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Public Works

City Transit
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MEMORANDUM

Equipment Maintenance
Roadway Maintenance
Collection & Drainage
Building & Grounds
Engineering

To: Gregg Mandsager, City Administrator
CC: Fran Donelson, Secretary
FROM: Randy Hill
DATE: July 12, 2010
RE: Clay Street Bridge Management Agreement

INTRODUCTION:

The City Council awarded the contract for the Clay Street Bridge Improvements at the July 1, 2010 meeting. Construction management tasks are required while work is in progress.

BACKGROUND:

The Coralville Engineering Firm, Shoemaker-Haaland, was hired by the city to provide the design work for the Clay Street Bridge Improvements. The bid has been let and work is scheduled to begin in mid-July. Oversight of the construction is needed. The City of Muscatine does not have staff available to provide this construction observation.

RECOMMENDATION/RATIONALE:

Attached is the Fee Estimate and Construction Observation and Staking Scope of Services Outline for the Clay Street Bridge Improvements. The agreement includes:

- 1) Construction Administration
- 2) Daily Construction Observation Tasks
- 3) Weekly Progress Monitoring Tasks
- 4) Periodic Observation/Testing Coordination
- 5) Processing Payment Requests
- 6) Final Inspection and Completion Certificates
- 7) Processing Extra Work Orders
- 8) Materials Testing
- 9) Construction Staking

The fee for this service is \$22,988 (\$21,628 Construction Observation + \$1,360 Construction Staking).

The Public Works Staff recommends the City enter into an Agreement with Shoemaker-Haaland for the Project Management of the Clay Street Bridge Improvements Project.

BACKUP INFORMATION:

- 1.
- 2.
- 3.
- 4.

CONSULTANT AGREEMENT

THIS AGREEMENT, made and entered into this 15th day of July, 2010 by and between the City of Muscatine, a municipal corporation, hereinafter referred to as the City and Shoemaker & Haaland Professional Engineers, of Coralville, Iowa, hereinafter referred to as the Consultant.

Whereas the City desires to contract with the Consultant to assist with the construction administration of the **2010 Clay Street Bridge Improvements**. This contract generally includes construction administration services for Clay Street Bridge Improvements as described in the **Scope of Services** outlined below. This outline of service tasks includes, among other things, on-site observations, record keeping, review of submittals, contract amendments, pay request review, materials testing and construction survey. Services will be performed in accordance with out standard Terms and Conditions which are attached.

NOW THEREFORE, it is agreed by and between the parties hereto that the City does now contract with the Consultant to provide services as set forth herein.

SCOPE OF SERVICES

Following is an outline of construction observation tasks which will be provided in compliance with plans and specification requirements for construction management and documentation. The estimated hours listed are for the prime construction inspector.

I. Initial Construction Administration Tasks - 24 hours

- A. Preconstruction Conference: Assist with Scheduling, Conduct, Prepare Minutes
- B. Receive and file Contractor Documents
- C. Review Shop Drawings and Submittals
- D. Review and file Subcontractor Listing

II. Daily Construction Observation Tasks - 30 hours (60 work days @ 0.5 hour/day)

- A. Make site visits as needed. Estimate three per week.
- B. Maintain Construction Diary
- C. Observe and Record daily:
 - Progress Made
 - Work Being Done
 - Work Crew
 - Weather Conditions
 - Signage and Barricades
 - Erosion Control
 - Cleanup
 - Neighbors Concerns
 - Contractor Questions
 - Utility Accommodations
- D. Coordinate Construction Staking and Materials Testing

This task may be assisted by the City Staff who will make daily observations and recordings as requested by Shoemaker & Haaland Professional Engineers.

III. Weekly Construction Progress Monitoring Tasks - 12 hours (12 weeks @ 1.0 hours/week)

- A. Weekly Progress Meetings: Schedule, Conduct, Prepare notes
- B. Prepare Weekly Progress Reports

IV. Periodic Construction Observation/Testing Coordination - 48 hours

- A. Concrete Pours - Assume 8 structural and 4 pavement pours
 - 1. Sample and test slump and air content
 - 2. Coordinate laboratory testing
 - 3. Check forms, reinforcing and pour details
 - 4. Receive and file Delivery Tickets
 - 5. Monitor compliance with specifications
- B. PCC Paving Related –
 - 1. Excavation and Re-grading Observation
 - 2. Subgrade Compaction Monitoring
 - 3. Utility Adjustments
 - 4. Shouldering
 - 5. Restoration
- C. Erosion Control Systems –
 - 1. Initial systems installation review
 - 2. Periodic monitoring with rainfalls
 - 3. Periodic repair and clean-up monitoring
 - 4. Monitor Compliance with Contractor's Erosion Control Plan

The City may assist with these tasks as requested by Shoemaker & Haaland Professional Engineers. These tasks and hours do not include any sampling and testing of materials which may be provided to Shoemaker & Haaland by Terracon Consultants.

V. Review Periodic Payment Requests - 20 hours

- A. Review submittals for partial payment (assume 7) and check quantity estimates submitted.
- B. Measure Final Quantities

VI. Final Inspection and Completion Certificates - 12 hours

- A. Conduct Final Inspection/Create Punchlist
- B. Punchlist Follow-up observations

VII. Process Extra Work Orders* - 12 hours

- A. Issue information to Contractor
- B. Evaluate Contractor's proposal
- C. Negotiate pricing
- D. Solicit Owner review and approval
- E. Construction observation for extra work materials and installation

- * The budget for hours proposed for processing extra work items will be used for this purpose until it is fully expended. If more hours are required due to the number or scope of extra work items these hours will be billed on an hourly basis as additional service, if approved by the the City of Muscatine.

VIII. Materials Testing -

These specialized services will be provided by Terracon Consultants as directed by field staff. Their anticipated services may include plant monitoring and laboratory testing of materials (flexural and compressive, pcc). We have allowed \$1,500.00 for these estimated services in our estimate of reimbursable expenses below.

Fee Estimate Summary

It is anticipated that the construction observation will be provided over a period from approximately July 6 to November 15, 2010. If the construction period should extend for a significantly longer period through no fault of the Consultant, then additional compensation for these services will be requested for the Owner's approval.

Fee Estimate - Construction Observation

Principal	2.0 hours @ \$110.00/hour =	\$ 220.00
Structural Engineer P.E.	24.0 hours @ \$92.00/hour =	2,208.00
Civil Engineer P.E.	2.0 hours @ \$90.00/hour =	180.00
Engineering Technician	24.0 hours @ \$75.00/hour =	1,800.00
Inspector	158.0 hours @ \$88.00/hour =	13,900.00
Clerical	8.0 hours @ \$40.00/hour =	<u>320.00</u>
	Subtotal:	\$18,628.00
	Reimbursable Expenses:	<u>3,000.00</u>
	TOTAL:	\$21,628.00

VIV. Construction Staking

Following is an outline of construction staking tasks which will be provided:
 Quarter point shots on existing beams for new deck profile. Approach paving is assumed to be linear from the end of the existing roadway to the new deck elevation.

Fee Estimate Summary

The fee estimate for construction staking includes all related reimbursable expenses and assumes a one time staking only, without replacement of lost, missing or damaged stakes. This estimate includes 8 hours of staking plus office support in providing and checking deck profile over existing beams.

The actual hours of staking will depend on the Contractor's sequence of construction operations and may require more or less hours, which may require additional or less budget for this service.

Fee Estimate - Construction Staking

Project Manager	2.0 hours @ \$85.00/hour =	\$ 170.00
Project Engineer	2.0 hours @ \$80.00/hour =	160.00
Engineering Technician	2.0 hours @ \$75.00/hour =	150.00
Survey Crew	8.0 hours @ \$95.00/hour =	<u>760.00</u>

Subtotal: \$1,240.00
Reimbursable Expenses: 120.00
TOTAL: \$1,360.00

FOR THE CITY

By: Richard W. O'Brien

Title: Mayor

Date: July 15, 2010

ATTEST: Jess M. [Signature]

FOR THE CONSULTANT

By: Robert A. Bang
Robert A. Bang, P.E.

Title: _____
Vice President

Date: 7/12/10

Terms and Conditions

Definition. The use of the term Engineer includes, Shoemaker & Haaland Professional Engineers, its Engineers, officers, directors, shareholders, employees and agents, designees, or assignees.

Scope of Service. The scope of service is included in the attached correspondence. Services not expressly identified are excluded from Engineer's scope of service.

Standard of Care. Services performed by Engineer under this Agreement will be with the level of care and skill ordinarily exercised by members of the profession currently practicing in similar conditions, time, and location. No warranty, express or implied, is made or intended for the services under this Agreement.

Cost Estimates. Any Estimate of the Construction Cost or other costs prepared by Engineer represents his estimate or opinion as a design professional and is supplied for general guidance of Client. Engineer has no control over cost of labor and material or over competitive bidding or market conditions, and Engineer does not guarantee the accuracy of such estimates or have any liability if contractor bids or actual cost to Client exceeds Engineer's cost estimate.

Client Information. Client shall provide all criteria, design parameters, construction standards, and full information as to Client's requirements for the Project including design objectives and constraints, space, capacity and performance requirements, and budgetary limitations. Client shall also provide location information for buried utilities and/or structures, tests of subsurface conditions, and any other pertinent data. Engineer shall be entitled to rely on the accuracy and completeness of all information (electronic or otherwise) provided by Client to Engineer. Accordingly, Client agrees, to the fullest extent permitted by law, to indemnify and hold Engineer and Engineer's officers, directors, shareholders, employees, agents and Engineer's consultant harmless from and against any and all claims, losses, costs or damages of any nature whatsoever for injury or loss arising or allegedly arising from errors, omissions or inaccuracies in documents or other information provided by Client to Engineer.

Access To Sites, Permits and Approvals. Unless otherwise agreed, Client will furnish Engineer with right-of-access to the site(s). Engineer will take reasonable precautions to minimize any damage to the property. Some damage may occur as a result of Engineer's access, and the restoration, repair or cost is not part of this agreement or Engineer's responsibility. Unless otherwise agreed, Client will secure all necessary approvals, permits, licenses and consents necessary to the performance of the services hereunder.

Hidden Conditions. A condition is hidden if concealed by existing earth, facilities or finishes or if it cannot be visually observed without uncovering the condition. If Engineer has reason to believe that such a condition may exist, Engineer shall notify Client who shall authorize and pay for all costs associated with the investigation, repair or remediation of said condition. Client is responsible for all risks associated with this condition, and Engineer shall not be responsible for the existing condition or any resulting damages to persons or property. Client has disclosed to Engineer all data available to Client concerning known or suspected Hazardous Environmental Conditions or has represented to Engineer that, to the best of Client's knowledge, a Hazardous Environmental Condition does not exist at or near the site.

Shop Drawing Review. If, as a part of this Agreement, Engineer reviews and approves Contractor submittals, such as shop drawings, product data, samples and other data, these reviews and approvals shall be only for the limited purpose of checking for conformance with the design concept and the information expressed in the contract documents. This review shall not include review of the accuracy or completeness of details, such as quantities, dimensions, weights or gauges, fabrication processes, construction means or methods, coordination of the work with other trades or construction safety precautions, all of which are the sole responsibility of the Contractor. Engineer's review shall be conducted with reasonable promptness while allowing sufficient time in Engineer's judgment to permit adequate review. Review of a specific item shall not indicate that Engineer has reviewed the entire assembly of which the item is a component. Engineer shall not be responsible for any deviations from the contract documents not brought to the attention of Engineer in writing by Contractor. Engineer shall not be required to review partial submissions or those for which submissions or correlated items have not been received.

On-Site Observation. If on-site observation of Contractor's work is a part of this Agreement, Engineer shall make visits to the site at intervals appropriate to the various stages of construction as Engineer deems reasonable. The site visits are for the limited purpose of becoming generally familiar with the progress and quality of the work completed and to determine in general if the work is being performed in a manner indicating that the work when completed will be in accordance with the contract documents. However, Engineer shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the work. Engineer does not guarantee or warrant the performance of Contractor. Engineer is not responsible for construction means, methods, techniques, sequence or procedures, time of performance, or programs in connection with the construction work. Engineer is not responsible for Contractor's failure to execute the work in accordance with the contract documents. Engineer is not responsible in any way for Contractor's, Subcontractors', or their agents or employee's compliance with OSHA or any federal, state or local laws or regulations. Engineer is not responsible for Project or site safety. Project and site safety shall be the sole responsibility of Contractor. Engineer shall not have control over or charge of acts or omissions of Contractor, Subcontractor, or their agents or employees, or any other persons performing portions of the work. Given the foregoing, Client also shall, to the fullest extent permitted by law, waive any claim against Engineer, and indemnify, defend, and hold Engineer harmless from any claim or liability for injury or loss arising from Engineer's alleged failure to exercise site safety responsibility. Client also shall compensate Engineer for any time spent or expenses incurred by Engineer in defense of any such claim. Such compensation shall be based upon Engineer's prevailing fee schedule and expense reimbursement policy.

Termination. This agreement may be terminated by either party with seven (7) days written notice in the event of substantial failure to perform in accordance with the terms of this agreement by the other party through no fault of the terminating party. In the event of termination, Engineer shall be paid for any and all services performed to the termination notice date plus, direct project expenses and reasonable termination expenses. Expenses of termination or suspension shall include all direct costs of Engineer incurred to complete analyses, records, or files and may also include a report on the services performed to the date of notice of termination or suspension.

Payment. Progress payment shall be made for services performed and shall be due upon receipt of invoice. Compensation for additional services shall be paid at Engineer's standard hourly rates. Payment of any invoice by Client shall mean Client is satisfied with Engineer's services to date of payment and is not aware of any deficiencies in those services. If payments are delinquent after thirty (30) days from invoice date, Client agrees to pay interest on the unpaid balance at the rate of 1-1/2% per month from the date of invoice. Any charges held to be in dispute shall be called to the Engineer's attention in writing within ten (10) days of receipt of invoice. Any dispute not resolved within ten (10) days following receipt of written objection shall be resolved within thirty (30) days in accordance with the Mediation provision of this Agreement. Interest as stated above shall be paid on disputed amounts resolved in Engineer's favor. Client agrees to pay attorney fees and all collection costs associated with past due invoices not brought to Engineer's attention as disputed; or in proportion to the results of the Mediation provision, if used. If Client fails to make monthly payments due Engineer, Engineer may after giving seven (7) days written notice to Client, suspend services under this agreement if disputed charges are not paid within 45 days of receipt of Engineer's invoice, and Client agrees to waive any claim against Engineer, and to indemnify, defend and hold Engineer harmless from and against any claims arising from Engineer's suspension or termination due to Client's failure to provide timely payment. No deductions shall be made from Engineer's Compensation on account of any Claim by Client for alleged errors or omissions in the services provided by Engineer.

Delays. If the Project is delayed or if Engineer's services for the Project are delayed or suspended for more than three (3) months for reasons beyond Engineer's control, Engineer may after giving seven (7) days written notice to Client terminate this Agreement and Engineer shall be paid for services performed to the termination notice date,

including direct project expenses due, plus termination expenses. If the Project continues after a delay or suspension of more than 90 days, Engineer shall be entitled to an equitable adjustment of rates and amounts of compensation to reflect costs incurred as a result of such delay or suspension.

Construction Defects. Engineer shall not be responsible for the defects, deficiencies, or omissions in the work of Contractor, any Subcontractor, any of Contractor's or Subcontractor's employees, or any person or entities responsible for performing work which results from the construction contract documents to be prepared by Engineer. Engineer shall have the authority to recommend to the Client rejection of any work that is not, in the judgment of the Engineer, in conformance with the Construction Documents or work plans. Neither this authority nor Engineer's good-faith judgment to reject or not reject any work shall subject Engineer to any liability or cause of action to Contractor, subcontractors or any other suppliers or persons performing work on this project.

Ownership of Documents. In accepting and utilizing any drawings, specifications, reports, work product, or other data, including data on any form of electronic media (all hereafter referred to as drawings and data) generated and provided by Engineer, Client covenants and agrees that all such drawings and data are instruments of service of Engineer, who shall be deemed the author of the drawings and data, and shall retain all common law, statutory law and other rights, including copyrights, whether the Project is completed or not. In the event of conflict between electronic media and sealed drawings, sealed drawings govern. Client and Engineer agree that any CADD files prepared by Engineer shall conform to Engineer's standard procedure unless noted otherwise in writing. The drawings and data submitted by Engineer to Client are submitted for an acceptance period of 14 days. Any defects Client discovers during this period will be reported to Engineer and will be corrected as part of Engineer's Basic Scope of Services. Correction of defects detected and reported after the acceptance period will be compensated as Additional Services. Client further agrees not to use the drawings and data, in whole or in part, for any purpose or project other than the Project which is the subject of this Agreement. Client shall make no claim against Engineer resulting in any way from any unauthorized changes or reuse of the drawings and data for any other project by anyone. In addition, Client agrees, to the fullest extent permitted by law, to indemnify and hold Engineer harmless from any damage, liability or cost, including reasonable attorney's fees and costs of defense, arising from any changes made by anyone other than Engineer or from any reuse of the drawings and data without the prior written consent of Engineer. Under no circumstances shall transfer of the drawings and data and other instruments of service on electronic media for use by Client be deemed a sale by Engineer, and Engineer makes no warranties, either express or implied, of merchantability and fitness for any particular purpose.

Limitation of Liability. In recognition of the relative risks and benefits of the Project to both Client and Engineer, the risks have been allocated such that Client agrees, to the fullest extent permitted by law, to limit the liability of Engineer and Engineer's officers, directors, shareholders, employees, agents and its consultants to Client and to all construction contractors and subcontractors on the Project for any and all claims, losses, costs, damages of any nature whatsoever, including but not limited to Engineer's negligence, professional errors or omissions, strict liability, breach of contract, warranty express or implied, or claims expenses from any cause or causes, including attorneys' fees and costs and expert witness fees and costs, so that the total aggregate liability of Engineer and Engineer's officers, directors, shareholders, employees, agents and its consultants to all those named shall not exceed Engineer's total fee for services rendered on this Project. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising. In no event shall Engineer be liable for incidental or consequential damages.

Indemnity. Client will require any contractor or subcontractor performing work in connection with drawings and specifications produced under this agreement to indemnify and hold harmless Client and Engineer and Engineer's officers, directors, shareholders, employees, agents and consultants from and against any and all claims, costs, losses, and damages (including but not limited to all fees and charges of Engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) arising out of or alleged to arise from the Contractor's or Subcontractor's negligent acts or omissions in the performance of the work described in the construction contract documents, but not including liability that is due to the negligence of Client, Engineer, or Engineer's officers, directors, shareholders, employees, agents or consultants.

To the fullest extent permitted by law, Client shall indemnify and hold harmless Engineer, Engineer's officers, directors, shareholders, employees and agent and Engineer's consultants from and against any and all claims, suits, demands, liabilities, costs, losses and damages (including but not limited to all fees and charges of Engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) caused by the negligent acts or omissions of Client or Client's officers, directors, partners, employees, agents and Client's consultants with respect to this Agreement or the Project.

To the fullest extent permitted by law, Client shall indemnify and hold harmless Engineer, Engineer's officers, directors, shareholders, employees and agent from and against any and all claims, suits, demands, liabilities, costs, losses and damages (including but not limited to all fees and charges of Engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) arising out of or in any way connected with the detection, presence, handling, removal, abatement, or disposal of any asbestos or hazardous or toxic substances, fungi or bacteria, products or materials that exist on, about or adjacent to the Project site, whether liability arises under breach of contract or warranty, tort, including negligence, strict liability or statutory liability or any other cause of action, except for the sole negligence or willful misconduct of Engineer.

Mediation. In an effort to resolve any conflicts that arise during the design or construction of the Project or following the completion of the Project, Client and Engineer agree that all disputes between them arising out of or relating to this Agreement shall be submitted to nonbinding mediation unless the parties mutually agree otherwise. Client and Engineer further agree to include a similar mediation provision in all agreements with independent contractors and consultants retained for the project and to require all independent contractors and consultants also to include a similar mediation provision in all agreements with subcontractors, subconsultants, suppliers or fabricators so retained, thereby providing for mediation as the primary method for dispute resolution between the parties to those agreements.

Acknowledgment. Client acknowledges that Engineer is a corporation and agrees that any claim made by Client arising out of any act or omission of any officer, director, shareholder or employee of Engineer, in the execution or performance of this Agreement, shall be made against Engineer and not such officer, director, shareholder or employee.

Force Majeure. Engineer shall not be responsible or liable for any damages or delay, including, but not limited to, those which arise from Acts of God, strikes, walkouts, accidents, Government Acts, or other events beyond the control of Engineer.

Laws. This agreement shall be governed by the laws of the State of Iowa.

Severability. In the event any provisions of this agreement shall be held to be invalid and unenforceable, the remaining provisions shall be valid and binding upon the parties. One or more waivers by either party of any provision, term, condition or covenant shall not be construed by the other party as a waiver of a subsequent breach of the same by the other party. All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating responsibility or liability between Client and Engineer, including ownership of documents, shall survive the completion of the services hereunder and the termination of this Agreement.

Assigns. Neither Client nor Engineer shall delegate, assign, substitute or otherwise transfer its duties under this agreement without the written consent of the other party.