

**ITEM 0263601**

**REMOVAL AND/OR RELOCATION OF TRAFFIC SIGNAL EQUIPMENT**

**DESCRIPTION**

Work under this item shall consist of removal or relocation of existing traffic signal equipment, and temporary signalization where necessary to maintain uninterrupted signal operation as directed by the Engineer and in conformity with these specifications.

Equipment affected by this item includes span poles, wood poles, trolley poles, detectors, handholes, mast-arms, pedestals, controllers, cameras, traffic signal heads, pedestrian signal heads, pedestal bases, conduit, partial removal of pole foundations, span wire, signal cables, miscellaneous fittings on poles that are not to be removed and other traffic signal operations related equipment.

Not all existing equipment may be shown on the Plans. It is the responsibility of the Contractor to field check all locations in the project for removal and/or relocation of any existing traffic signal equipment.

**REFERENCED ITEMS**

None

**REQUIRED SUBMITTALS**

Contractor's emergency contact list of names and telephone numbers.

**MATERIALS**

All materials required for this work shall conform to the requirements of these specifications or the special provisions for the material in question; or if not so specified, they shall be of a quality satisfactory to the Engineer.

**CONSTRUCTION METHODS**

Existing traffic signal equipment shall be carefully removed together with all fittings and attachments in such a manner as to safeguard all parts from damage or loss. The Contractor shall replace, at his own expense, all equipment which becomes damaged due to his operations.

Removal of existing signal and control equipment shall be coordinated with the installation of new signal and control equipment so as to maintain uninterrupted

traffic signal operation at each intersection. The Contractor shall furnish and install signals, supports or other equipment necessary to provide for uninterrupted signal operation as directed by the Engineer.

Traffic signal equipment, fittings, wires, cable, conduit and all other materials shall be reinstalled and extended where necessary to maintain uninterrupted operation. All equipment that is furnished by the Contractor for temporary signalization shall remain the property of the contractor.

The Contractor shall be responsible for obtaining secondary service required for continuous operation of the temporary traffic control signals.

Signs on poles being removed shall, at the direction of the Engineer, be relocated to new poles if the new poles are less than 5 feet away and adjacent to the curb or onto new channel posts (in grass area) or on new telspar posts in paved areas.

The Contractor shall furnish the City Traffic Engineer and the Superintendent of the City of Hartford, Fire Department, Signal Maintenance Division a list of active telephone numbers of personnel who will be responsible for the maintenance of the temporary traffic signals during normal working hours and after normal working hours. Traffic signal malfunctions must be responded to within a maximum of three hours from the time that the malfunction is reported to the Contractor. The intersection must be back in operation within a maximum of 24 hours from the time that the malfunction is reported to the Contractor.

Where attachment points for span wire or other signal equipment are on a utility pole, the Contractor shall secure from the owning utility company the permission to remove or install such attachments in accordance with their requirements.

Equipment shall be removed in such a manner as to cause no hazard to pedestrians, traffic or property. If necessary, flagmen shall be used to halt traffic briefly while work is in process. When plans call for relocation of existing equipment, the work shall be accomplished with a minimum of down time.

When existing hand holes or foundations are to be rebuilt or replaced with a new hand hole or foundation, the Contractor shall carefully remove the entire existing hand hole or foundation structure, using caution not to damage existing conduit runs to be incorporated in the new hand hole or foundation. The Contractor shall protect all existing cables to remain in use from damage during the conversion by pulling them back to a convenient storage point such as an adjacent hand hole or manhole in the case of interconnect cable.

All surface conduits on wood utility poles shall be removed in a workmanlike manner; the wood poles shall not be damaged by forcing screws out of the wood.

Trolley poles are steel poles with one third of their total height buried in the ground to act as a foundation. These poles are encased in concrete below the grade. Removal of these poles shall include partial removal of concrete base, cutting the steel pole to a depth of 24 inches below grade, backfill with suitable material, and abandon the removed pole.

Existing pole foundations, pedestal foundations, hand holes behind the curb shall be cut to a depth of 24 inches below curb grade. Existing anchor bolts shall also be cut to a depth of 24 inches below curb grade. Existing pole foundations, pedestal foundations, trolley poles, hand holes in a roadway that is being widened and in the proposed sidewalk ramp area behind the curb shall be cut to a depth of 24 inches below the existing grade.

When removing foundations or hand holes in concrete sidewalk areas, the sidewalk shall be sawcut at the nearest joint and the complete slab(s) of sidewalk shall be removed and replaced.

All removed equipment designated by the Engineer and that is not reused at the location shall remain the property of the City of Hartford and shall be returned to the City Yard at 40 Jennings Road, Hartford. Materials and equipment that is not salvaged or reused shall be properly disposed of by the Contractor. When poles, foundations, etc. are removed, the hole shall be backfilled with clean fill material, which shall be compacted and the ground restored to a grade and condition compatible with the surrounding area. Topsoil to a minimum depth of 4" shall be applied and seeded with perennial grass seed. If in a sidewalk area, the surfacing shall be with material compatible with the rest of the sidewalk. Where pressure sensitive vehicle detectors are to be removed from the roadway, the entire detector frame shall be removed, the hole shall be backfilled and the roadway surface restored.

**METHOD OF MEASUREMENT**

This work shall be at the contract lump sum price for the completion of all work specified.

**BASIS OF PAYMENT**

This work will be paid for at the contract lump sum price for the "REMOVAL AND/OR RELOCATION OF TRAFFIC SIGNAL EQUIPMENT" which price shall include all removals, all relocations, all pavement, sidewalk, ground restoration, and all temporary signalization, all disposals, all material, equipment and labor incidental to completion of this item.

<b><u>PAY ITEM</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>PAY UNIT</u></b>
0263601	Removal and/or Relocation of Traffic Signal Equipment	LS