PROFESSIONAL
SERVICE AGREEMENT

This Professional Service Agreement ("Agreement") is made and entered into this 1st day of April, 2011, by and between the County of Cuyahoga, Ohio (the "County"), and Michael Baker Jr. Inc., a corporation, with principal offices locate The Halle Building, 1228 Euclid Avenue, Suite 1050, Cleveland, Ohio 44115 (the "Provider").

WHEREAS the **County** is authorized to employ consultants to provide professional services; and

WHEREAS the **County** may have matters involving specialized issues requiring professional services; and

WHEREAS the **Provider** can provide such professional services and has the necessary skills, experience and abilities to provide such assistance;

NOW THEREFORE in consideration of the mutual covenants contained herein, the parties agree as follows:

1. **Term.** This agreement shall commence April 1, 2011 and conclude on December 31, 2011.

2. **Scope of Services.** The Provider will assist the County in training employees in the AASHTO BRIDGE Ware VirtisOpis software in accordance with attached outline: See **Attachment A.**

3. **Compensation.** The compensation for the Provider shall be an amount not to exceed Two Thousand Nine hundred ($2, 900)

4. **Agents or Assistants.** All agents, assistants, persons, corporations and subcontractors of Provider that perform work pursuant to this agreement shall do so as independent contractors and not as employees of the County.

6. **Termination.** Either party may terminate this Agreement by providing the other party with ten (10) days written notice of the intent to terminate. In the event of termination by either party, the County agrees to compensate Provider for all services performed under this Agreement prior to the termination date. The parties further agree that should the Provider become unable, for any reason, to complete the work called for by virtue of this Agreement, that such work completed by Provider shall become the property of the County as full discharge of the Consultant's liability hereunder.

7. Non-Assignment. Provider shall not assign or transfer any interest in this contract without the express written consent of the County. This provision does not apply to the engagement of subcontractors or agents of Provider or to the assignment or transfer of this contract to an affiliate of Provider or to an entity acquiring substantially all of the stock or assets of Provider.

8. Governance. This agreement shall be governed by, and construed and enforced in accordance with the laws of the State of Ohio.

9. Legal Construction. In the event that any one or more of the provisions contained in this agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision and this agreement shall be construed as if the invalid, illegal or unenforceable provision had never been contained herein.

10. Notices. All notices shall be in writing and shall be deemed given if mailed by certified mail, return receipt requested, to the other party at the following addresses (or at such other address for a party as shall be specified by notice given pursuant hereto):
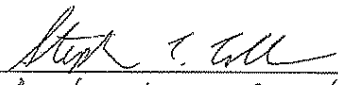
11. Damages. Provider's cumulative liability to County and for any breach of this agreement or for any and all claims, regardless of the form of action, shall not exceed the total amount of the fees paid by County to Provider for said services. Under no circumstances shall Provider have any liability to client for any consequential, exemplary, incidental, indirect or special damages or costs, including, but not limited to, lost profits or loss of goodwill, resulting from any violation of this agreement even if consultant has been advised, knew or should have known of the possibility thereof. County acknowledges that the foregoing limitations of liability and remedies represent bargained for allocations of risk, and that Provider's fees, charges, and costs hereunder represent the allocations of such risk.

12. Electronic Signature By entering into this Agreement the District, its officers, employees, subcontractor, sub grantees, agents, and assigns, agree to conduct this transaction by electronic means and agree that all documents requiring signatures by the County may be executed by electronic means, and that the electronic signatures affixed by the County to this Agreement shall have the same legal effect as if that signature was manually affixed to a paper version of this Agreement. The District also agrees, on behalf of the aforementioned entities and persons, to be bound by the provisions of Chapters 304 and 1306 of the Ohio Revised Code as the pertain to electronic transactions, and to comply with the electronic signature policy of Cuyahoga County.

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IN WITNESS WHEREOF, the parties have caused this Agreement to be executed on the day and year first above mentioned.

Michael Baker Jr. Inc.,

By: _____
Asst. Vice President

County of Cuyahoga, Ohio

By: X _____
Edward FitzGerald, County Executive

Virtis Training Course Outline
Cuyahoga County
Draft

1. **Introductions**
   1.1. Instructors
   1.2. Overview of the Training
   1.3. Objectives
       Understanding the system, development approach and limitations

2. **Development of AASHTO BRIDGEWare Virtis/Opis**

3. **System Overview**
   3.1. Introduction and Analysis
       Introduction to the Bridge Explorer
       On-line Help and Manuals
       Use the Bridge Explorer to select the bridge
       Review Example Bridge No. 1 (STL1)
       Selecting vehicles
       Use Analysis Settings to select a vehicle set
       Perform an analysis (Design Review)

   > This is a relatively quick overview of the entire system. Participants should not be logged into Virtis at this time. Each topic reviewed here will be explained in detail in subsequent exercises and participants will have opportunities to practice.

   3.2. Reviewing results - This is just a brief overview, details later
       Description of the computational process
       Summary Report
       Specification Check Report
       Graphics Output
       Engine Output

4. **Bridge Workspace - Organization of Bridges**
   4.1. Bridge Definition
   4.2. Superstructure Definitions
       Girder system vs. Girder line
   4.3. Member Alternatives
       Schedule based vs. Cross section based input
   4.4. Demonstrate with a bridge that is already entered
   4.5. Review the Bridge Workspace
       Navigate the Workspace
       Copy, Paste and Delete within BWS
       Copy vs. Link
       Storage of Results

   > This is an overview of the Bridge Workspace. Participants should not be logged into Virtis at this time. Each topic reviewed here will be explained in detail in subsequent exercises and participants will have opportunities to practice.

5. **Libraries**
   5.1. Library Concepts
       Store typical and commonly used information
       Type of data
       Security issues
       Database as shipped

   > This is a brief introduction to the libraries.

   5.2. Entering library data (LIB1)

6. Defining a Superstructure and Members
   6.1. General procedures and rationale
   6.2. Entering a simple span steel plate girder bridge (STL1)

7. Changing Bridge Workspace Data
   7.1. Hands-on exercise (Instructor lead)
       Modifying several aspects of the System-Schedule Model (STL1)
         Change steel material
         Change flange size
         Change web depth

8. Entering a P/S I-Beam Bridge
   8.1. Hands-on exercise - Simple span prestressed I-beam with harped strands (PS1)

9. Bridge Workspace - Revisited
   9.1. Bridges and Alternatives
   9.2. Superstructures and Alternatives
   9.3. Hands-on exercise - Completing the bridge definition for STL1
       Create a Bridge Alternative
       Create a Superstructure and Superstructure Alternative
       Assign a Superstructure Definition to the Superstructure Alternative

10. Bridge Explorer Issues
   10.1."Template" Bridges
   10.2.Lists and Folders
       Creating folders
       List folders
       Filter folders
   10.3.Finding a bridge
   10.4.Sorting the list of bridges
   10.5.Import/Export a bridge

11. Miscellaneous Topics
   11.1.Preference Settings vs. System Defaults
   11.2.Engine Specific Data
   11.3.Report Tool
   11.4.Help files available
   11.5.Virtis/Opis Technical Support Web Site (http://aashto.bakerprojects.com)

12. Entering a Reinforced Concrete Bridge
   12.1.Hands-on exercise - Simple span R/C slab bridge using cross section based and schedule based input (RC2)

13. Additional Exercises - Steel, P/S or R/C concrete bridge
   13.1.Entering a two span steel plate girder bridge (STL2)
   13.2.Entering a simple span adjacent prestressed box beam with straight/debonded strands (PS3)
   13.3.Entering a two span reinforced concrete slab bridge (RC4)
   13.4.

14. Wrap-up - Questions and Answers