## REMOVE AND RELOCATE LIGHT STANDARDS

(09-2012) SPECIAL

# Description

Furnish and install all materials required to remove and/or remove and relocate parking lot light standards at locations shown in the plans. Work includes, but is not limited to, identification and designation of the existing underground electrical system, and supply and installation of conduit, cable, junction boxes, and concrete foundations. Light standards to be removed and not reinstalled shall be returned to the Southwest Community College (SCC).

#### Materials

Refer to Divisions 4, 10 and 14 of the 2012 Standard Specifications. Furnish all new mounting hardware.

Item	Section
Removal of Existing Foundations	402-2
Backfill	545, 1005
Conduit	1091-3, 1400-2(B)
Electrical Junction Boxes	1091-5, 1411-2
Ground Rod	1091-6
Wire and Cable	1091-2, 1400-2
Metal Shroud	1400-4(I)
Anchor Bolts	1404, 1405
Portland Cement Concrete, Class A	1000
Reinforcing Steel	1070

#### **Construction Methods**

Existing parking lot lighting and underground conduits and cables are owned by the Southwest Community College (SCC). Coordinate with SCC and the utility company as needed for access to existing electrical panels and services.

Subsurface information on the lighting conduits and circuits servicing the parking lot lighting is not available. Locate existing underground electrical conduits and identify the number and size of cables in each conduit. Prior to removal of any light standard or electrical conduit, verify the operating circuit and phase of all parking lot lighting where the electrical service is being interrupted.

Maintain operation of the existing parking lot lighting system until such time that it becomes in conflict with the actual construction work. Use care in working around the lights and circuitry so that the disruption of existing lighting system will be minimized.

The area of the parking lot that remains open to traffic during construction shall remain illuminated throughout construction. Temporary electrical service shall be provided as needed to

maintain the existing light standards in the section of the parking lot not directly impacted by construction activities.

Carefully disconnect and remove the light standards and wires servicing the light standards. The existing light standards, luminaires and lamps shall be protectively stored on site or, at the Contractor's option, removed to a location approved by the Engineer. Light standards that will not be reused shall be returned to the Southwest Community College.

Take care not to damage any light poles, luminaires, arms, and lamps and leave the area vacated by the light pole ready for subsequent work. Remove existing light pole foundations in accordance with Standard Specification Section 402-2. Remove existing conduit and cables impacted by construction.

Foundations for the relocated light standards shall be integral to the box culvert as shown on the contract plans.

Locate electrical ducts as shown on the plans. Install electrical duct at a minimum depth of 30" below finished grade. Where there is limited cover on top of the culvert, electrical duct shall be permitted to be installed at a minimum depth of 18" below grass-covered finished grade. Select the appropriate electrical duct size in accordance with National Electric Code (NEC) requirements. Verify that the electrical duct size shown on the plans is sufficient for the number and size of cables in that duct. If adjustments to the number or size of conduits shown on the plans are required, it is the responsibility of the contractor to make those changes. Install electrical duct in accordance with Section 1409 of the Standard Specifications. Install feeder circuits in accordance with Section 1400-4 and 1410 of the Standard Specifications.

Install junction boxes in accordance with Section 1411 of the Standard Specifications.

Reinstall existing light poles on constructed foundations using all new mounting hardware. Securely mount the standards on the anchor bolts, plumb up, with torque nuts according to the manufacturer's recommendation.

Reconnect the existing parking lot light standards to the same circuit and phase as existing. If adjustments are required to the number and size of cables shown on the plans, it is the responsibility of the contractor to make those changes. Perform electrical tests and inspections as required by Section 1400 of the *Standard Specifications*.

### Measurement & Payment

Remove and Relocate Light Standards will be measured and paid for as a lump sum to include full compensation for the removal, storage, reinstallation, re-connection of existing lighting circuits, removal of existing concrete foundations, installation of new concrete foundations, all materials returned to the Southwest Community College and cost of all labor, tools, materials, and equipment necessary to satisfactorily complete the work. Any damage caused due to the Contractor's lack of care shall be repaired at no additional expense to NCDOT or the Southwest Community College.

Payment will be made under:

Pay Item
Remove and Relocate Light Standards

Pay Unit Lump Sum

