

The Pennsylvania State University Master Agreement
Contract number: 4400008014
Agency Request – Work Plan

Agency and Project Name:

Pennsylvania Department of Transportation
Best Practices for the Design, Evaluation and Quality Control of High Percentage RAP Mixes
Work Order (WO) 10

Objective:

The purpose of this project is to propose specific changes to PennDOT documents and procedures in order to implement best practices for the design, evaluation, and quality control of “high” RAP asphalt pavement mixtures in Pennsylvania.

Is this a continuation of services?

☒ NO ☐ YES

If yes, previous Purchase Order Number: N/A

Time Frame of Project:

Estimated Duration: 12 Months

Budgeting:

PennDOT purchase orders under this Master Agreement will be issued as fixed price. The University shall present its budget as a fixed price per project task/deliverable.

Project Site:

Pennsylvania Department of Transportation
Bureau of Project Delivery
Materials and Testing Division
81 Lab Lane
Harrisburg, PA 17110

Key Personnel:

Key personnel for this project are civil engineers and researchers with pavement-related experience as well as technical experts related to the assessment of pavement data and pavement materials processing and production. Principal investigators and co-principal investigators are always key personnel; student and wage payroll employees are not key personnel.

Statement of Work:

PennDOT is asking PSU to recommend procedures for implementation of best practices in the design, evaluation, and quality control of “high” RAP asphalt pavement mixtures in Pennsylvania.

Attachment 1

The implementation should be consistent with the recommendations offered in the published National Cooperative Highway Research Program (NCHRP) Report 752 entitled, "Improved Mix Design, Evaluation, and Materials Management for Hot-Mix Asphalt with High Reclaimed Asphalt Pavement Content" and a companion document entitled, "Best Practices for RAP Management" (NCHRP Report 752, Appendix D). The work of the FHWA Mix Expert Technical Group (ETG) on assessment of High RAP in mix design procedures and performance evaluations also needs to be considered in this assessment and development of an implementation plan for PennDOT.

Given the recommended best practices in the above-cited documents, propose draft changes to producer minimum QC requirements for RAP management, as well as draft changes to PennDOT publications (to include, but not limited to, Pubs. 2, 408, & 27) and procedures adapting these best management practices to PennDOT. Develop an implementation plan with action items, responsibilities and timeframes.

Anticipated deliverables for potential implementation by the Department would include:

Point by point analysis of the BMPs in the documents;

Required changes to PennDOT and producer procedures to implement BMPs.

Priority list of the effectiveness of each of the recommended points for both warm mix and hot mix designs.

Identify additional work or studies or data collection to verify the recommendations in the NCHRP reports specifically for PennDOT and recommend desired features for a pilot program.

Provide draft changes in a red-line format using the current Word document of the Publications for circulation for comment to transportation partners. Address response comments from a minimum of two rounds of circulation of these draft changes.

Confidential Information:

N/A

Copyright Ownership:

Ownership of materials developed as part of the scope of work for Project Tasks. *Agency must check one of the provisions:*

☒ Work Made for Hire/University Non-Exclusive License

☐ Purchase Orders Vesting Title in the University and Granting a Non-Exclusive License to the Commonwealth

Reporting:

During the term of the work the University Principal Investigator shall:

- 1) Attend a kick-off meeting, to be held in person and/or via conference call, no later than **two (2) weeks** following the Notice to Proceed date.
- 2) Inform the PennDOT Project Manager and Technical Advisor of all project-related meetings at least **two (2) weeks** prior to the meeting date if the date has not previously been decided by the meeting participants.
- 3) Provide written minutes of, and action items resulting from, all project meetings within **ten (10) working days** of the meetings.
- 4) Schedule a project review meeting no later than **ninety (90) days** prior to the project end date.
- 5) Submit Monthly Progress Reports within **ten (10) working days** of a completed month.
- 6) Submit task reports, as delineated in the scope of work, in a reproducible electronic version compatible with the most current version being used by PennDOT (currently PennDOT is using Microsoft Office) .
- 7) Submit the Final Report in a reproducible electronic version on **two (2) CDs and/or two (2) USB Drives** compatible with the most current version being used by PennDOT (currently PennDOT is using Microsoft Office) in addition to **three (3) bound and two (2) unbound copies**.
- 8) Show the deliverables due to PennDOT, using Table 1 shown below, by including the table in the project scope of work in Attachment 2 and Attachment 3.

Table 1.

Task	Description	Month Due from Notice to Proceed Date
	Draft Final Report	
	Final Report	

- 9) Document oral or written communications that may affect the scope, budget, deliverables or time frame of the work and relay the documentation immediately to the PennDOT Project Manager by telephone, e-mail or memo for consideration, recognizing that changes will be effective only through execution of a modification to the project purchase order.

Management Plan and Staffing:

In this section of Attachment 2 and Attachment 3, the University Principal Investigator shall place the employee's names and hours per task into a table such as Table 2 below.

The Principal Investigator shall also notify the PennDOT Project Manager in writing to identify new work team members who are key personnel prior to their addition to the team and prior to charging their time to the project.

Table 2. Proposed Person-Hours by Task

Team Member	Task 1	Task 2	Task X	TOTAL
Key Project Team Members, Estimated Hours per Task				
Team Member Name				
Team Member Name				
Team Member Name				
Other Project Team Members Estimated Hours per Task				
Team Member Name				
Team Member Name				
Team Member Name				
Totals				

Confirmation of Service and Invoicing:

For payment upon completion of a task deliverable, the University Administrator must submit the invoice cover letter, PennDOT OS-501 Confirmation of Service form, along with the monthly progress report(s) and a copy of an email from PennDOT verifying that the task deliverable has been accepted.

Federal Pass Through Information:

If funding for this project stems from a Federal Agency, the source of these funds must be disclosed notifying University of the respective percentages of state funds and federal funds that will be utilized for payment for this service. The following information is required or the University may not provide a quote.

Federal Agency: US Department of Transportation
 Sub-Agency: Federal Highway Administration

Catalog of Federal Domestic Assistance (CFDA) number *(if applicable)*: 20.205

Percentage of federal funding: 80%
 Percentage of state funding: 20%

If at any time, the funding sources or percentages are changed it is the responsibility of the Agency to notify the University. If Federal funds are increased, the University has the right to revise the indirect costs at that time or anytime that the percentage of Federal Funds has increased. The Agency will be responsible for payment of additional costs associated with the change in funding source or change in funding percentages.

Attachment 1

Signature attesting to Funds appropriated for Project:

Shelly Scott 1/24/14
Contract Administrator Date

(The Agency has the option to competitively solicit the procurement with other suppliers if the University's proposed budget is not considered reasonable).

Signatures attesting to the commitment of PennDOT to this project:

Timothy Z. Raming 1/17/14
Technical Advisor Date

Debra Dawson 1/27/2014
Research Program Management Section Manager Date

[Signature] 1/27/14
Research Division Manager Date