

Request for Statement of Interest (SOI) Traffic Engineering Assistance

The Kane County Division of Transportation is in need of professional services from a qualified engineering firm to Traffic Engineering Assistance on an on-call basis. These services are required to assist our Traffic Engineering staff various tasks.

The attached *Preliminary Scope of Services* provides in detail anticipated items that are necessary as part of the services for Traffic Engineering Assistance.

At this time the County anticipates services available in mid-December of 2007 with a duration of twelve (12) months.

The Statement of Interest shall be submitted **VIA EMAIL** no later than **4:00 P.M. on October 31, 2007** and should be addressed to **Thomas Szabo, Traffic Manager**. Thomas Szabo's email address is: szabotom@co.kane.il.us.

Statements of Interest received will be used by County engineering staff to develop a short-list of three (3) firms. The County will then submit a Request for Proposal (RFP) and schedule interviews with the short-listed firms.

For more information regarding the SOI, such as content and format of these items, please reference our QBS document found at www.co.kane.il.us/dot/qbs/csp.pdf. Also, the SOI shall be submitted in PDF format viewable with the latest version of Adobe reader. The County's email system is set up to automatically provide you with a receipt verifying that we received your submittal. If you do not receive this verification please contact Thomas Szabo, Traffic Manager at (630) 208-3139.

If you plan to enter into a joint venture with another firm for this project please note this on your Statement of Interest, including the name of the firm you are entering into a joint venture with for this project.

Short-listed firms will be posted on our website at www.co.kane.il.us/dot. Click on the link labeled "Request for Consultant Services", then click on the link labeled "Summary Table".

A Statement of Interest (SOI) received after the above noted deadline will not be used as part of our consultant selection process.

PROJECT DESCRIPTION/PRELIMINARY SCOPE OF SERVICES

The Consultant will provide traffic study assistance on an as-needed basis at locations to be determined. The various services that may be provided are described below:

1. Speed Studies

Speed studies will be performed for both the AM and PM Peak Hours at specified locations. The speed study will be conducted by utilizing a radar gun. The study will require a minimum of 100 vehicles (in each direction) or a maximum of 3-hours of count. The results of the speed study will be tabulated with the prevailing speed and any necessary reduction factors in accordance with the County's policy for conducting speed studies. The results of the study will be provided to the County for review.

2. Multi-Stop Warrant Analyses

A set of traffic counts will be performed for all approaches to the intersection. The counts will be performed for a 24-hour period during a typical workday utilizing the methodology described in the 2003 Edition of the *Manual on Uniform Traffic Control Devices (MUTCD)*, Section 2B.07.

Based on the traffic count, an analysis of the volumes related to the MUTCD criteria will be performed. The results of the analysis will be summarized in memo format and delivered to the County for review.

3. Traffic Signal Warrant Analysis

Traffic signal warrant analysis shall be prepared utilizing the methodology described in the 2003 Edition of the *Manual on Uniform Traffic Control Devices (MUTCD)*, Section 4C. Unless specified otherwise by the County, it should be assumed warrants 1 through 8 will be analyzed for each location requested.

The signal warrant analysis would also include machine counts for all approaches to the intersection. It is assumed that no right turn factor will be applied for intersections that do not include any State routes. A warrant analysis for intersections that do include State routes would require a right turn factor and entail a 12-hour manual count.

The results of the warrant analysis will be summarized and submitted to the County in memo format.

4. Ball Bank Studies

In order to ascertain the correct advisory speeds for various roadway sections, a ball bank indicator study will be performed. The study will be based on criteria outlined in the Institute of Transportation Engineers Traffic Engineering Manual. The results of the study will be summarized and delivered to KDOT for review.

5. Guardrail Analysis

A variety of services may be performed to assist the County in the evaluation of guardrails throughout the County. The services performed could entail any or all of the following:

- Topographic survey to determine the distance and size of fixed objects within the clear zone
- Survey of roadway backslopes and foreslopes within the clear zone
- Evaluation of existing guardrail installations
- Warrant for new guardrail installations in accordance with the latest edition of *The ASSHTO Roadside Design Guide*.

The services to be performed would be determined on a case-by-case basis and the work would be performed on a time and materials basis.

6. Accident Studies

Accident studies will be performed on an as-needed basis for various locations throughout the county. At the time of the study, a specific scope of work will be determined for the specific study. The work will be performed on a time and materials basis.

7. Contract Preparation

Preparation of bid documents for six (6) annual County traffic related maintenance contracts (i.e. various pavement marking, guardrail etc.) in accordance with IDOT and County standards. Annual programs and scope will be provided to the Consultant by the County. This task will be conducted on a time and materials basis.

8. Develop Highway Details

Development of CAD drawings for County Traffic Standard detail drawings. Preliminary or conceptual sketches will be supplied to the Consultant from the County. The sketches will be prepared on *MicroStation* format and supplied to the County in both *MicroStation* and *AutoCAD* format. This task will be conducted on a time and materials basis.

9. Traffic Signal Design

On a work order basis, the Consultant shall develop a scope of work, plans, and an engineer's cost estimate and contract bid documents (for projects that are bid) for new permanent signal installations, modifications of existing signals, and flashing beacon installations, all in conformance with IDOT District One and Kane County standards. This task will be conducted on a time and materials basis.

10. Miscellaneous Traffic Engineering Services

Traffic engineering services not specifically identified in previous subtasks may be performed by the Consultant at the direction of the County. For each task performed, a

specific scope of work and fee estimate will be developed by the Consultant and delivered to the County for approval.

11. Roundabout Engineering

a. Design Review:

The consultant shall provide design review services as needed for engineering design submittals for roundabout designs prepared by another consultant for the County or a Kane County Township.

The consultant shall provide written comments and recommendations to county staff on various elements of “Modern Roundabout” design in accordance with the *Kane County Roundabout and Selection Design Guide*, *AASHTO Policy on Geometric Design of Highways and Streets* and the *Manual on Uniform Traffic Control Devices* when requested by the County, which may include but not be limited to the following elements:

- Location
- Capacity
- Geometrics
- Pavement Marking and Signing
- Illumination
- Pedestrian/Bicyclist Safety

The consultant will be required to submit all projects to a second party consultant that is a nationally recognized expert in the field of “Modern Roundabout” design for peer review. The second party consultant shall be approved by the County prior to the commencement of the contract. Review comments shall be summarized and submitted to the County in memo format.

b. Intersection Feasibility Study:

When requested, the Consultant shall evaluate the feasibility and appropriateness of a modern roundabout for a specified intersection for the planning and programming purposes. The evaluation should include all necessary elements specified in the *Concept Design* per section 3 of *Kane County Roundabout and Selection Design Guide* and shall be summarized in memo format. The study should include recommendations and an estimated project cost, which shall include construction, right of way acquisition, phases I, II and III engineering.

QUALIFICATIONS

Interested consultants should possess competency in the following areas of expertise:

- General traffic engineering and provide a project manager that possesses certification as a Professional Traffic Operations Engineer (PTOE)
- Traffic Signal design (per IDOT Region One and Kane County standards)
- Pre-qualified for Phase II engineering with IDOT, Region One
- Familiarity with Manual on Uniform Traffic Control Devices (MUTCD)

- Familiarity with the ITE Traffic Control Devices Handbook
- Familiarity with the ASSHTO Roadside Design Guide

PROJECT DURATION

Contract duration shall begin upon the receipt of the notice to proceed from the County to the Consultant, which is anticipated to sometime in **mid December 2007 through December 31st 2008**.

The County also reserves the right to extend this contract for a period of **12 months** from **January 1, 2009 through December 31st 2009**.