**TRANSPORTATION POOLED FUND PROGRAM**

**QUARTERLY PROGRESS REPORT**

Lead Agency (FHWA or State DOT): \_\_\_\_\_IOWA DOT\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**INSTRUCTIONS:**

*Project Managers and/or research project investigators should complete a quarterly progress report for each calendar quarter during which the projects are active. Please provide a project schedule status of the research activities tied to each task that is defined in the proposal; a percentage completion of each task; a concise discussion (2 or 3 sentences) of the current status, including accomplishments and problems encountered, if any. List all tasks, even if no work was done during this period.*

|  |  |
| --- | --- |
| **Transportation Pooled Fund Program Project #***TPF-5(169)* | **Transportation Pooled Fund Program - Report Period:**□Quarter 1 (January 1 – March 31) Quarter 2 (April 1 – June 30)XQuarter 3 (July 1 – September 30)□Quarter 4 (October 4 – December 31) |
| **Project Title: Field Monitoring of Curved Girder Bridges with Integral Abutments** |
| **Project Manager: Phone: E-mail:**Ahmad Abu-Hawash 515-239-1393 ahmad.abu-hawash@dot.iowa.gov |
| **Project Investigator: Phone: E-mail:**Brent Phares 515-294-5879 bphares@iastate.edu |
| **Lead Agency Project ID:**RT 281 | **Other Project ID (i.e., contract #):**Addendum 323 | **Project Start Date:** 6/01/08 |
| **Original Project End Date:** 5/31/13 | **Current Project End Date:**  | **Number of Extensions:** |

Project schedule status:

X On schedule □ On revised schedule □ Ahead of schedule □ Behind schedule

Overall Project Statistics:

|  |  |  |
| --- | --- | --- |
|  **Total Project Budget** |  **Total Cost to Date for Project** |  **Total Percentage of Work** **Completed** |
| $325,000.00 | $193,191.24 | 60% |

***Quarterly*** Project Statistics:

|  |  |  |
| --- | --- | --- |
|  **Total Project Expenses** **This Quarter** |  **Total Amount of Funds**  **Expended This Quarter** | **Percentage of Work Completed** **This Quarter** |
| $16,660.94 |  | 5% |

**Project Description:**

* Group 1 – Information Collection
	+ Form TAC
	+ Survey of available technologies
	+ Review of available engineering literature
	+ Inspect existing curved and chorded curved girder bridges
* Group 2 – Collect and Analyze Data on the Performance of Five or More Bridges
	+ Finalize an instrumentation plan
	+ Monitor and analyze behavior of bridges for two thermal cycles
	+ Develop and Validate simple analytical models
* Group 3 – Develop Project Conclusions and Recommendations
	+ Establish a meeting with TAC
	+ Submit final report

**Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):**

Following the last TAC meeting, the project team embarked on finalizing the process of analyzing the field collected data (both long- and short-term). In essence, that TAC meeting finalized the way that the results will be presented. Work, therefore, has focused on analyzing and presenting the data. Of particular interest is the fact that the research team has begun the process of trying to identify differences in behavior for each of the bridges and trying to correlate those differences with geometrical differences.

**Anticipated work next quarter:**

We plan to continue analyzing the collected data and to begin drawing conclusions with respect to long-term behavior and associated bridge design. Analysis of the live load response will continue but will not be ready to draw conclusions.

**Significant Results:**

We are finding that there are considerable forces developed from temperature variations – a parameter that does not seem to be taken into account during design.

**Circumstance affecting project or budget (Describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope, and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).**

No problems have been encountered in the last quarter.