## KANSAS

## DEPARTMENT OF TRANSPORTATION DEB MILLER, SECRETARY

KATHLEEN SEBELIUS, GOVERNOR

LON INGRAM, CHIEF

April 5, 2006

Dr. Paul R. Lowe; Assistant Vice Provost for Research Kansas State University 2 Fairchild Hall Manhattan, Kansas 66506-5103

Dear Dr. Lowe:

We have enclosed an executed copy of a contract coversheet for a second supplemental agreement on the following project:

C1435 KSU (TPF-5(079); RE-0361-01): "Implementation of the 2002 AASHTO Design Guide for Pavement Structures". KDOT is the lead agency on this transportation pooled found project.

Sincerely,

L.S. Ingram, P.E. Chief

Materials and Research

Richard L. McReynolds, P.E.

Engineer of Research

cc: Stefan Romanoschi, Ph.D., Department of Civil Engineering, KSU (w/a)

Steve Foust, Asst. P & R Engineer, FHWA (w/a)

John Ehmen, Bureau of Fiscal Services (w/a)

Susie Lovelady, Bureau of Program & Project Management (w/a)

Greg Schieber, Bureau of Materials and Research (w/a)

Susan Barker, Bureau of Materials and Research (w/a)

Darleen Bernhardt, Bureau of Materials and Research (w/a)

State of Kansas
Department of Administration
Division of Accounts and Reports
Datas (Rev. 05/99)

### **CONTRACT COVER SHEET**

| Agency No. | Diversió       | Ourrent Document Number |
|------------|----------------|-------------------------|
|            |                |                         |
|            | 1000           |                         |
| 276        | THE RESERVE    | A0601435                |
|            | *8643599924555 | 7,000,700               |

| Document Date: 03/13/06 Effective Date:   |                 |                        |               |                                       |          |   |                                     |                                    |  |        | Agy Contract N   | Vo.              | C1435      |            |  |
|---|-----------------|------------------------|---------------|---------------------------------------|----------|---|-------------------------------------|------------------------------------|--|--------|--|------------------|------------|------------|--|
| Vendor Information  |                 |                        |               |                                       |          |   |                                     | Contracting Agency Name & Address  |  |        |  |                  |            |            |  |
|   | No/Sfs          | x <u>3670100</u>       | 000           |                                       | )5       |   |                                     |                                    |  |        |  |                  |            |            |  |
| Name Kansas State University  |                 |                        |               |                                       |          |   |                                     | Kansas                             | Kansas Department of Transportation  |        |  |                  |            |            |  |
| Associate Vice Provost For Research   |                 |                        |               |                                       |          |   | Bureau of Materials and Research    |                                    |  |        |  |                  |            |            |  |
| Street 2 Fairchild Hall   |                 |                        |               |                                       |          |   |                                     | 2300 9                             | 2300 S.W. Van Buren  |        |  |                  |            |            |  |
| City, State Manhattan, KS 66506-1103  |                 |                        |               |                                       |          |   |                                     | Topeka, KS 66611                   |  |        |  |                  |            |            |  |
| & Zip   |                 |                        |               |                                       |          |   |                                     |                                    |  |        |  |                  |            |            |  |
| Sf  | ŤÆ              | Ref Doc                | Sfx 1         | M Rand                                | BFY      | ladex   | PCA                                 | Sub-                               | bi Det   | R      |  | Amount           |            | Agency Use |  |
| 01  | 864             | 02                     |               | 4100                                  | 06       | 0555  | 99170                               | 279                                | )  |        |  | 49,996.00        | 009        |            |  |
|   |                 |                        |               |                                       |          | ļ   |                                     | _                                  | _  | -      |  |                  |            |            |  |
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| <u></u>   |                 |                        |               |                                       |          |   |                                     |                                    |  |        | PER MANAGEMENT AND | it Fotal         |            |            |  |
| CO  | NTRA            | ACT TYPE:              |               |                                       | ······   | ····  |                                     | \$ 49.996.903<br>PRIOR DOC. NO.    |  |        |  |                  |            |            |  |
|   | _ , _ , _ ,     | <del></del>            | lew Contr     | ract                                  |          |   |                                     |                                    |  |        |  |                  |            |            |  |
|   |                 | X                      | mended (      | Contract Te                           | rms      |   |                                     | A0501435                           |  |        |  |                  |            |            |  |
|   |                 | R                      | e-encumb      | per Previous                          | sly Ap   | proved Co   | ntract                              |                                    | Section for the section of the secti |        |  |                  |            |            |  |
| co  | NTRA            | CT DESCRIPTION         |               | •                                     | , ,      |   |                                     |                                    |  | 2002   | 2 AASHT  | O Design Guide   | e for Pave | ment       |  |
|   |                 |                        | Str           | ıctures". İn                          | crease   | of funds a  | and exter                           |                                    |  |        |  |                  |            |            |  |
|   |                 | for Contract (Cite sta | te or federal | l statutes or re                      | gulation | as, etc.)   |                                     | Brior Authorization (2003/4/Cavry) |  |        |  |                  |            |            |  |
| PAYMENT SCHEDULE:   |                 |                        |               |                                       |          |   | 00                                  | <i>y</i>                           |  |        |  |                  |            |            |  |
| Total Contract Commitment Amount: \$ 209,963.00  Contract Beginning Date: October 1, 2003 |                 |                        |               |                                       |          |   | Contract Ending Date: June 30, 2007 |                                    |  |        |  |                  |            |            |  |
|   |                 | requency:              |               |                                       | CIODEL   | payment(s   | <br>of \$                           |                                    |  |        |  |                  |            |            |  |
| -   |                 | requency:              |               | , <u>,</u>                            |          | payment(s   |                                     |                                    |  | - ·    | due  | approved invoice | ********   |            |  |
|   |                 |                        |               |                                       |          | paymonics   | , O4                                | AGENCY APPROVALS:                  |  |        |  |                  |            |            |  |
| APPROVALS: AGENCY   |                 |                        |               |                                       |          |   |                                     |                                    |  |        |  |                  |            |            |  |
|   | /               | L. He                  |               | · · · · · · · · · · · · · · · · · · · |          | MAR 2   | 4 2006                              |                                    |  |        |  |                  |            |            |  |
| Dire  | ctor of         | urchasing              |               |                                       |          | Dat   | e                                   |                                    |  |        |  |                  |            |            |  |
| MAR 2 3 20 <b>06</b>  |                 |                        |               |                                       |          | This contract was prepared and executed at my direction with full knowledge of the obligations incurred. All required approvals for |                                     |                                    |  |        |  |                  |            |            |  |
| - Paril make  |                 |                        |               |                                       |          | our State agency have been obtained.  |                                     |                                    |  |        |  |                  |            |            |  |
| Director of Recounts and Reports Date   |                 |                        |               |                                       |          |   |                                     |                                    |  |        |  |                  |            |            |  |
| Approved as to form and execution:  |                 |                        |               |                                       |          |   |                                     |                                    |  |        |  |                  |            |            |  |
| Lastin Same Do A 2 2 2 1  |                 |                        |               |                                       |          | ~/  |                                     |                                    |  |        |  |                  |            |            |  |
| Dept of Admin Attorney, Attorney General, or Agency  Date                                 |                 |                        |               |                                       |          | Agency Authorized Signature Date  |                                     |                                    |  |        |  |                  |            |            |  |
| -   | t of Adn<br>mev | um Auorney, Attorne    | y creneral, o | Agency                                |          | Dat   | c                                   | Agen                               | oy extituition   | rear y | ានិធានកោត  |                  |            | Date       |  |

# AGREEMENT FOR TECHNICAL ASSISTANCE BETWEEN THE SECRETARY OF TRANSPORTATION AND KANSAS STATE UNIVERSITY

#### SUPPLEMENTAL AGREEMENT

This agreement, made and entered into this 27<sup>th</sup> day of February, 2006, for Technical Assistance between the Secretary of Transportation of the State of Kansas, hereinafter referred to as Secretary, and Kansas State University, hereinafter referred to as KSU.

#### RECITALS:

WHEREAS, the Secretary and KSU entered into an Agreement for Technical Assistance, hereinafter referred to as "Original Agreement" for the Project entitled, "Implementation of the 2002 AASHTO Design Guide for Pavement Structures."

WHEREAS, funding for this Project originates with the Kansas Department of Transportation, award number KSU (RE-0361-01); TPF-5(079).

WHERAS, the Secretary agrees to provide additional funds of \$49,996 to perform the work described in the attached letter hereto and incorporated herein as Special Attachment No. 1.

NOW, THEREFORE, The Secretary and KSU, in consideration of the need to clarify the Original Agreement, the Parties hereto agree to as follows:

#### Section 2, Contract Dates.

KSU may continue work in conformity with the Proposal and the Proposal Expansion under this Agreement for an additional period of six (6) months. The previous completion date was December 31, 2006 and the revised completion date is June 30, 2007.

#### Section 3, Basis of Payment.

The Secretary agrees to reimburse KSU and additional amount not to exceed \$49,996 in accordance with the proposed budget (attached), to cover the cost of the work described in Special Attachment No. 1. The total amount available for reimbursement under the agreement shall not exceed \$209,963.

All other terms and conditions of the Original Agreement for Technical Assistance, dated September 4, 2003, shall remain in force.

KSU

Assistant Vice Provost for Research

F

Debra L. Miller

Secretary of Transportation

By: Warren L. Sick

Secretary of Transportation

Assistant Secretary and

State Transportation Engineer

Yansen Mazey

ATTEST

ATTEST



Department of Civil Engineering 2118 Fiedler Hall Manhattan, KS 66506-5000 785-532-5862 Fax: 785-532-7717

February 27, 2006

Mr. Richard McReynolds, Engineer of Research KDOT Materials & Research Center 2300 S.W. Van Buren St. Topeka, KS 66611

Re: FHWA Pooled Fund Project TPF-5(079) RE-0361-01 (Implementation of the 2002 AASHTO Design Guide for Pavement Structures) - KSU Account 5-33013

This letter is to request additional funds and time extension for the completion of the project. This replaces my letter dated February 8, 2006. The funds are necessary because of modifications and additions required to the initial work plan and approved by the NYSDOT project supervisors. The following items were added to the initial work plan:

- Expanding of the testing program, in order to determine materials properties for more NYS highway materials. Tests will be performed for the unbound and bound materials of five new flexible pavement sections.
- Review of the procedure to summarize and develop statistics for traffic data, for use in the AASHTO Design model.

Considering the supplementary work needed to complete the project, additional funds of \$49,996 are requested. An itemized budget for this extension is attached. Also, a time extension to 6/30/07 is also requested for this research project.

If you approve this time and monetary extension, please sign both copies and return one copy to this office. Thank you,

Sincerely,

Stefan A. Romanoschi

Assistant Professor of Civil Engineering

Kansas State University

APPROVED:

Paul R. Lowe

Assistant Vice Provost for Research

KDOT

#### Proposed Budget For the Period 4/1/06 to 6/30/07

| A. | Personnel  |              |
|----|--|--------------|
|    | 1 Stefan Romanoschi  |              |
|    | 1.0 time, 0.5 months summer 2006                               | 3,872        |
|    | 1.0 time, 1.0 months summer 2007                               | 8,130        |
|    | 2 Graduate Research Assistants                                 | E E00        |
|    | 0.5 time, 5 mos. cal. yr.(2006-2007)  3 Undergraduate Students | 5,500<br>600 |
|    | Subtotal - Salaries  | 18,102       |
|    | 4 Fringe Benefits  | 10, 102      |
|    | A1 - 32%   | 3,840        |
|    | A2 - 5.5%  | 303          |
|    | A3 -1.52%  | 9            |
|    | Subtotal - Fringe Benefits                                     | 4,152        |
|    | Subtotal - Personnel   | 22,254       |
| В. | Equipment  | -            |
| C. | Travel-Domestic  | 1,500        |
|    | KSU staff trips to NYS   |              |
| D. | Materials and Supplies   | 350          |
| E. | Other Direct Costs   | •            |
|    | Consultant Travel  | 10,000       |
|    | Communications   | 100          |
|    | Duplication  | 40           |
|    | Subtotal - Other Direct Costs                                  | 10,140       |
|    | Subtotal - Direct Costs  | 34,244       |
| F. | Facilities and Administrative Costs                            |              |
|    | 46% of MTDC  | 15,752       |
|    | Total Project Costs  | 49,996       |
|    |  |              |