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DEPARTMENT OF PUBLIC WORKS
Engineering Division – Traffic Section
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To: Municipal Services Committee
From: Michael Hardy, Assistant City Traffic Engineer
Date: April 4, 2014
Re: Recommendation of Award – School Flasher Control Upgrades
CC: Jeffrey Fait, City Purchasing Manager

Project Background:

Contained in the 2014 City budget is the upgrade of the control units for 20 school zone warning flashers throughout the City. The current flasher control units, which have been deployed in the field for decades, have very limited functionality and are beginning to fail.

Because the existing units have limited functionality, they are programmed annually to flash on all weekdays during the school year, with no accommodations for special days off or early release. This results in the flashers being active when school no school children are present, which is discouraged by the Manual on Uniform Traffic Control (MUTCD) and results in reduced driver compliance. Any time programming changes would need to be made, an electrician would need to visit each and every controller in the field, which is an extremely inefficient use of their limited time.

This project would replace the existing flashers with new units that offer improved capabilities. These new units would be remotely programmed in a matter of a few minutes, allowing us to efficiently address planned or last minute changes to the school calendar. Additionally, the remote access functionality would allow for troubleshooting and automatic notification if a flasher fails, greatly improving our responsiveness and efficiency. This project will also make improvements to the flasher locations where needed for consistency, and to provide compliance with Federal Highway Administration (FHWA) standards for school zone signing.

The approved budget for this project is \$44,430, of which \$38,000 was allocated to the control unit upgrades. The Traffic Section would install and integrate the procured equipment.

Sole Source Purchase Request:

The City contacted three vendors in the region regarding the various components to receive product information. Minimum criteria were developed as part of a request for quote that was submitted to the three vendors. Only TAPCO formally responded with product literature, price and warrantee information in compliance with minimum criteria. Several meetings were held with the vendor to learn of the product capabilities, limitations and integration of components. A review of the final submission of pricing presents the following;

- 1) TAPCO system: \$31,716

With only one formal quote received, an alternative design implementing City-owned infrastructure for remote access and automatic notification was discussed with vendors. That alternative would have an estimated cost of \$56,000. The quoted TAPCO system includes a 5-year subscription to their network for remote access and automatic notification. The annual subscription rate would be approximately \$3,000 thereafter (beginning in 2019). Considering the costs associated with maintaining City-owned infrastructure for this application, the Traffic Section feels the TAPCO System is advantageous.

With our understanding of the product capabilities and the discussion above, the Traffic Section is recommending procurement of the School Flasher Control Upgrades from TAPCO of Brown Deer, Wisconsin. Per City Policy, we are requesting approval for this purchase.