PTK # 143339 March 27<sup>th</sup>, 2017

## ADDENDUM NO. 2 City-Wide Resurfacing 2017

Bids Open: 2:00 p.m. 03/29/2017 Room 220 City Hall DEPARTMENT OF PLANNING ENGINEERING & PERMITS ANDRE V. BITTAS, DIRECTOR FRED HAWKINS, PE, CITY ENGINEER

THIS ADDENDUM IS DIRECTED TO ALL PRIME BIDDERS, AND ALL OTHERS TO WHOM DRAWINGS AND SPECIFICATIONS HAVE BEEN ISSUED.

THIS ADDENDUM FORMS A PART OF THE CONTRACT DOCUMENTS. THE FOLLOWING CONDITIONS TAKE PRECEDENCE OVER ANY CONFLICTING CONDITIONS IN THE DRAWINGS AND SPECIFICATIONS. THE DRAWINGS AND SPECIFICATIONS ARE HEREBY AMENDED IN THE FOLLOWING PARTICULARS.

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- The **Video Detection System (VDS) Specifications** are <u>updated</u>. See the Revised 3/27/17 specifications.
- Bid Items #13 and #14 "Traffic Control Box" refers to a ground level junction box that may need to be adjusted or relocated due to repaving, curb ramp installation, etc.

**END OF ADDENDUM NO. 2** 

# Video Detection System (VDS) Specifications

The Contractor shall furnish and install all equipment, materials, software and other miscellaneous items that are required to provide a fully functional Video Detection System for the control of vehicular and pedestrian traffic signals.

The Contractor shall establish the configuration of the required traffic detection zones within each controller cabinet up to a maximum of 24 detection zones per controller. The Contractor shall notify the Engineer prior to software configuration and detector zone setup in ample time to allow the Engineer to observe this work. There will be no additional payment made for the relocation of cameras that may be required to achieve the required configuration.

The VDS shall detect the presence of a vehicle in the zones with at least 95 % accuracy at any time during the day.

The Contractor shall have a qualified representative of the supplier of the VDS to be present at the site of the installation to verify that all equipment and materials are being installed correctly. The representative of the VDS supplier shall be available to address all issues of concern that the Engineer may have.

All coaxial cable and power cable shall be one continuous pull without splices between the camera mounting location and the traffic controller cabinet.

#### (A) CAMERA

The camera enclosure shall have the following features and functionality:

- provide real time detection;
- operate from 0% to 100% humidity;
- fixed wide angle 2.1mm / narrow angle 6.0mm lens;
- be easily field replaceable;
- shall be clearly identified with the focal length and aperture;
- shall be resistant to vibration and resistant to shock when installed for operation.

#### (B) CAMERA ENCLOSURE

The camera enclosure shall have the following features and functionality:

- shall be a NEMA Type 4 enclosure;
- shall be fabricated from corrosion resistant aluminum;
- shall be finished in a light colored UV and weather resistant paint.

#### (C) CAMERA AND ENCLOSURE ASSEMBLY

The camera and the enclosure assembly shall have the following features and functionality:

- The weight of all components shall not exceed 10 pounds {4,54 kg}. The weight shall include the environmental enclosure, complete with camera, fittings, and transformers.

## (D) CAMERA MOUNTING ASSEMBLY

The camera mounting assembly shall have the following features:

- shall have all stainless steel or aluminum construction;
- shall meet the support requirements of the camera manufacturer;
- shall be equipped with lightening lightning protection;
- connections shall be mounted on the rear of the enclosure;
- all connections shall have liquid tight fittings;
- shall be installed at a minimum of 15ft/5m.

## (E) PROCESSOR

- The processor shall be rack or shelf mounted in a controller cabinet and shall have a RS232 serial port, Ethernet, or USB interface capability.
- The processor shall provide video output (USB) for connecting a television monitor or PC for testing purposes and for connection to video transmitter provided by others.
- The processor shall be capable of detecting vehicle presence in 8 user-defined detection zones. When the vehicle is in the detection zone, the detection zone shall change color or intensify on the screen to verify proper operation of the detectable system.

## (F) VIDEO INTERFACE PANEL AND CABLES

- The video interface panel shall provide facilities to protect against damage from lightning and to isolate the ground of the cables from that of the video detection system.
- It also shall be capable of receiving inputs and decoding video from at least 4 cameras Cat 5 cable and power cable shall meet the requirements of vehicle detection manufacturer.
- 45ft/15m of manufacturer approved cable will be required for each unit.
- (G) TWO CHANNEL AND FOUR CHANNEL DETECTOR UNIT All detector units shall be card rack units, suitable for mounting in a detector unit as specified in NEMA Standard Publication TS-2-1992.