

SPECIAL PROVISIONS FOR TRAFFIC SIGNALIZATION

Polk County STP-SWAP-3125(614)--SG-77

Effective Date March 19, 2019

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

151060.01 DESCRIPTION.

Furnish all work, apparatus, and materials to construct, install, and place in operation, functional traffic signals and communications as shown in the contract documents. Signals shall be constructed according to Section 2525 of the Standard Specifications with the following materials modifications.

151060.02 MATERIALS.

- A. Add the following to Article 4189.01, C:
 - 1. **Pull Tape:** Flat woven polyester tape with minimum tensile strength of 1250 pounds and width of 0.5 inch.
- B. Add the following to Article 4189.02, C:
 - 3. System: The video detection system includes furnishing and installing detection camera(s), mounting hardware, processing equipment, and manufacturer's recommended cable(s) to provide functioning vehicle detection at each intersection. Provide camera(s) to detect both stopline and advance vehicle detection areas as shown on the layout sheets and video detection summaries. Camera mounting locations per manufacture recommendations based on detection needs. The system shall be IP addressable with capability to transmit video, via fiber optic cable, to the City Public Works Facility. Camera(s) may be mounted on mast arms or on/near luminaire arms of signal poles. Include necessary software to view camera(s) at the Public Works facility with instructions on how to install software and connect to the camera(s).
- C. Add the following to Article 4189.03
 - D. Ethernet Switch: Provide an Ethernet Switch with the following:
 - 1. Hardened for the environment

- 2. Managed
- 3. Eight fiber ports
- 4. Eight (minimum) Ethernet ports
- D. Replace Article 4189.04, A, 1 with the following:
 - Controller: Shall be NAZTEC ATC with NTCIP communication capability, IP
 Addressable, and capable of communicating with a NAZTEC master controller over the
 IP network.
- E. Replace Article 4189.04, A, 2, b with the following:
 - **b.** Aluminum cabinet riser with same dimensions as cabinet and 18 inch height with same finish as signal cabinet.
- **F.** Add the following to **Article 4189.04**, **B**, **2**: and 8 hours of flashing operation.
- G. Add the following to Article 4189.04, B:
 - **5.** Locate system in a side mounted, NEMA enclosure attached to the signal cabinet. Finish shall match signal cabinet.
- H. Add the following to Article 4189.05, A:
 - **9. Finish:** Housing, inside and outside of visor, backplate, and body shall be black. Mounting hardware shall have a natural finish.
- I. Add the following to Article 4189.05, C, 1:
 - Transformer Base: All signal poles shall have a transformer base unless structural design requires other.
- J. Add the following to Article 4189.05, C:
 - **5. Pole Finish:** Finish shall include galvanizing and electrostatically applied primer and black finish, per manufacturer's recommendation. All visible pole hardware shall match pole color.
- K. Add the following to Article 4189.05, F:
 - **4. Street Name Signs:** Shall have 12 inch Highway Series B font for primary street name and 8 inch lettering for remaining text (directional and street identifiers). White text and border on black background.
- L. Add the following to Article 4189.05:
 - **G. Luminaire:** Shall be LED, rated for 13,000 lumens (+/- 5%), at least 100 lumens per watt efficacy, 4000K color temperature, Type III distribution, medium cutoff, 100,000 hours, 5 year warranty, and black finish. Each luminaire shall include individual, long life (10 year minimum) photocell control.