



**SPECIAL PROVISIONS  
FOR  
TEMPORARY TRAFFIC SIGNALIZATION**

**Linn County  
NHSX-100-1(79)--3H-57**

**Effective Date  
March 18, 2014**

**THE STANDARD SPECIFICATIONS, SERIES 2012, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.**

**120136.01 DESCRIPTION.**

**A. Scope of Work.**

The work shall consist of furnishing labor, materials and performing all work necessary to install, maintain, operate and remove temporary traffic control signals in the City of Cedar Rapids, Iowa, at the following intersections:

- Edgewood Road & Transamerica Entrance
- Edgewood Road & North River Boulevard
- Edgewood Road & Hwy 100 EB Terminal
- Edgewood Road & Hwy 100 WB Terminal
- Edgewood Road & South Hy-Vee Access

**B. Temporary Traffic Signal Operation and Maintenance.**

1. At the intersections shown on the contract documents, the Contractor shall be solely responsible for the installation, operation, maintenance and repair (if necessary) of the temporary traffic signal installation during the operation and maintenance period. This shall include the temporary traffic signal's controller programming and all costs to maintain, operate and repair (if necessary) the temporary traffic signal installation, with the exception of power costs. The operation and maintenance period will begin with the contract authorization and continue until permanent traffic signals are activated. All materials and equipment that are removed shall become the property of the Contractor and be removed from the project.
2. The Contractor's traffic engineer or applicable manufacturer's representative shall be responsible for initial traffic signal controller programming and for performing turn-ons of each temporary traffic signal. Provide at least 5 working days notice to the Engineer that a new signal will be ready for turn-on. At initial signal turn-on, the Contractor's traffic engineer or applicable manufacturer's representative shall coordinate with the City of Cedar Rapids Traffic Engineering Department for appropriate signal timings. The Engineer will be available at the site during the initial signal turn-on to observe traffic flow during this time.

3. After initial signal activation and turn-on and during the operation of the temporary traffic signal, if it's determined by the Engineer that subsequent signal timing modifications are necessary; the Engineer will provide a signal timing report with modified signal timings. Program the controller to modify the existing signal timings based on this report. The Engineer will be available onsite during controller programming to observe traffic during the implementation of the new signal timings.
4. During the operation of the temporary traffic signals, any failures or malfunctions of the temporary traffic signal materials or equipment that occur, regardless of cause, shall be immediately corrected at the Contractor's expense, including all labor, materials and associated cost.
5. While the temporary traffic signals are installed, any damages to signal equipment or materials that occur regardless of cause shall be immediately repaired, corrected, or removed and replaced with materials and equipment of like kind at the Contractor's expense, including all labor, materials and associated cost. Typical damages that might be expected include damage from storms or weather events, or impacts that might result from moving vehicles. The Engineer shall approve the repair of all damaged equipment or materials. If deemed necessary by the Engineer, damaged equipment and materials will be replaced with new stock. All approved repairs to damaged equipment or materials must restore the temporary traffic signal to a like new condition.
6. At all times during the operation of the temporary traffic signal, a qualified service technician shall be available to respond to signal complaints received from the Engineer, the City, the Iowa DOT, or emergency service providers. The signal complaints shall be routed through the Iowa DOT for tracking/concurrence prior to alerting the Contractor. This shall include, but not be limited to, the following complaints: signal timing phasing and coordination, equipment or material failures or malfunctions, and equipment or material damage. Response time shall be 1 hour for complaints received between 6 AM and 7 PM on non-holiday weekdays, and 2 hours for all other times. For some cases (due to travel times or other extenuating circumstances) additional time may be acceptable within reason, but must be approved by the Engineer.

**C. Design of Temporary Traffic Signal Poles and Structural Supports.**

The temporary traffic signal typical details shown in the plans were designed for a maximum span length of 100 feet for one or two spans off a signal post, with one 5-section head signal, two 3-section head signals and two signs per span. Because the actual span lengths for the temporary signals at the three intersection locations exceed 100 feet, propose a modified temporary traffic signal design in which the signal poles and structural supports are designed to support the actual number of signal heads (use weight and projected areas of polycarbonate signal heads) and aluminum signs with actual span lengths. Design of poles and structural supports shall comply with AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, 2001 and current interims. The contractor shall supply/procure/submit shop drawings, signed and sealed by an Engineer Licensed in the State of Iowa, to the Engineer for review. Do not order materials or equipment, nor begin construction of the temporary traffic signal until the shop drawings have been reviewed and approved by the Engineer.

**120136.02 EQUIPMENT.**

**A.** Apply Article 2525.02 of the Standard Specifications.

**B. Existing Video Detection System.**

The existing video detection system currently in use at the south Hy-Vee entrance intersection shall be reused at the Transamerica Entrance intersection. The existing equipment shall be protected during the transfer between intersections and shall be reconfigured for proper use at the Transamerica entrance intersection. Contractor shall use new cable between camera units and detector card rack assemblies.

**C. Radar Vehicle Detection System Equipment.**

At the intersections of North River Boulevard, WB and EB IA Ramp terminals and at the Hy-Vee south entrance intersection, the Contractor will utilize the radar vehicle detection system equipment, other than the cable, from the temporary traffic signals and relocate equipment to the permanent traffic signals. The radar detection equipment shall be protected during the transfer between the construction stages as well as the transfer to the permanent installations and shall be reconfigured for proper use as part of the permanent installation at each of the intersections. Contractor shall install new cable.

**120136.03 CONSTRUCTION.**

- A. Apply Article 2525.03 of the Standard Specifications.
- B. The temporary traffic signal at the locations identified above will be removed, with the exception of underground conduits, which will be abandoned.

**120136.04 METHOD OF MEASUREMENT.**

Each Temporary Traffic Signal Installation as indicated on the plans, complete-in-place, will be measured as a unit lump sum quantity for all work necessary.

**120136.05 BASIS OF PAYMENT.**

The Temporary Traffic Signal Installation(s) measured as provided above will be paid for at the contract lump sum price bid, which price shall be full compensation for furnishing all equipment, materials, labor and all other work necessary or incidental to the construction of the complete temporary traffic signal installation, and for all materials, equipment, and labor necessary to maintain, operate and remove (if necessary) the temporary traffic signal installation.