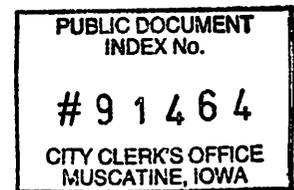


MEMORANDUM



To: Randy Hill, Public Works director

CC: Connie Mann

FROM: Jon Lutz, City Engineer

DATE: November 15, 2010

RE: Cedar Street Reconstruction – Geotechnical investigation  
Request to approve purchase order

**INTRODUCTION:**

Cedar Street Reconstruction scheduled for utility work in 2011 and paving in 2012 includes work from Parham to Houser. Geotechnical investigation is required to determine existing pavement thickness, base material and soil conditions below the roadway. This information will be used for preparation of construction plans.

**BACKGROUND:**

Terracon Consultants submitted a proposal dated October 12, 2010 to perform the work for a lump sum of \$7,250.00. This work would be performed in late November or December 2010.

**RECOMMENDATION/RATIONALE:**

The city engineer recommends issuing a purchase order to Terracon Consultants for \$7,250.00 for geotechnical investigation and report.

**BACKUP INFORMATION:**

1. Terracon Consultants, Inc. Proposal dated October 12, 2010.

October 12, 2010

City of Muscatine  
 1459 Washington Street  
 Muscatine, Iowa 52761

Attention: Mr. Jon Lutz, P.E.  
 City Engineer

Re: Proposal for Geotechnical Engineering Services  
 Proposed Cedar Street Reconstruction  
 Muscatine, Iowa  
 Terracon Proposal No. P07100291

Dear Mr. Lutz:

Terracon Consultants, Inc. (Terracon) appreciates the opportunity to submit our proposal to provide subsurface exploration and geotechnical engineering services for the proposed project. This proposal presents our understanding of the project information provided by the City of Muscatine (City), our proposed scope of services, anticipated work schedule, and lump sum fee.

## A. PROJECT LOCATION AND INFORMATION

### Site Location

| ITEM                  | DESCRIPTION                                                            |
|-----------------------|------------------------------------------------------------------------|
| Location              | from Houser Street to 300 feet east of Parham; about 6,700 linear feet |
| Existing Improvements | an existing paved street                                               |

### Project Information

| ITEM                  | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Proposed improvements | Reconstruction of Cedar Street will include milling the existing asphalt and grading the entire length. The new road will be 9 inches of portland cement concrete with an integral curb over an 8 inch thick milled asphalt base. A drainable base and subdrain system are planned. The water main will be relocated due to the grade change, and storm sewers will replace the open ditch drainage. Extensions will be required for Papoose Creek culvert. The overhead electric line will be placed underground. Either a sidewalk (5 feet wide) or 10 foot wide trail will be constructed along the new section of Cedar Street. |
| Grading               | Based on the plan and profile sheets provided, grading will include primarily reducing grade along the road less than 4 feet. However, fill will be required for construction of the sidewalk/trail; approximately 6 feet of fill will be placed over the culvert at Papoose Creek and near Wood Creek Drive.                                                                                                                                                                                                                                                                                                                       |



Terracon Consultants, Inc. 870 40th Avenue Bettendorf, Iowa 52722  
 P [563] 355 0702 F [563] 355 4789 terracon.com

## **B. SCOPE OF SERVICES**

**Field Program** – The scope of services proposed by Terracon includes seventeen (17) borings to a depth of about 10 feet. The borings will terminate at shallower depths if rock is encountered above the requested boring depths. Our lump sum fee includes 170 linear feet of drilling in soil. Coring or other means of drilling into rock is not included in our fee.

Four (4) samples will be obtained within the top 10 feet of each boring and on approximately 5-foot depth intervals thereafter. Once the samples have been collected and classified in the field, they will be prepared for delivery to our laboratory. Water levels observed during drilling will also be noted.

**Laboratory Testing** – Laboratory testing of the samples will include natural water contents and visual-engineering classifications. Unconfined compressive strengths will be estimated for selected cohesive samples. Up to six (6) Atterberg limits and the percent passing a No. 200 sieve test are included in our lump sum fee. Further testing can be performed for an additional fee.

**Engineering Report** – After completion of the field and laboratory testing programs, the data and conditions will be summarized on boring logs and in a report prepared under the supervision of an engineer licensed in the State of Iowa. This report will contain a description of the project, a summary of the drilling, sampling and testing procedures, computer generated boring logs, a boring location sketch, a summary of the laboratory test results, and the following:

- An overview of the subsurface conditions
- Water levels observed during drilling and their influence on construction
- An estimated modulus of subgrade reaction value (k) for pavement design

Unless otherwise requested, two (2) paper copies and an electronic copy (PDF) of the report will be provided. Upon request, a draft copy of the report can be provided for your review and comments prior to final submittal of the report.

**Schedule** - If site and weather conditions permit, we can generally begin the field exploration program within about 5 to 10 working days after receipt of written authorization to proceed. We estimate the geotechnical report can be submitted about two (2) weeks after the soil borings are completed. However, in situations where information is needed prior to submittal of our report, we can provide verbal information or recommendations for specific project requirements after we have completed our field and laboratory programs.

**Conditions** - Our lump sum fee is based on the use of a truck-mounted drill rig. Terracon will mark the approximate boring locations prior to our field exploration. It is understood that the City will obtain surface elevations and survey the boring locations after our field exploration. Our fee is based on road signage and flagging personnel being supplied by the City during our field exploration.

Items to be provided by the City include the right of entry to conduct the exploration, and an awareness and/or location of any subsurface utilities existing in the area. Terracon will contact the "Iowa One Call" utility locate service, but Terracon will not be responsible for underground utilities incorrectly marked, or not marked by others. Our cost does include one (1) combined trip to locate the borings and for a joint utility meet at the site. If there are any other restrictions or special requirements regarding this site or exploration, these also should be made known to us prior to commencing fieldwork.

The borings will be backfilled after the completion of drilling with auger cuttings. Those borings in existing pavements will be patched at the surface. Terracon will not be responsible for future maintenance or backfilling of the boreholes or for the migration of contaminants due to the presence of the borings. If this is a concern, the boreholes can be backfilled with bentonite for an additional fee. Reasonable care will be taken to reduce damage to the site, but it is impossible to estimate the cost to restore the boring sites to their original conditions prior to performing the work. For this reason, this cost is not included in our lump sum fee.

If obstructions are encountered, the boring will be offset and redrilled, or we will attempt to core through the obstruction. We will contact the City's project representative prior to coring through any obstruction so the location of private utilities can be verified. The cost for the additional auger or core footage will be in addition to our lump sum fee.

Our fee is based on performing the field exploration without the need for personal environmental protective equipment. As our normal standard of care, the exploration at any boring location will be terminated and our findings discussed with you if evidence of contamination is encountered. Should personal protective equipment or special borehole sealing procedures become necessary, our fee will be discussed with you prior to commencing further drilling. Our scope of services does not include any level of environmental site assessment services, but identification of unusual or unnatural materials encountered while drilling will be discussed on our logs and in our report.

### **C. COMPENSATION**

We will perform the scope of services outlined in this proposal for a lump sum fee of \$7,250. Should subsurface conditions be encountered which would require revisions in the subsurface

exploration program and/or result in higher costs, we will contact you prior to initiating this work. However, if contact cannot be made while our drill crew is on-site, reasonable changes in the drilling program, such as deepening a boring will be made by Terracon and the City agrees to reimburse Terracon for these additional services. Our fee does not include the cost of services performed after submittal of our report, such as plan review or addendum reports due to project changes or information that was not provided/available at the time our report was prepared. An invoice will be submitted upon completion of our services, with payment due within thirty (30) days of the invoice date.

#### **D. CLOSURE**

This proposal may be accepted by executing the attached Agreement for Services and returning one copy. This proposal is valid only if authorized within sixty (60) days from the proposal date.

Thank you for considering Terracon for your geotechnical engineering services. We at Terracon look forward to working with you on this project. We are available to discuss the details of this proposal with you.

Sincerely,

**Terracon Consultants, Inc.**



W. Ken Beck, P.E.  
Senior Principal/Office Manager

WKB:N:Proposal Documents\2010\P07100291\Colorado Street P07100291

Enclosures

## AGREEMENT FOR SERVICES

This AGREEMENT is between City of Muscatine ("Client") and Terracon Consultants, Inc. ("Consultant") for Services to be provided by Consultant for Client on the proposed Cedar Street Reconstruction, Muscatine, Iowa project ("Project"), as described in the Project Information section of Consultant's Proposal dated 10/12/2010 ("Proposal") unless the Project is otherwise described in Exhibit A to this Agreement (which section or Exhibit is incorporated into this Agreement).

1. **Scope of Services.** The scope of Consultant's services is described in the Scope of Services section of the Proposal ("Services"), unless Services are otherwise described in Exhibit B to this Agreement (which section or exhibit is incorporated into this Agreement). Portions of the Services may be subcontracted. Consultant's Services do not include the investigation or detection of, nor do recommendations in Consultant's reports address the presence or prevention of biological pollutants (e.g., mold, fungi, bacteria, viruses, or their byproducts) or occupant safety issues, such as vulnerability to natural disasters, terrorism, or violence. If Services include purchase of software, Client will execute a separate software license agreement. Consultant's findings, opinions, and recommendations are based solely upon data and information obtained by and furnished to Consultant at the time of the Services.
2. **Acceptance.** Client agrees that execution of this Agreement is a material element of the consideration Consultant requires to execute the Services, and if Services are initiated by Consultant prior to execution of this Agreement as an accommodation for Client at Client's request, both parties shall consider that commencement of Services constitutes formal acceptance of all terms and conditions of this Agreement. Additional terms and conditions may be added or changed only by written amendment to this Agreement signed by both parties. In the event Client uses a purchase order or other form to administer this Agreement, the use of such form shall be for convenience purposes only and any additional or conflicting terms it contains are stricken. This Agreement shall not be assigned by either party without prior written consent of the other party.
3. **Change Orders.** Client may request changes to the scope of Services by altering or adding to the Services to be performed. If Client so requests, Consultant will return to Client a statement (or supplemental proposal) of the change setting forth an adjustment to the Services and fees for the requested changes. Following Client's review, Client shall provide written acceptance. If Client does not follow these procedures, but instead directs, authorizes, or permits Consultant to perform changed or additional work, the Services are changed accordingly and Consultant will be paid for this work according to the fees stated or its current fee schedule. If project conditions change materially from those observed at the site or described to Consultant at the time of proposal, Consultant is entitled to a change order equitably adjusting its Services and fee.
4. **Compensation and Terms of Payment.** Client shall pay compensation for the Services performed at the fees stated in the Compensation section of the Proposal unless fees are otherwise stated in Exhibit C to this Agreement (which section or Exhibit is incorporated into this Agreement). If not stated in either, fees will be according to Consultant's current fee schedule. Fee schedules are valid for the calendar year in which they are issued. Consultant may invoice Client at least monthly and payment is due upon receipt of invoice. Client shall notify Consultant in writing, at the address below, within 15 days of the date of the invoice if Client objects to any portion of the charges on the invoice, and shall promptly pay the undisputed portion. Client shall pay a finance fee of 1.5% per month, but not exceeding the maximum rate allowed by law, for all unpaid amounts 30 days or older. Client agrees to pay all collection-related costs that Consultant incurs, including attorney fees. Consultant may suspend Services for lack of timely payment. It is the responsibility of Client to determine whether federal, state, or local prevailing wage requirements apply and to notify Consultant if prevailing wages apply. If it is later determined that prevailing wages apply, and Consultant was not previously notified by Client, Client agrees to pay the prevailing wage from that point forward, as well as a retroactive payment adjustment to bring previously paid amounts in line with prevailing wages. Client also agrees to defend, indemnify, and hold harmless Consultant from any alleged violations made by any governmental agency regulating prevailing wage activity for failing to pay prevailing wages, including the payment of any fines or penalties.
5. **Third Party Reliance.** This Agreement and the Services provided are for Consultant and Client's sole benefit and exclusive use with no third party beneficiaries intended. Reliance upon the Services and any work product is limited to Client, and is not intended for third parties. For a limited time period not to exceed three months from the date of the report, Consultant will issue additional reports to others agreed upon with Client, however Client understands that such reliance will not be granted until those parties sign and return Consultant's reliance agreement and Consultant receives the agreed-upon reliance fee.
6. **LIMITATION OF LIABILITY.** CLIENT AND CONSULTANT HAVE EVALUATED THE RISKS AND REWARDS ASSOCIATED WITH THIS PROJECT, INCLUDING CONSULTANT'S FEE RELATIVE TO THE RISKS ASSUMED, AND AGREE TO ALLOCATE CERTAIN OF THE RISKS SO, TO THE FULLEST EXTENT PERMITTED BY LAW, THE TOTAL AGGREGATE LIABILITY OF CONSULTANT (AND ITS RELATED CORPORATIONS AND EMPLOYEES) TO CLIENT AND THIRD PARTIES GRANTED RELIANCE IS LIMITED TO THE GREATER OF \$10,000 OR ITS FEE FOR ANY AND ALL INJURIES, DAMAGES, CLAIMS, LOSSES, OR EXPENSES (INCLUDING ATTORNEY AND EXPERT FEES) ARISING OUT OF CONSULTANT'S SERVICES OR THIS AGREEMENT REGARDLESS OF CAUSE(S) OR THE THEORY OF LIABILITY, INCLUDING NEGLIGENCE, INDEMNITY, OR OTHER RECOVERY. UPON WRITTEN REQUEST FROM CLIENT, CONSULTANT MAY NEGOTIATE A HIGHER LIMITATION OF LIABILITY AMOUNT FOR AN ADDITIONAL FEE. THIS LIMITATION SHALL NOT APPLY TO THE EXTENT THE DAMAGE IS PAID UNDER CONSULTANT'S COMMERCIAL GENERAL LIABILITY POLICY.
7. **Indemnity/Statute of Limitations.** Consultant and Client shall indemnify and hold harmless the other and their respective employees from and against legal liability for all claims, losses, damages, and expenses to the extent such claims, losses, damages, or expenses are caused by their negligent acts, errors, or omissions. In the event such claims, losses, damages, or expenses are caused by the joint or concurrent negligence of Consultant and Client, they shall be borne by each party in proportion to its own negligence under comparative fault principles. Causes of action arising out of Consultant's services or this Agreement regardless of cause(s) or the theory of liability, including negligence, indemnity or other recovery shall be deemed to have accrued and the applicable statute of limitations shall commence to run not later than the date of Consultant's substantial completion of services on the project.
8. **Warranty.** Consultant will perform the Services in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. CONSULTANT MAKES NO WARRANTIES OR GUARANTEES, EXPRESS OR IMPLIED, RELATING TO CONSULTANT'S SERVICES AND CONSULTANT DISCLAIMS ANY IMPLIED WARRANTIES OR WARRANTIES IMPOSED BY LAW, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
9. **Insurance.** Consultant represents that it now carries, and will continue to carry: (i) workers' compensation insurance in accordance with the laws of the states having jurisdiction over Consultant's employees who are engaged in the Services, and employer's liability insurance (\$1,000,000); (ii) commercial general liability insurance (\$1,000,000 occ / \$2,000,000 agg); (iii) automobile liability insurance (\$1,000,000 B.I. and P.D. combined single limit); and (iv) professional liability insurance (\$1,000,000 claim / agg). Certificates of insurance will be provided upon request. Client and Consultant shall waive subrogation against the other party on all general liability and property coverage.

Agreement Reference Number (Terracon Proposal or Project Number):P07100291

- 10. CONSEQUENTIAL DAMAGES.** NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR LOSS OF PROFITS OR REVENUE; LOSS OF USE OR OPPORTUNITY; LOSS OF GOOD WILL; COST OF SUBSTITUTE FACILITIES, GOODS, OR SERVICES; COST OF CAPITAL; OR FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT, PUNITIVE, OR EXEMPLARY DAMAGES.
- 11. Dispute Resolution.** Client shall not be entitled to assert a Claim against Consultant based on any theory of professional negligence unless and until Client has obtained the written opinion from a registered, independent, and reputable engineer, architect, or geologist that Consultant has violated the standard of care applicable to Consultant's performance of the Services. Client shall provide this opinion to Consultant and the parties shall endeavor to resolve the dispute within 30 days, after which Client may pursue its remedies at law. This Agreement shall be governed by and construed according to Kansas law.
- 12. Subsurface Explorations.** Subsurface conditions throughout the site may vary from those depicted on logs of discrete borings, test pits, or other exploratory services. Client understands Consultant's layout of boring and test locations is approximate and that Consultant may deviate a reasonable distance from those locations. Consultant will take reasonable precautions to reduce damage to the site when performing Services; however, Client accepts that invasive services such as drilling or sampling may damage or alter the site. Site restoration is not provided unless specifically included in the Services.
- 13. Testing and Observations.** Client understands that testing and observation are discrete sampling procedures, and that such procedures indicate conditions only at the depths, locations, and times the procedures were performed. Consultant will provide test results and opinions based on tests and field observations only for the work tested. Client understands that testing and observation are not continuous or exhaustive, and are conducted to reduce - not eliminate - project risk. Client agrees to the level or amount of testing performed and the associated risk. Client is responsible (even if delegated to contractor) for notifying and scheduling Consultant so Consultant can perform these Services. Consultant shall not be responsible for the quality and completeness of Client's contractor's work or their adherence to the project documents, and Consultant's performance of testing and observation services shall not relieve Client's contractor in any way from its responsibility for defects discovered in its work, or create a warranty or guarantee. Consultant will not supervise or direct the work performed by Client's contractor or its subcontractors and is not responsible for their means and methods.
- 14. Sample Disposition, Affected Materials, and Indemnity.** Samples are consumed in testing or disposed of upon completion of tests (unless stated otherwise in the Services). Client shall furnish or cause to be furnished to Consultant all documents and information known or available to Client that relate to the identity, location, quantity, nature, or characteristic of any hazardous waste, toxic, radioactive, or contaminated materials ("Affected Materials") at or near the site, and shall immediately transmit new, updated, or revised information as it becomes available. Client agrees that Consultant is not responsible for the disposition of Affected Material unless specifically provided in the Services, and that Client is responsible for directing such disposition. In the event that test samples obtained during the performance of Services (i) contain substances hazardous to health, safety, or the environment, or (ii) equipment used during the Services cannot reasonably be decontaminated, Client shall sign documentation (if necessary) required to ensure the equipment and/or samples are transported and disposed of properly, and agrees to pay Consultant the fair market value of this equipment and reasonable disposal costs. In no event shall Consultant be required to sign a hazardous waste manifest or take title to any Affected Materials. Client shall have the obligation to make all spill or release notifications to appropriate governmental agencies. The Client agrees that Consultant neither created nor contributed to the creation or existence of any Affected Materials conditions at the site. Accordingly, Client waives any claim against Consultant and agrees to indemnify and save Consultant, its agents, employees, and related companies harmless from any claim, liability or defense cost, including attorney and expert fees, for injury or loss sustained by any party from such exposures allegedly arising out of Consultant's non-negligent performance of services hereunder, or for any claims against Consultant as a generator, disposer, or arranger of Affected Materials under federal, state, or local law or ordinance.
- 15. Ownership of Documents.** Work product, such as reports, logs, data, notes, or calculations, prepared by Consultant shall remain Consultant's property. Proprietary concepts, systems, and ideas developed during performance of the Services shall remain the sole property of Consultant. Files shall be maintained in general accordance with Consultant's document retention policies and practices.
- 16. Utilities.** Client shall provide the location and/or arrange for the marking of private utilities and subterranean structures. Consultant shall take reasonable precautions to avoid damage or injury to subterranean structures or utilities. Consultant shall not be responsible for damage to subterranean structures or utilities that are not called to Consultant's attention, are not correctly marked, including by a utility locate service, or are incorrectly shown on the plans furnished to Consultant.
- 17. Site Access and Safety.** Client shall secure all necessary site related approvals, permits, licenses, and consents necessary to commence and complete the Services and will execute any necessary site access agreement. Consultant will be responsible for supervision and site safety measures for its own employees, but shall not be responsible for the supervision or health and safety precautions for any other parties, including Client, Client's contractors, subcontractors, or other parties present at the site.
- 18. Termination.** Either party may terminate this Agreement or the Services upon written notice to the other. In such case, Consultant shall be paid costs incurred and fees earned to the date of termination plus reasonable costs of closing the project.

Consultant: **Terracon Consultants, Inc.**

By: W. Ken Beck Date: 10/12/2010

Name/Title: W. Ken Beck, P.E./Office Manager

Address: 870 40th Avenue

Bettendorf, Iowa 52722

Phone: 563.355.0702 Fax: 563.355.4789

Client: City of Muscatine

By: \_\_\_\_\_ Date: \_\_\_\_\_

Name/Title: \_\_\_\_\_

Address: 1459 Washington Street

Muscatine, Iowa 52761

Phone: 563.263.8933 Fax: 563.263.2127

Agreement Reference Number (Terracon Proposal or Project Number): P07100291