



1450 Washington St  
Muscatine IA 52761-5040  
(563) 263-8933  
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Public Works

City Transit  
263-8152

## MEMORANDUM

Equipment Maintenance  
Roadway Maintenance  
Collection & Drainage  
Building & Grounds  
Engineering

To: Brian Stineman, Public Works Director

CC: Greg Jenkins, Interim City Administrator

FROM: Pat Lynch, Assistant City Engineer

DATE: January 16, 2020

RE: Request to Enter Into Contract to Design Traffic Signals for Park Avenue Reconstruction and 4 to 3 Lane Conversion Project

### INTRODUCTION:

The City of Muscatine submitted a grant to the Iowa Department of Transportation (IaDOT) for Traffic Safety Improvement Grant (STIP) funds. The grant was approved and design has commenced so that the project can be ready for the 2020 Construction Season. Due to the reconfiguration of Park Avenue from 4 lanes to 3 lanes, the traffic signals will need to be modified. This contract is for the design and plan preparation of these modifications, of which half is to be reimbursed to the City by MP&W.

### BACKGROUND:

At the January 18, 2018 council meeting, council directed Public Works to move forward with planning and design to implement the conversion of Park Avenue from four to three lanes. The City's consultant began design services as described in the professional services agreement. Subsequent discussions with the IaDOT identified the potential to combine the TSIP project with several other funding sources to patch, resurface and improve all pedestrian crossings along Park Avenue from Mad Creek to Colorado/Clay Street. The addition of these grants increased the scope of the project to which our consultant's agreement was amended. This happened on December 20, 2019. The traffic signal design was inadvertently left out of the amendment due to a misunderstanding between MP&W and City Staff as to who was responsible for the design.

This project must be let by June 16, 2020. To accomplish this, the construction documents must be completed by March 24, 2020 with a review set to be submitted on February 11, 2020. To complete the review set by February 11<sup>th</sup>, Hutchison needs to start the design immediately.

**RECOMMENDATION/RATIONALE:**

**Staff recommends that council approve this request to contract with Hutchison Engineering, Inc. in an amount not to exceed \$41,500.00 for design of the traffic signals for Park Avenue Reconstruction and 4 to 3 Lane Conversion Project in accordance with the TSIP Grant submittal, USTEP Grant submittal, ADA Ramp Grant submittal and the IaDOT 3R Project processes. The estimated construction cost is \$2.2 million with these funding sources covering \$1.4 million.**

**BACKUP INFORMATION:**

1. Contract.

# **H**utchison Engineering, Inc.

Since 1945

Jacksonville • Quad Cities • Peoria • Shorewood

November 6, 2019

Mr. Pat Lynch, P.E.  
Asst. City Engineer  
City of Muscatine  
1459 Washington, St.  
Muscatine, IA 52761

Re: Traffic Signal Design Services – Four Intersections on Park Ave & 2<sup>nd</sup> St.

Dear Mr. Lynch:

As requested, we are pleased to submit this Professional Services Agreement for traffic signal design engineering services for the following intersections in the City of Muscatine:

1. Park Ave. & Clay/Colorado St.
2. Park Ave. & Washington St.
3. Park Ave. & E. 5<sup>th</sup> St.
4. 2<sup>nd</sup> St. & Hwy 92

The services to be provided are outlined in the attached Exhibit A - Scope of Services. The Not-to-Exceed fee for the services described in Exhibit A is \$41,500. The City of Muscatine will be invoiced at the rates shown on the attached Schedule of Hourly Charges for actual time spent working on the project. Any additional services requested will be invoiced at the rates shown on the attached Schedule of Hourly Charges. If you agree with the proposed scope of services and the Not-to-Exceed fee, please sign and return the attached Professional Services Agreement.

If you have any questions, please contact me at (309) 368-0689 or at slarson@hutchisoneng.com. We look forward to working with you on this project and building a relationship with the City of Muscatine.

Very truly yours,

Hutchison Engineering Inc.



W. Shane Larson, P.E.  
Vice President

Attach.

1518 5th Ave., Suite 302 • Moline, Illinois 61265  
Phone: (309) 517-3899  
www.hutchisoneng.com • info@hutchisoneng.com

**AGREEMENT FOR PROFESSIONAL SERVICES**

THIS AGREEMENT made his 6th day of November, 2019 by and between

City of Muscatine

1459 Washington St., Muscatine, IA 52761

hereinafter called the OWNER and **Hutchison Engineering, Inc.**,  
1518 5<sup>th</sup> Avenue, Suite 302, Moline, Il. 61265 hereinafter called the ENGINEER.

WITNESSETH: That whereas the OWNER desires Professional Engineering and Land Survey Services as follows: Engineering Services for traffic signal design at 4 intersections on Park Ave. and 2<sup>nd</sup> St.  
See attached Exhibit A - Scope of Services.

**NOW THEREFORE:**

The ENGINEER AGREES to provide the above described services in accordance with the generally accepted engineering practices.

The OWNER AGREES to compensate the ENGINEER at the hourly rates on the attached Schedule of Hourly Charges with a Not-to-Exceed amount of Forty-One Thousand Five Hundred Dollars **(\$41,500.00)** for the services outlined in the scope of work on Exhibit A.

**IT IS MUTUALLY AGREED:**

Payment for the services rendered shall be made monthly in accordance with invoices issued by the ENGINEER. Invoices not paid within thirty (30) days from the date of the invoice will be considered delinquent and shall bear interest at the rate of 12% per annum from the date of invoice until fully paid and OWNER shall be liable to ENGINEER for any reasonable attorney's fees, court costs or related expenses incurred in connection with the effort to collect said delinquencies. Services may be suspended by ENGINEER if payments are not paid within thirty (30) days of OWNER's receipt of invoice. In the event that the ENGINEER deems that a lien or other legal action is necessary to enforce collection of services rendered, the OWNER shall bear all lien fees, legal expenses and court costs.

Either the OWNER or the ENGINEER may terminate this agreement at any time by giving the other party five (5) days written notice thereof, in which case, the ENGINEER shall be paid in full for all services performed to the date of termination.

The OWNER agrees to limit the ENGINEER's liability to the OWNER and to all construction contractors and sub-contractors on the PROJECT, due to the ENGINEER's negligent acts, errors or omissions, such that the total aggregate liability of the ENGINEER to all those named shall not exceed fifty thousand dollars (\$50,000.00) or the ENGINEER's total fee for services rendered on this PROJECT, whichever is greater.

**IT IS FURTHER MUTUALLY AGREED:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The OWNER and the ENGINEER each binds himself, his partners, successors, executors, administrators and assignees to each other party hereto in respect to all the covenants and agreements herein and except as above, neither the OWNER nor the ENGINEER shall assign or transfer any part of his interest in this AGREEMENT without the written consent of the other party hereto.

IN WITNESS WHEREOF, the parties hereto have made and executed this AGREEMENT as of the day and year first above written.

OWNER:  
City of Muscatine

ENGINEER:  
**HUTCHISON ENGINEERING, INC.**

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

By: *W. Sh... ..*

Title: \_\_\_\_\_

Title: Vice President

**HUTCHISON ENGINEERING, INC.**  
**Jacksonville, IL**  
**Shorewood, IL**  
**Peoria, IL**  
**Moline, IL**  
**SCHEDULE OF HOURLY CHARGES**  
**Effective January 1, 2019**

<b>Engineering Technician I.....</b>	<b>84.00 per hour</b>
<b>Engineering Technician II.....</b>	<b>97.00 per hour</b>
<b>Engineering Technician III.....</b>	<b>114.00 per hour</b>
<b>Engineering Technician IV.....</b>	<b>123.00 per hour</b>
<b>Engineering Technician V.....</b>	<b>135.00 per hour</b>
<b>Engineering Technician VI.....</b>	<b>152.00 per hour</b>
<b>Engineer I.....</b>	<b>120.00 per hour</b>
<b>Engineer II.....</b>	<b>146.00 per hour</b>
<b>Engineer III.....</b>	<b>160.00 per hour</b>
<b>Engineer IV.....</b>	<b>180.00 per hour</b>
<b>Engineer V.....</b>	<b>199.00 per hour</b>
<b>Project Manager.....</b>	<b>224.00 per hour</b>
<b>Principal of Firm.....</b>	<b>248.00 per hour</b>
<b>Computer Aided Design/Drafting.....</b>	<b>15.00 per hour</b>
<b>Prints.....</b>	<b>1.50 per sheet</b>
<b>Nuclear Density Equipment.....</b>	<b>50.00 per day</b> <b>(\$25.00 Minimum)</b>
<b>Breaking Concrete Cylinders .....</b>	<b>20.00 Each</b>
<b>GPS Equipment.....</b>	<b>200.00 per day</b> <b>(\$100.00 Minimum)</b>
<b>Robotic Survey Equipment.....</b>	<b>100.00 per day</b> <b>(\$50.00 Minimum)</b>

**Expenses such as sub-surface investigations, laboratory testing, bituminous proportioning, mileage and subsistence shall be billed at actual cost.**

**The above rates shall apply to any services for the calendar year in effect, after which the rates shall be adjusted to the then current calendar year schedule used by the firm.**

**HUTCHISON ENGINEERING, INC.**

**CITY OF MUSCATINE**

**TRAFFIC SIGNAL DESIGN – PARK AVE. & 2<sup>ND</sup> ST.**

**EXHIBIT A - SCOPE OF SERVICES**

Whereas the City of Muscatine has requested a proposal from Hutchison Engineering, Inc. (Consultant), to provide professional engineering services related to the construction of traffic signals at four intersections on Park Ave. & 2<sup>nd</sup> St. (Park Ave. & Clay/Colorado St., Park Ave. & Washington St., Park Ave. & E. 5<sup>th</sup> St., and 2<sup>nd</sup> St. & Hwy 92) in the City of Muscatine, IA. Hutchison Engineering, Inc. agrees to provide services as follows.

**SERVICES:** Hutchison Engineering's scope of services will be limited to the following:

1. Coordination with the City of Muscatine including an initial scoping meeting and design coordination meetings as needed.
2. Coordination with Shive-Hattery to Obtain CAD Base Files and Incorporate Traffic Signal Plans into Overall Plan Set.
3. Coordination with MP&W to Coordinate Design Details and Obtain Project Specifications.
4. Utility Coordination.
5. Four Soil Borings and corresponding geotechnical survey/report for the four proposed foundations at 2<sup>nd</sup> St & Hwy 92 and Park Ave. & E. 5<sup>th</sup> St.
6. Mast Arm Foundation Design at the intersections of Park Ave. & E. 5<sup>th</sup> St. and 2<sup>nd</sup> St. & Hwy 92. The existing foundations are proposed to be reused at the intersections of Park Ave. & Washington St. and Park Ave. & Clay/Colorado St. and therefore foundation design will not be required.
7. Confirmation of Mast Arm Lengths to confirm foundation size at Park Ave. & Washington St. and Park Ave. & Clay/Colorado St. If it is determined mast arm lengths are incorrect and the existing foundation sizes are too small, a supplement will be required to obtain additional borings and design new foundations at these two intersections.
8. General Notes & Project Specifications relating to traffic signal installation (provided by MP&W).
9. Permanent Signal Design and Installation Plans and Details
10. Permanent Signal Cable, Phase, & Preemption Plans & Details. Phasing/Timing to be determined using revised lane configuration and traffic count data provided by City.
11. Develop Estimate of Quantity Chart to Summarize Items/Quantities to be included in Shive-Hattery's Lump Sum Items.

**HUTCHISON ENGINEERING, INC.**

**CITY OF MUSCATINE**

**TRAFFIC SIGNAL DESIGN – PARK AVE. & 2<sup>ND</sup> ST.**

**EXHIBIT A - SCOPE OF SERVICES**

**ITEMS NOT INCLUDED IN THIS SCOPE OF WORK:** The following services are not included in the scope of work but can be added by addendum at the Client's request.

1. Topographic and Legal Boundary Surveys or Platting
2. Environmental assessments or clearances
3. Traffic counting (To be provided by City)
4. Construction Inspection, layout and daily observation
5. Traffic control to obtain soil borings. Traffic control to be provided by the City.