



THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION



Victoria F. Sheehan
Commissioner

William Cass, P.E.
Assistant Commissioner

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

Bureau of Materials & Research
June 28, 2018

REQUESTED ACTION

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 \$24,955.00. Funding is provided by the Federal State Transportation Innovation Councils (STIC) Incentive Program through project STIC Incentive for Green Infrastructure Restoration and Resiliency for Linear Transportation (NHDOT 40792E), effective upon Governor and Council approval, through December 31, 2019. 100% Federal Funds.

Funding to support this request are anticipated to be available in the following account in State FY 2019:

Table with 2 columns: Account Number and Amount. Row 1: 04-96-96-963515-3054, FY 2019. Row 2: Consolidated Federal, \$24,955.00. Row 3: 046-500464 General Consultants Non-Benefit, \$24,955.00.

EXPLANATION

The purpose of the STIC Incentive Program is to provide funding to support the costs of standardizing innovative practices in a state transportation agency or other public sector.

The University of New Hampshire (UNH or University) will work with New Hampshire Department of Transportation (NHDOT) and municipal end users and other regional stormwater coalitions to document and develop standard details for innovative stormwater control measures implemented and reinvented throughout the region. Researchers will work with end users to compile design information, including typical cross-sections, system capital costs, updated operations and maintenance procedures, maintenance costs, and existing measured or modeled performance efficiencies.

The requested action will address an immediate Department need; is 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. It is in the Department's and the State's best interest to work directly with the University of New Hampshire.

These innovations in Green Infrastructure are applicable in linear transportation environments or other locations where improved stormwater control is necessary. They have been pioneered in the Berry Brook watershed in Dover, NH and are applicable in new construction projects as well as part of everyday infrastructure updates and improvements.

STIC Incentive funds provide a Federal share of 80 percent. The 20 percent non-Federal match may come from project sponsors or other allowable funding sources. For reference, the following table shows the funding allocations:

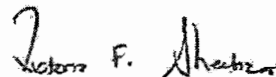
Agency	Federal STIC Funds	UNH Cost Share	Project Total
Cost	\$24,955 (80%)	\$7,500 (23%)	\$32,455

Authorization is requested to allow the Department to enter into this agreement with the sub-recipient to ensure compliance with Federal Aid requirements and to permit State personnel to supervise the project and the Department to expend Federal funds.

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

It is respectfully requested that authority be given to enter into a sole-source Agreement for consulting services as outlined above.

Sincerely,



Victoria F. Sheehan
Commissioner

Attachments

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

- A. This Cooperative Project Agreement (hereinafter "Project Agreement") is entered into by the State of New Hampshire, **Department of Transportation**, (hereinafter "State"), and the University System of New Hampshire, acting through **University of New Hampshire**, (hereinafter "Campus"), for the purpose of undertaking a project of mutual interest. This Cooperative Project shall be carried out under the terms and conditions of the Master Agreement for Cooperative Projects between the State of New Hampshire and the University System of New Hampshire dated November 13, 2002, except as may be modified herein.
- B. This Project Agreement and all obligations of the parties hereunder shall become effective on the date the Governor and Executive Council of the State of New Hampshire approve this Project Agreement ("Effective date") and shall end on **12/31/19**. If the provision of services by Campus precedes the Effective date, all services performed by Campus shall be performed at the sole risk of Campus and in the event that this Project Agreement does not become effective, State shall be under no obligation to pay Campus for costs incurred or services performed; however, if this Project Agreement becomes effective, all costs incurred prior to the Effective date that would otherwise be allowable shall be paid under the terms of this Project Agreement.
- C. The work to be performed under the terms of this Project Agreement is described in the proposal identified below and attached to this document as Exhibit A, the content of which is incorporated herein as a part of this Project Agreement.

Project Title: Green Infrastructure Restoration and Resiliency for Linear Transportation

- D. The Following Individuals are designated as Project Administrators. These Project Administrators shall be responsible for the business aspects of this Project Agreement and all invoices, payments, project amendments and related correspondence shall be directed to the individuals so designated.

State Project Administrator

Name: Ann M. Scholz
 Address: NHDOT Bureau of Mat'ls & Research
PO Box 483, 5 Hazen Drive
Concord, NH 03302-0483

Phone: 603 271-1659

Campus Project Administrator

Name: Cheryl Moore
 Address: University of New Hampshire
Sponsored Programs Administration
51 College Rd. Rm 116
Durham, NH 03824

Phone: 603 862-1992

- E. The Following Individuals are designated as Project Directors. These Project Directors shall be responsible for the technical leadership and conduct of the project. All progress reports, completion reports and related correspondence shall be directed to the individuals so designated.

State Project Director

Name: James Marshall
 Address: PO Box 483, 7 Hazen Drive
Concord, NH 03302-0483

Phone: 603 271-1659

Campus Project Director

Name: Dr. James Houle
 Address: University of New Hampshire
Stormwater Center
244 Gregg Hall
Durham, NH 03524

Phone: 603 767-7091

F. Total State funds in the amount of \$24955 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.

Check if applicable

Campus will cost-share 23 % of total costs during the term of this Project Agreement.

Federal funds paid to Campus under this Project Agreement are from Grant/Contract/Cooperative Agreement No. _____ from **Department of Transportation** under CFDA# **20.205**. 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 Exhibit B, the content of which is incorporated herein as a part of this Project Agreement.

G. Check if applicable

Article(s) **7** of the Master Agreement for Cooperative Projects between the State of New Hampshire and the University System of New Hampshire dated November 13, 2002 is/are hereby amended to read:

Budget reallocations to cost share will require prior State approval.

H. 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.

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

IN WITNESS WHEREOF, the University System of New Hampshire, acting through the **University of New Hampshire** and the State of New Hampshire, _____ have executed this Project Agreement.

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

Name: Karen M. Jensen

Title: Manager, Sponsored Programs Administration

Signature and Date: [Signature] 5/10/18

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

Name: Allison Greenstein

Title: Attorney

Signature and Date: [Signature] 6/22/18

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

Name: Peter E. Stamnas

Title: Director of Project Development

Signature and Date: [Signature] 5/17/2018

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

Name: _____

Title: Deputy Secretary of State

Signature and Date: _____

EXHIBIT A

- A. Project Title:** Green Infrastructure Restoration and Resiliency for Linear Transportation
- B. Project Period:** Upon G&C Approval - December 31, 2019
- C. Objectives:** The project team will work with New Hampshire Department of Transportation (NHDOT) and municipal end users and other regional stormwater coalitions to document and develop standard details for innovative stormwater control measures implemented and reinvented throughout the region.
- D. Scope of Work:** Researchers will work with end users to compile design information, including typical cross-sections, system capital costs, updated operations and maintenance procedures, maintenance costs, and existing measured or modeled performance efficiencies. These innovations in Green Infrastructure are applicable in linear transportation environments or other locations where improved stormwater control is necessary. They have been pioneered in the Berry Brook watershed in Dover, NH and are applicable in new construction projects as well as part of every day infrastructure updates and improvements. To date there have been three innovations that have been documented:
- Subsurface gravel filter: Mimics the hydrologic and water quality performance of Porous Asphalt systems with regular dense pavement surface. The hydraulic inlet and outlets are controlled through perforated pipes underdrains and orifice controls.
 - Linear infiltration trench: A simple, but effective innovation instead of solid pipe, perforated pipe is installed between catch basin structures and enveloped in stone to promote infiltration. Inlets are protected from leaf litter and gross solids by non-skimming inlet controls.
 - Sectional Media Box Filter: Non-proprietary Filtering Catch Basin Designed to replace conventional deep sump catch basin structures where additional water quality treatment (filtration) is required. In its third iteration this low cost structure can continue to be modified and adapted to target specific pollutants of concern.
- E. Deliverables Schedule:** The project is anticipated to start by 6/20/2018 and be completed by 12/31/19. A Progress Report (template provided by NHDOT), as required by the FHWA incentive funding, will be due on September 30, 2018, March 31, 2019, and September 30, 2019. A summary report (4-6 pages) that includes a description of the project, a breakdown of the overall budget, description of how the work met the program criteria, results, challenges, and lessons learned will be due when the project is complete.
- F. Budget and Invoicing Instructions:** Campus will submit invoices to State on regular Campus invoice forms no more frequently than monthly and no less frequently than quarterly. Invoices will be based on actual project expenses incurred during the invoicing period, and shall show current and cumulative expenses by major cost categories and shall document cumulative cost sharing of Dr. Thomas Ballestero's salary, fringe benefits; and facilities and administrative cost through the end of the invoicing period according to the following table. State will pay Campus within 30 days of receipt of each invoice. Campus will submit its final invoice not later than 60 days after the Project Period end date. Total payments will not exceed 90% until receipt of the final summary report acceptable to the State. State will provide final payment within 30 days of receipt of the accepted final report.

Budget Items	State Funding	Cost Sharing (if required)	Total
1. Salaries & Wages	13,123	4,095	17,218
2. Employee Fringe Benefits	4,237	1,730	5,967
3. Travel	425	127	552
4. Supplies and Services	2,021	0	2,021
5. Equipment 0 0 0			
6. Facilities & Admin Costs	5,149	1,548	6,697
Subtotals	24,955	7,500	32,455

EXHIBIT B

This Project Agreement is funded under a Grant/Contract/Cooperative Agreement to State from the Federal sponsor specified in Project Agreement article F. All applicable requirements, regulations, provisions, terms and conditions of this Federal Grant/Contract/Cooperative Agreement are hereby adopted in full force and effect to the relationship between State and Campus, except that wherever such requirements, regulations, provisions and terms and conditions differ for INSTITUTIONS OF HIGHER EDUCATION, the appropriate requirements should be substituted (e.g., OMB Circulars A-21 and A-110, rather than OMB Circulars A-87 and A-102). References to Contractor or Recipient in the Federal language will be taken to mean Campus; references to the Government or Federal Awarding Agency will be taken to mean Government/Federal Awarding Agency or State or both, as appropriate.

Special Federal provisions are listed here: None or **Uniform Guidance issued by the Office of Management and Budget (OMB) in lieu of Circulars listed in paragraph above. .**