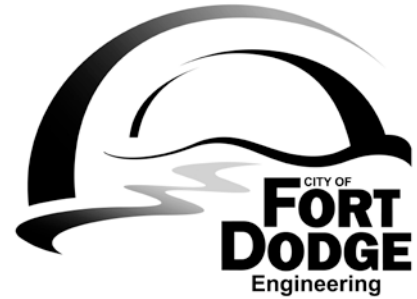


May 6, 2014

To: Mayor Bemrich and City Council
From: David Fierke, City Manager
Subject: Traffic System Improvements Study Agreement for Professional Services Snyder & Associates, Inc.



ACTION: For vote Monday, May 12, 2014

Brief History

The Iowa Department of Transportation oversees a program called the Traffic Safety Improvement Program (TSIP). The program provides safety funds to cities, counties, and the Iowa DOT for roadway safety improvements, research, and studies. The Iowa DOT sets aside \$5,000,000 for this program annually. \$500,000 of that money goes towards research and study projects throughout the state.

The Council approved a resolution endorsing the project and the TSIP application on August 12, 2013. The City's application proposed TSIP funding in the amount of \$60,000. This funding would implement a signal inventory, identify and review high crash intersections, assess other traffic related infrastructure as it relates to ADA / PROWAG and the MUTCD, and combine all this information in a report that can then be utilized to prioritize projects and funding.

The application was approved for TSIP funds from the Iowa Department of Transportation. The Council approved the agreement to receive \$60,000 in Traffic Safety Improvement Program Funding for this project on March 10, 2014.

On March 10, 2014, Staff sent out a Request for Qualifications to 4 engineering firms: McClure Engineering, HR Green, Foth Infrastructure & Environment, and Snyder & Associates. The Statement of Qualifications (SOQ) was due on April 1, 2014 and 3 firms submitted (HR Green did not submit). Eng. Dept. staff reviewed the SOQ's based on the project teams, capability of the consultant, and the approach to the project. Following this review, Staff selected Snyder & Associates as the most qualified consultant to complete the Study. Snyder was selected for the following reasons:

- In 2012, they completed an inventory and analysis study of the Iowa State University traffic system. The scope of work was very similar to our scope.
- They proposed a diverse project team including a GIS specialist to assist us with the management of the data collected, a signal contractor to help provide maintenance programs and guidelines, along with their team of traffic engineers.
- Understanding of the City's desire to create a traffic / timing model and plans for the traffic signals on 5th Ave. S. between Menards and S. 21st St.

Analysis of Issue

This contract is for engineering services to conduct a comprehensive traffic safety audit study for the City focusing on higher volume traffic signalized intersections, corridors, and other specific intersections. The study will focus on four primary tasks including a traffic signal equipment assessment, safety audit of same signalized intersections, and documentation of inventory and analysis. Opportunities for improved operation, crash potential mitigation, and compliance issues with national standards will be identified. Services will also be consistent with supplemental funding for the study per the TSIP funding agreement with the Iowa DOT. For more detail regarding the scope of services, please see the attached.

Budget Impact

The TSIP Agreement includes \$60,000 for the Traffic System Improvement Study. An additional \$50,000 was programmed in the approved Capital Improvement Plan to begin work on upgrading and improving the City's traffic signal system.

The contract is structured as hourly plus direct expenses, not to exceed a total of \$110,000.

Strategic Plan Impact

Policy D.4.2: Advanced planning for all infrastructure facilities shall be supported and routinely updated. Facilities benefited by advanced planning shall include, at minimum, schools, health care, residential areas, roads, water, sewer, storm water management, parks, recreation, and greenways.

Policy C.3.5: Pedestrian-oriented streetscape improvements including, but not limited to, sidewalks, street trees, landscaping, street lights, street furniture, trash receptacles, and signage shall be made to create and maintain an environment attractive to investment.

Impact on Existing Plans

This project has been included in the Capital Improvement Plan.

Staff Conclusions / Recommendations

It is Staff's recommendation to enter into an agreement for Professional Services with Snyder & Associates, Inc. for this project.

Alternatives

None recommended.

Implementation and Accountability

The Engineering Department will be responsible for overseeing this project.

Signed

Approved



Chad W. Schaeffer, P.E.
City Engineer

David Fierke
City Manager



STANDARD PROFESSIONAL SERVICES AGREEMENT (Short Form)

NOW ON THIS ____ day of _____, 20__, **Snyder & Associates, Inc.**,
2727 SW Snyder Boulevard., Ankeny, IA 50023 (hereinafter, Professional), and

(hereinafter, Client) do hereby agree as follows:

1. **PROJECT:** Professional agrees to provide Professional Services (Services) for Client's project known and identified as: _____
2. **SCOPE AND FEES:** The Scope of and the fees to be paid for said Services are set forth on Exhibit A attached hereto and by this reference made a part of this Agreement. Any Services not shown on Exhibit A shall be considered Additional Services. Additional Services may only be added by written change order, amendment or supplement to this agreement signed by both parties.
3. **TIMELINESS:** Professional will perform its services with reasonable diligence and expediency consistent with sound professional practices and within the time period(s), if any, set forth in Exhibit A.
4. **STANDARD OF CARE:** In providing Services under this Agreement, the Professional shall perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same professional discipline currently practicing under similar circumstances at the same time and in the same or similar locality. Professional makes no warranty, express or implied, as to its professional services rendered under this Agreement. Client shall promptly report to Professional any defects or suspected defects in the Professional's Services of which Client becomes aware. Withholdings, deductions or offsets shall not be made from the Professional's compensation for any reason unless the professional has been found to be legally liable for such amounts by a court of competent jurisdiction.
5. **INVOICE, PAYMENT, INTEREST, SUSPENSION:** Professional shall prepare invoices in accordance with its standard invoicing practices and submit the invoice(s) to Client on a monthly basis. Client agrees to timely pay each invoice within 30 days of the invoice date. Payments not paid within said 30 days shall accrue interest on unpaid balances at the rate of 1.5% per month (or the maximum rate of interest permitted by law, if less) from said 30th day. In addition, Professional may, after giving 7 days written notice to Client, suspend services under this Agreement until Professional has been paid in full for Services, interest, expenses and other related charges rendered, accrued, advanced and/or incurred by Professional to the date of suspension. Client waives any and all claims against Professional arising out of or resulting from said suspension. Payments will be credited first to interest, then to expenses, then to principal.
6. **RELIANCE:** The Client shall furnish, at its expense, all information, requirements, reports, data, surveys and instructions required by this Agreement and Professional may use such furnished information and material in performing its services and is entitled to rely upon the accuracy and completeness thereof. The Professional shall not be held responsible for any errors or omissions that may arise as a result of erroneous or incomplete information provided by the Client and/or the Client's consultants and contractors.
7. **ASSIGNMENT:** Client shall not transfer, sublet or assign any rights or duties under or interest in this Agreement, without the prior written consent of Professional.
8. **OWNERSHIP OF INSTRUMENTS OF SERVICE:** All reports, drawings, specifications, electronic and hard copy files, field data, notes and other documents and instruments prepared by Professional for the Project are acknowledged to be instruments of service and shall remain the property of the Professional. The Professional shall retain all common law, statutory and other reserved rights, including, without limitation, the copyrights thereto. If Professional agrees to allow transfer of its electronic media file(s), Client understands and agrees that as a condition precedent, it will sign the Professional's "Electronic Media Transfer Agreement" form prior to the transfer of an electronic media file.

ADDITIONAL TERMS AND CONDITIONS

- 9. **MUTUAL INDEMNIFICATION:** The Professional and the Client mutually agree, to the fullest extent permitted by law, to indemnify and hold each other harmless from any and all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, arising from their own negligent acts, errors or omissions, or willful misconduct in the performance of their services, duties and responsibilities under this Agreement, to the extent that each party is responsible for such damages, liabilities and costs on a comparative basis of fault.
- 10. **MUTUAL WAIVERS:** Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, neither the Client nor the Professional, their respective officers, directors, partners, employees, contractors or subconsultants shall be liable to the other or shall make any claim for any incidental, indirect or consequential damages arising out of or connected in any way to the Project or to this Agreement.
- 11. **LIMITATION:** In allocating the risks of this Project and notwithstanding any other provision of this Agreement, the Client agrees to limit, to the maximum extent permitted by law, the Professional's liability for the Client's damages to the aggregate sum of the Professional's fee for this Project. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.
- 12. **DISPUTE RESOLUTION:** Any disputes that arise during the Project or following the completion of the Project will be resolved by representatives from each party who have authority to settle. Those issues not resolved shall be submitted to formal nonbinding mediation prior to submission to a court of competent jurisdiction. Each party shall endeavor to include a similar dispute resolution in all agreements with other consultants, contractors and subcontractors of any tier who are retained for the project so that formal mediation is required as the primary form of dispute resolution.
- 13. **SEVERABILITY:** If any term or provision of this Agreement is held to be invalid or unenforceable under any applicable statute or rule of law, such holding shall be applied only to the provision so held, and the remainder of this Agreement shall remain in full force and effect.
- 14. **SURVIVAL:** Notwithstanding completion or termination of this Agreement for any reason, all rights duties and obligations of the parties to this Agreement shall survive such completion or termination and remain in full force and effect until fulfilled.
- 15. **GOVERNING LAW AND JURISDICTION:** The Client and the Professional agree that this Agreement and any legal actions concerning its validity, interpretation and performance shall be governed by the laws of the State of Iowa, without regard to any conflict of laws provisions, which may apply the laws of other jurisdictions. It is further agreed that any legal action between the Client and the Professional arising out of this Agreement or the performance of the services shall be brought in a court of competent jurisdiction in the State of Iowa.
- 16. **ATTORNEYS FEES, COSTS:** In the event legal action is necessary to enforce the payment terms of this Agreement, Professional shall be entitled to collect from Client and Client agrees to pay to Professional any judgment or settlement sum(s) due, plus reasonable attorneys' fees, court costs and other expenses incurred by Professional for such collection action and, in addition, the reasonable value of the Professional's time and expenses spent for such collection action, computed according to the Professional's prevailing fee schedule and expense policy.
- 17. **INCORPORATION BY REFERENCE:** It is understood and agreed that the provisions of the following attached Exhibits are incorporated herein and by this reference made a part of this Agreement:

Exhibit A
Exhibit

Exhibit
Exhibit

(Client)

SNYDER & ASSOCIATES, INC. (Professional)

By: _____
(Authorized agent)

By: _____
(Authorized agent)

(Printed or typed signature)

(Printed or typed signature)

Route executed copy to:

EXHIBIT A - SCOPE OF SERVICES

CLIENT/OWNER: City of Fort Dodge
819 1st Avenue South
Fort Dodge, Iowa 50501

ENGINEER: Snyder & Associates, Inc.
2727 SW Snyder Blvd
Ankeny, Iowa 50023

PROJECT: 2014 Traffic Systems Improvement Study
CS-TSF-2690(623)—85-94

DATE: May 12, 2014

GENERAL:

Conduct a comprehensive traffic safety audit study for the City focusing on higher volume traffic signalized intersections, corridors, and other specific intersections. The study will focus on four primary tasks including a traffic signal equipment assessment, safety audit of same signalized intersections, and documentation of inventory and analysis. Opportunities for improved operation, crash potential mitigation, and compliance issues with national standards will be identified. Services will also be consistent with supplemental funding for the study per the Cities March 7, 2014 Traffic Safety Improvement Program (TSIP) funding agreement 2015-TS-031 with the Iowa DOT.

SCOPE OF SERVICES:

1. TRAFFIC SIGNAL ASSESSMENT

1.1. Traffic Signal Inventory

- 1.1.1. Include all signalized intersections in the community with exception of intersections in downtown area scheduled for removal or reconstruction (intersections between 2nd Ave S – 1st Ave N, and 7th St to 12th St). Approximately 35 intersections included.
- 1.1.2. Review possible traffic signal asset inventory software packages for the City. Provide a brief technical memorandum outlining available off the shelf packages for City consideration as separate purchase, but to confirm inventory details.
- 1.1.3. Determine integration potential with City GIS system prior to start of inventory.
- 1.1.4. Gather existing construction record drawings and maintenance records for all signal locations.
- 1.1.5. Field review/inventory/photo log including all controller cabinet equipment by model, brand, age, and other key equipment at intersection including heads, detection, poles, and other pertinent features. Include inventory of current communication status with adjacent signals and method of communication.

1.2. Maintenance/Replacement Program

- 1.2.1. Develop individual intersection maintenance needs based on priority level for immediate MUTCD compliance issues, critical visibility concerns, or other operational issues.
- 1.2.2. Develop basic maintenance program outline for regular maintenance plan that may relate to annual, bi-annual or other preferred maintenance activities.
- 1.2.3. Identify maintenance needs per intersection by short-term 0-2 years, mid-term 2-5 years, and long term 5-10 years.

2. SAFETY AUDIT

2.1. High Crash Locations

- 2.1.1. Utilize Iowa DOT SAVER/CMAT 10 year crash history database to evaluate each signalized intersection for crash history, type, major contributing cause
- 2.1.2. Review possible mitigation measures based on existing signalization or other infrastructure features at intersection.
- 2.1.3. Identify possible improvement options at high crash locations.

2.2. Emergency Vehicle Preemption System

- 2.2.1. Review existing traffic signal preemption system for emergency vehicles, operational state, and locations.
- 2.2.2. Consider immediate operational needs for locations immediately adjacent to fire station and overall future concept of operations.

2.3. Infrastructure Characteristics

- 2.3.1. Review other key features at each intersection relative to parking, lighting, pedestrian accommodation and in particular with respect to ADA and PROWAG requirements or guidelines.
- 2.3.2. Identify changes for compliance with ADA/PROWAG, or other elements contributing to operations or safety issues.

2.4. Turn Lane Needs & Lane Width Adequacy

- 2.4.1. Review intersections for potential left or right turn lane storage inadequacies.
- 2.4.2. Verify potential operation or safety issues associated with “narrow” (i.e. less than 11 feet wide lanes) at study intersections.
- 2.4.3. Review signal phasing for protected/permissive left turn operations and potential alterations and also considerations for implementation of “flashing yellow arrow” implementation citywide.

3. OPERATIONS REVIEW

3.1. 5th Ave S & Midway Blvd

- 3.1.1. Perform traffic counts and review peak hour traffic operations.
- 3.1.2. Evaluate traffic signal warrant criteria with MUTCD, and other traffic operation performance and safety history.
- 3.1.3. Recommend improvement options for functional geometry or traffic control as needed.

3.2. 5th Ave S Coordination Timings

- 3.2.1. Gather peak hour turning movement counts at up to eight(8) intersections within the corridor.
- 3.2.2. Develop traffic signal timing model for the corridor.
- 3.2.3. Generate up to three timing plans and controller settings for implementation in the corridor for improved coordinated/progressive flow.

3.3. 15th St Coordination Timings

3.3.1. Gather peak hour turning movement counts at up to four(4) intersections within the corridor.

3.3.2. Develop traffic signal timing model for the corridor.

3.3.3. Generate up to three timing plans and controller settings for implementation in the corridor for improved coordinated/progressive flow.

3.4. Traffic Signal Interconnection/Communications

3.4.1. Review current interconnected/communication methods and connectivity of existing signal system gathered in inventory.

3.4.2. Develop concept of operations and functional design for improved signal system operation, monitoring, and communication connectivity.

4. RECOMMENDATIONS/REPORT

4.1. Traffic Signal Inventory

4.1.1. Document inventory in geo referenced database to incorporate within Google Earth, City GIS system, and/or off the shelf signal inventory software package if so chosen by City.

4.1.2. Deliverables of inventory will include PDF forms, scans of paper document records, and photos of each intersection.

4.1.3. Recommendations tabulation for each intersection and a comprehensive tabulation of potential budget costs for overall traffic signal system maintenance needs.

4.1.4. Technical memorandum(s) as needed to document maintenance program recommendations.

4.2. Safety Audit

4.2.1. Summarize findings of crash analysis and “high crash” locations requiring immediate attention.

4.2.2. Identify potential improvement candidates for pursuit of additional Iowa DOT TSIP funding.

4.3. Infrastructure Needs

4.3.1. Technical memorandums and summary report as needed for pedestrian, lighting, parking, turn lane, lane width and other relevant intersection features. Include cost opinions for budget level planning as needed.

4.4. System Interconnection/Coordination Concepts

4.4.1. Provide technical memorandum(s) documenting implemented traffic signal coordination timing plans.

4.4.2. Develop technical memorandum(s) documenting concept functional design for traffic signal system.

4.5. Summary Report

4.5.1. Create summary report of all technical memorandums for comprehensive overview of subtasks, action items, and budgetary needs.

4.5.2. Meet as needed with City staff to review inventory and study recommendations.

PROJECT FEE AND SCHEDULE:

ENGINEER will complete the above services for on an hourly rate plus direct expenses basis per the attached standard fee schedule. Not to exceed budget for the project is \$110,000 .

The ENGINEER will begin work upon notice to proceed. It is assumed that the CLIENT would like to have the study completed by September 30, 2014.

ADDITIONAL SERVICES:

If CLIENT should request additional services related to the above-listed services or if the extent of modifications to a work task or subtask vary significantly from those listed above, the ENGINEER will complete additional services on an hourly rate plus direct expenses basis upon a notice to proceed by CLIENT.

RESPONSIBILITIES OR INFORMATION TO BE PROVIDED BY CLIENT:

- Traffic signal record drawings/maintenance records
- Related traffic studies, or other pertinent traffic data
- Coordination with City GIS system
- Latest digital aerial mapping
- Historic budget expenses for traffic signal system maintenance
- Coordination with other City staff/departments such as Fire/Police
- Planned or committed development that could have immediate traffic impact on study intersections.

SNYDER & ASSOCIATES, INC.
2014-15
STANDARD FEE SCHEDULE

Billing Classification/Level	Billing Rate	
Professional		
<i>Engineer, Landscape Architect, Land Surveyor, Legal, GIS, Environmental Scientist Project Manager, Planner, Right-of-Way Agent, Graphic Designer</i>		
Principal	\$169.00-179.00	/hour
Senior	\$150.00	/hour
VIII	\$141.00	/hour
VII	\$134.00	/hour
VI	\$129.00	/hour
V	\$121.00	/hour
IV	\$110.00	/hour
III	\$99.00	/hour
II	\$92.00	/hour
I	\$79.00	/hour
Technical		
<i>Technicians--CADD, Survey, Construction Observation</i>		
Lead	\$108.00	/hour
Senior	\$104.00	/hour
VIII	\$97.00	/hour
VII	\$89.00	/hour
VI	\$79.00	/hour
V	\$72.00	/hour
IV	\$66.00	/hour
III	\$55.00	/hour
II	\$46.00	/hour
I	\$41.00	/hour
Administrative		
II	\$55.00	/hour
I	\$45.00	/hour
Reimbursables		
Mileage	<i>current IRS standard rate</i>	
Outside Services	<i>As Invoiced</i>	

RESOLUTION NO. _____

ACCEPTING AGREEMENT BETWEEN CITY OF FORT DODGE AND SNYDER & ASSOCIATES, INC. FOR PROFESSIONAL SERVICES IN CONNECTION WITH THE PROJECT KNOWN AS 2014 TRAFFIC SYSTEM IMPROVEMENTS STUDY.

WHEREAS, the City of Fort Dodge desires to improve safety and functionality of the all signalized intersections within the City of Fort Dodge; and

WHEREAS, this project is consistent with Capital Improvement Plan; and

NOW, THEREFORE, BE IT RESOLVED by the City Council of Fort Dodge, Iowa, as follows:

- 1) The City of Fort Dodge shall enter into the Agreement with Snyder & Associates, Inc. to provide Professional Services for the 2014 Traffic System Improvements Study for a fee of \$110,000 attached hereto, and be further resolved that the Mayor and City Clerk be authorized to execute same for and on behalf of the City.

PASSED AND APPROVED this _____ day of _____, 20____.

AYE: _____

NAY: _____

OTHER: _____

Matt Bemrich, Mayor

ATTEST:

Jeff Nemmers, City Clerk