, and in accordance with the Master Agreement for Cooperative Projects between the State of New Hampshire and the University System of New Hampshire dated November 13, 2002, are attached to this document as **revised** Exhibit B, the content of which is incorporated herein as a part of this Project Agreement.

- Article G. is exercised to amend Article(s) _____ of the Master Agreement for Cooperative Projects between the State of New Hampshire and the University System of New Hampshire dated November 13, 2002, as follows:

Article _____ is amended in its entirety to read as follows:

Article _____ is amended in its entirety to read as follows:

- Article H. is amended such that:

- State has chosen **not to take** possession of equipment purchased under this Project Agreement.
- State has chosen **to take** possession of equipment purchased under this Project Agreement and will issue instructions for the disposition of such equipment within 90 days of the Project Agreement's end-date. Any expenses incurred by Campus in carrying out State's requested disposition will be fully reimbursed by State.

- Exhibit A is amended as attached.

- Exhibit B is amended as attached.

All other terms and conditions of the Cooperative Project Agreement remain unchanged.

This Amendment, all previous Amendments, the Cooperative Project Agreement, and the Master Agreement constitute the entire agreement between State and Campus regarding the Cooperative Project Agreement, and supersede and replace any previously existing arrangements, oral and written; further changes herein must be made by written amendment and executed for the parties by their authorized officials.

This Amendment and all obligations of the parties hereunder shall become effective on the date the Governor and Executive Council of the State of New Hampshire or other authorized officials approve this Amendment to the Cooperative Project Agreement.

IN WITNESS WHEREOF, the following parties agree to this **Amendment #** _____ to the Cooperative Project Agreement.

**By An Authorized Official of:
University of New Hampshire**

Name: Karen Jensen

Title: Manager, Sponsored Program Administrator

Signature and Date: [Signature] 3/11/15

**By An Authorized Official of: the New
Hampshire Office of the Attorney General**

Name: John J. Conforti

Title: Assistant Attorney General

Signature and Date: [Signature] 3/20/15

**By An Authorized Official of:
Department of Transportation**

Name: William J. Cass

Title: Director of Project Development

Signature and Date: [Signature] 3/23/15

**By An Authorized Official of: the New
Hampshire Governor & Executive Council**

Name: _____

Title: _____

Signature and Date: _____



THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION



69

CHRISTOPHER D. CLEMENT, SR.
COMMISSIONER

JEFF BRILLHART, P.E.
ASSISTANT COMMISSIONER

Bureau of Materials & Research
December 12, 2013

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

REQUESTED ACTION

- 1. Authorize the Department of Transportation to execute a sole-source Cooperative Project Agreement with the UNH Sponsored Programs Administration (Vendor 177867), Durham, New Hampshire, for a total fee not to exceed \$79,794, for a cooperative investigation to investigate and test accelerated bridge construction alternatives (SPR15680X) effective upon Governor and Council approval, through June 30, 2015. 100% Federal Funds.
2. Authorize the Department of Transportation to execute a sole-source Cooperative Project Agreement with the UNH Sponsored Programs Administration (Vendor 177867), Durham, New Hampshire, for a total fee not to exceed \$70,000, for a cooperative investigation to assess and develop planning tools that will validate pollutant load coefficients used for water quality modeling of stormwater runoff (SPR 15680Y) effective upon Governor and Council approval, through June 30, 2015. 100% Federal Funds.

Funding is available as follows:

Table with 3 columns: Fund Code, FY 2014, FY 2015. Rows include SPR Research Funds and 046-500464 General Consultants Non-Benefit.

EXPLANATION

The research studies included in the requested action will each address an immediate Department need; are unique to New Hampshire's environment and conditions, thereby requiring substantial local experience; and are directly aligned with a particular area of University expertise. In addition, the Principal Investigators are nationally recognized experts in their respective fields. As such, the proposed work does not lend itself to a selection process that includes private industry or out-of-state organizations, and it is in the Department's and the State's best interest to work directly with the University of New Hampshire.

This work is part of the Departments Statewide Planning and Research (SPR) program. The requested action is in furtherance of a long-standing cooperative relationship of transportation research between the Department of Transportation and the University of New Hampshire. This relationship has been mutually beneficial, culminating in savings to the State while enhancing work force development and maintaining New Hampshire's position on the leading edge of new technology. Research studies conducted by UNH for the Department have led to numerous innovations in the highway and bridge industry, including such successes as high performance concrete, improved pavements, alternative reinforcing for bridge decks, increased use of recycled materials, and rapid construction techniques.

Statewide-SPR 15680X, Accelerated Bridge Construction (ABC) Alternatives for NH Bridges

The UNH Structures Group has performed extensive developmental research for the Department's bridge projects including the Gilford 15903 bridge rehabilitation project scheduled for construction in 2018. This research will provide the Department with additional analysis to evaluate the stresses induced in the concrete slab during placement thereby providing necessary guidelines for the bridge contractors and fabricators.

~~Additional work will investigate alternatives to expedite the placement of foundation members and installation of bridge approach roadways on saturated clay materials. The Department needs to address concerns of the environment and structural integrity in order to design an economically viable plan for the US4 bridge over Bunker Creek in Durham. Multiple road and bridge layout and structural design alternatives are being considered, which will be investigated with respect to the stated issues and concerns.~~

Statewide-SPR 15680Y, Validating Pollutant Load Estimates from Highways and Roads

It has been documented that the stormwater runoff from impervious surfaces degrades water quality. As stormwater runoff regulatory limits become more specific, it is important to have accurate pollutant mass load information to account for mass load reduction credit achieved through stormwater treatment practices.

The planning tools for pollutant mass load and export coefficients were developed 20 to 30 years ago. This research will validate coefficients necessary for NHDOT and municipal agencies that manage the critical planning and pollutant accounting information.

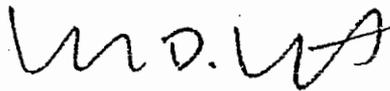
Highway traffic counts will be used in conjunction with stormwater sampling and monitoring to develop flow-weighted event mean concentrations (EMCs). The resultant EMCs will be used in the United States Environmental Protection Agency's Storm Water Management Model to develop simulated export coefficients based on dominant precipitation patterns. Pollutant transport characteristics for New Hampshire will provide the Department with a collection of real time data that will serve to validate the pollutant mass loading and credit from stormwater best management treatment practices.

These Agreements have 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 Agreements 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.

The project funding is 80% federal funds with 20% state match. Turnpike toll credit is being utilized for match requirements, effectively using 100% federal funds.

It is respectfully requested that authority be given to enter into two (2) sole-source Agreements for consulting services as outlined above.

Sincerely,



Christopher D. Clement, Sr.
Commissioner

Attachments