INDIAN RIVER COUNTY, FLORIDA MEMORANDUM

DATE:	December 18, 2019
TO:	Jason E. Brown, County Administrator
THROUGH:	Richard B. Szpyrka, P.E., Public Works Director
FROM:	Janie Hollingsworth, P.E., County Traffic Engineer
SUBJECT:	Sole Source Approval for Traffic Management Center Upgrade

DESCRIPTION AND CONDITIONS

The Advanced Traffic Management System (ATMS) is housed at the County's Traffic Management Center (TMC), which is located in the Public Works section of Building A. From this location, County staff can monitor the transportation system, modify signal timings, and troubleshoot many signal malfunctions from a single location.

ATMS is the traffic signal control system used by the Traffic Division to monitor traffic and control the traffic signals in Indian River County. Utilizing wireless communication and over 480 miles of fiber optic technology, the ATMS connects over 157 traffic signals, 109 closed-circuit television cameras, 55 flashing beacons and remote data sensors throughout the County, allowing traffic engineers and technicians to effectively manage and analyze real-time traffic conditions. Currently, the traffic signal control system uses two separate and distinctive operating systems. Econolite Systems Centracs operating system is currently used for traffic signal operations and VIDOS for the visual (video) monitoring of intersections. This allows staff to visually monitor traffic congestion at individual intersection or roadway and traffic signal malfunctions, which allows staff to take immediate action to resolve the issue remotely or dispatch a signal technician. Staff is extremely satisfied with the operation and dependability of the Econolite Centracs system for the operation of our traffic signals. Unfortunately, VIDOS is an obsolete software system that is no longer in existence as it was discontinued when the Windows XP operating system was no longer supported by Microsoft. The County continued to use the VIDOS system until recently when the system started to experience software glitches.

The existing TMC was originally implemented in 2007 and is overdue for an upgrade. The current VIDOS software is obsolete and unserviceable. Furthermore, for the past several years staff has been replacing malfunctioning cameras and installing new cameras that are not compatible with the VIDOS software. As a result, the Public Works Traffic Division is proposing to upgrade the TMC with Econolite's Centracs Advanced CCTV module. This upgrade will not only upgrade our traffic signal operating system, but will include a new Video Management System software, to replace VIDOS, that is compatible with all of our new and existing cameras. As part of this proposed upgrade, the TMC will also receive an upgrade from the 2007 analog monitors to a state of the art digital video wall to improve monitoring capabilities. The new Econolite Centracs monitoring system will now allow remote viewing capabilities at locations such as the Emergency Operations Center and Traffic Operations Facility to improve response and awareness during day-to-day activities and during emergency events such as hurricanes. This capability is not available with the current obsolete VIDOS monitoring software.

Since the Traffic Management Center staff currently uses Econolite Centracs for the traffic signal operating system, and the Board designated Econolite as sole source for that system on November 15, 2016, we are requesting the Board waive the requirement for bids for the TMC system upgrade at a cost of \$256,302. The Econolite Advanced CCTV module can be added to the update of the Econolite Centracs system currently being used for our traffic signal operating system. This allows the integration of the visual operation within the Centracs system that a separate standalone system would not allow. Additionally, Econolite has shown excellent reliability over the years and has provided prompt service when necessary. The camera control software utilized in the Centracs system is a well-known security system used throughout the security industry.

FUNDING

Funding for the upgrades to the Traffic Management System in the amount of \$246,276 is programmed in the 2019-2020 CIE and will be expensed to Traffic Impact Fees/District I, II and III, account #'s 10215141-066510-20008, 10215241-066510-20008 and 10215341-066510-20008. The training expense in the amount of \$10,026 will be charged to 11124541-033490 Transportation/Traffic Engineering/Other Contractual Services.

RECOMMENDATION

Staff recommends the Board of County Commissioners waive the requirement for bids for the TMC upgrade, at a cost of \$256,302, and declare Econolite Systems as the County's sole source provider for any subsequent maintenance, repair and upgrade of the Centracs Advanced CCTV module, video wall monitors and associated hardware and software related to the TMC . Staff also recommends the Board authorize the Purchasing Division to issue Purchase Orders for the Econolite Centracs System, associated equipment and software, as needed.

ATTACHMENTS

Econolite Systems Proposal Econolite Sole Source Letter

APPROVED AGENDA ITEM FOR JANUARY 7, 2020