



**SPECIAL PROVISIONS
FOR
ITS INFRASTRUCTURE INSTALLATION**

**Tama County
NHSX-030-6(242)--3H-86**

**Effective Date
October 19, 2021**

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.

150787.01 DESCRIPTION.

- A.** This project involves installing Iowa DOT supplied pole and foundation. Separate contracts will be initiated to supply and install the cameras, sensors, weather sensors, and other ancillary equipment on the pole, as well as other items required to provide a complete and functioning network of ITS devices.
- B. Related Specifications and Standards.**

The work as detailed on the plans for the ITS Infrastructure Installation shall be completed in accordance with the contract documents and the documents listed below.

 - 1. NEC, latest edition adopted by the State of Iowa.
 - 2. Telecommunications Industry Association/Electronic Industries Association (TIA/EIA) latest editions.
- C. Contractor's Responsibility.**

Until final acceptance, the Contractor shall provide all utility locates of the work performed under this contract when requested through One-Call services or by the Engineer. The Contractor shall perform any such locations within 48 hours of receiving notice that such locations are needed.
- D. Contractor Submissions.**
 - 1. Shop Drawings.**
 - a. After approval of the Materials List and before any items are ordered, the shop drawings shall be submitted for approval according to Article 1105.03 of the Standard Specifications.
 - b. The Engineer will review the shop drawings/catalog cuts for the purpose of assuring general conformance with the project design concept and contract documents.
 - c. Provide written notice of any deviations from the requirements of the contract documents.
 - d. Engineer's approval of shop drawings/catalog cuts does not relieve the Contractor of responsibility for providing satisfactory materials complying with the contract documents. Errors not detected during review do not authorize the Contractor to proceed in error.

2. Warranty.

- a. Transfer all required standard materials warranties on the date of final acceptance to the Iowa DOT.
- b. Warranty periods shall not commence prior to final acceptance of the work.

E. As-Built Documentation.

1. General.

- a. As-built record plans will be the responsibility of, and completed by, an on-site representative of the Engineer. As such, it will be the responsibility of the Engineer's representative to coordinate directly with the Contractor to ensure that a master record set of the plans is maintained throughout construction to document all installations and any deviations from the design shown in the contract documents.
- b. It is the responsibility of the Contractor to maintain written records of daily construction progress, areas worked, and quantities installed to aid in the completeness of as-constructed documentation by the Engineer's on-site representative.

2. GPS Data Recording Staking Assistance.

- a. The Engineer's on-site representative will be responsible for collecting GPS data of ITS pole installation. All efforts will be made by the Engineer's on-site representative to coordinate with the Contractor and collect daily construction progress.
- b. The Contractor shall be responsible to coordinate and assist the Engineer's on-site representative in this effort.

150787.02 MATERIALS.

A. General.

1. Provide any items, equipment, or materials not specifically addressed in the contract documents but required to provide a complete and functional installation. The level of quality shall be consistent with other specified items. All miscellaneous electrical equipment and materials shall be listed for its specific application.
2. The Iowa DOT will stake all pole locations. Pole locations shall not be adjusted without approval by the Engineer. The Engineer shall authorize any changes in location in writing before installation by Contractor.
3. Notify the Engineer immediately if an obstruction conflicts with a foundation. The Engineer is responsible for relocating or determining another effective means of supporting the structure to eliminate the conflict. Payment shall not be made for re-work or extra work as the result of an unauthorized relocation of a foundation.

B. Power Installed Foundation.

All power installed foundations shall be provided by the Iowa DOT. The Contractor shall coordinate with the Engineer the time for the Contractor to travel to the designated Iowa DOT Maintenance Facility, pick up the power installed foundation(s), and haul the foundation(s) to the project site for installation. The designated Iowa DOT Maintenance Facility is located at:

57073 US 30
Ames, IA 50010

C. Poles.

All poles shall be provided by the Iowa DOT. The pole(s) are constructed of steel and are nominally 45 feet in length. The Contractor shall coordinate with the Engineer the time for the Contractor to travel to the designated Iowa DOT Maintenance Facility, pick up the pole(s), and haul the pole(s)

to the project site for installation. The designated Iowa DOT Maintenance Facility is located at:
 57073 US 30
 Ames, IA 50010

150787.03 CONSTRUCTION.

A. Existing RWIS Structure Removal.

1. The Contractor shall be responsible for the removal of the existing RWIS steel support structure and demolition of the foundation. Refer to the plans.
2. The Contractor shall protect and maintain the operation of the existing RWIS installation for as long as practicable to facilitate Iowa DOT weather monitoring during the beginning of interchange construction.
3. The Contractor shall contact the Iowa DOT Traffic Operations Bureau 30 days in advance of when the Contractor requires the removal of the existing RWIS installation. Traffic Operations Bureau contact:
 Jason Dale
 Office: 515-239-1995
 Mobile: 515-291-4675
 e-mail: Jason.Dale@iowadot.us
4. During this time, the Iowa DOT will have their ITS equipment maintenance contractor remove the weather sensing and other electronic components from the structure prior to removal of the RWIS steel structure by the Contractor.
5. The Contractor shall notify the Engineer one day in advance of the actual removal of the structure.
6. On the scheduled date, the Contractor shall remove the RWIS steel structure and demolish the concrete foundation per the plans.

A. Power Installed Foundation.

1. General.

- a. Install the power installed foundations in accordance with the contract documents and the manufacturer's recommendations.
- b. Contact the Engineer a minimum of 1 week in advance to arrange a field review prior to placing the power installed foundation.
- c. Notify the Engineer immediately if an obstruction conflicts with a proposed power installed foundation location. The Engineer is responsible for relocating or determining another effective means of supporting the structure to eliminate the conflict. Payment shall not be made for re-work or extra work as the result of an unauthorized relocation of a power installed foundation.

2. Installation Details.

- a. Construct all power installed foundations as located by the Engineer and set level and to the proper elevation.
- b. Hand dig with shovel after power installed foundation is in place to install conduit(s) into the provided conduit entrances.

3. Improper Construction.

Remove and reconstruct, at no additional cost to the Engineer, all power installed foundations improperly constructed or with improperly installed anchor bolts, conduit, or any other foundation components as determined by the Engineer.

B. Poles.

1. General.

- a. If pole has structural damage do not erect and notify Engineer.
- b. Repair any surface damage to galvanized components using a zinc-rich paint acceptable to the Engineer.

2. Pole Erection.

- a. Erect pole and securely bolt to the power installed foundation base plate such that the pole is vertical to the centerline of the nearest adjacent major roadway.
- b. Use leveling nuts on each anchor bolt installed below the pole flange. Adjust the pole's vertical position by adjusting both the upper and lower nuts.

150787.04 METHOD OF MEASUREMENT.

A. Power Installed Foundation.

Measurement and payment for installation of power installed foundations shall be paid for at the contract unit price per each for the pay item Install Power Installed Foundation.

B. Poles.

Measurement and payment for installation of steel poles shall be paid for at the contract unit price per each for the pay item Install Steel Pole (45').

150787.04 BASIS OF PAYMENT.

A. Power Installed Foundation.

Payment is full compensation for:

1. The installation of all power installed foundations.
2. Including all surface excavations, repair, or restoration of any nearby areas.
3. Furnishing all materials, labor, equipment, and other incidental items necessary to meet the requirements of the contract documents.

B. Poles.

Payment is full compensation for:

1. The installation of all poles and accessories,
2. Including all conduit entrances and attachments, all necessary electric grounding materials, and
3. Furnishing all materials, labor, equipment, and other incidental items necessary to meet the requirements of the contract documents.