



WEIGH STATION-LIGHTING LAYOUT

LIGHTING NOTES

SPECIFICATIONS:

These notes are supplemental to Items 625 and 713 of the State of Ohio Department of Transportation Construction and materials Specifications.

625.03 GENERAL

The following specifications shall apply to S.R. 44 Interchange and the Weigh Station sites.

In lieu of pertinent details shown on the standard construction drawings, the tops of light pole foundations and of Pull Boxes shall not extend more than 1-inch above the high point elevation of the adjacent surrounding ground.

The Contractor shall cooperate with the Cleveland Electric Illuminating Company whose address is:

Cleveland Electric Illuminating Company
Illuminating Building
Public Square
Cleveland, Ohio

Mailing address
Post Office Box 5000
Cleveland, Ohio 44101

The Contractor will not be required to furnish or install the primary distribution lines, transformers, supply pole, or the connections between the primary and secondary cables.

The Contractor shall furnish and install the service pole weatherhead, conduits, circuit breakers, circuit breaker enclosure, cables, grounding, arrester and all incidentals necessary to complete, ready for use the service to this project.

625.05 - 713.01 LIGHT POLE

As each pole is erected on its foundation, the handhole cover and/or transformer base door shall be installed and closed to prevent dirt and debris from entering.

625.07 - 713.11 LUMINAIRES

400-Watt luminaires shall have dual rated 120/240 or 240/480 volt integral regulator ballasts and shall be General Electric M400, Westinghouse OV-25, McGraw-Edison "Unistyle", or equal approved by the Engineer.

625.08 - 713.14 LAMPS

Mercury lamps shall be General Electric "Bonus Line", Westinghouse "Lifeguard", Sylvania "Rough Service", or equal approved by the Engineer.

625 - CONDUIT JACKED UNDER PAVEMENT, AS PER PLAN

This item shall consist of furnishing and installing conduit, of the size or sizes indicated, under existing pavement and contiguous shoulders by an approved method such as "drilling" or "jacking".

The Contractor shall place the conduit with the least amount of disturbance to the existing pavement, sub-base, berm pavement, or shoulders of the roadway. All push pits or any necessary excavations shall be backfilled and restored in accordance with 625.01.

Measurement of the conduit shall be the actual amount of lineal feet installed under pavement and shoulders, measured in place, as accepted by the Engineer. The unit price bid for Item 625 "Conduit Jacked Under Pavement, as per plan", shall be full compensation for excavation, drilling or jacking, backfilling, compaction, restoration, and all labor, material, equipment, and incidentals necessary to complete the work as specified.

839 - HIGH VOLTAGE DIRECT CURRENT TEST

A high voltage direct current test, as described in Supplemental Specification 839, shall be performed on all secondary feeder cable and duct cable systems to be installed on this project. The test shall not be performed until after all new construction, such as guard rail, fence, delineator posts, sign supports, etc., in the immediate vicinity of the location of the cable run being tested, has been completed.

629.19 - 713.20 CONTROL CENTERS

The Contractor shall furnish and install a "Control Center for SR-44" and at the "Weigh Station" site, where shown on the plans, to serve roadway, weigh station and sign lighting. The control center shall include the stainless steel enclosure, mounting, trenching, 1 1/2" duct-cable with 3-1/8 No. 1/0 A-WG cable, conduit, pullboxes, junction box, cables, disconnect switch, mounting the disconnect switch in the enclosure, fuses, contactor, on-off-automatic switch, photoelectric cell, ferrules, grounds, and all incidentals required for the 120/240 or 480 V. service.

Payment for the "Control Center at SR-44" and "Control Center at Weigh Station" will be at the Contract lump sum price.

ELECTRICAL SERVICE FOR ILLUMINATED SIGNS

The pay items in the Lighting General Summary include the pull box adjacent to each lighted sign and the electrical service connections leading into the box, including connector kits in the pull box. Quantities for electrical service from the connector kits in the pull box to the sign are included in the Traffic Control General Summary.

Quantities for electrical service from the connector kits to luminaires mounted on combination-type sign supports, including distribution cable, pole and bracket cable, luminaire support arm, luminaire, lamp, etc., exclusively required to service the roadway lighting unit are included in the Lighting General Summary.

625.25 - PAYMENT FOR LIGHTING ITEMS

Payment for all roadway lighting, Item 625, will be made at the contract prices bid for items as indicated in the Schedule of Quantities, which payment shall constitute full compensation for furnishing all materials, labor, equipment, tools and incidentals necessary, whether specifically mentioned or not, to complete the entire work, installed and in operating condition for full acceptance, according to the plans and specifications.

A. "Bracket Arm, 15' - 0\"", per each, and shall include the 15' - 0" steel, truss type arm, for attaching to Combination Sign and light pole, 2-inch slip fitter, bracket attachment welded to the lower ends of the bracket arms, to mate with those furnished on the pole in the Traffic Control General Summary, galvanizing, and all incidentals. The pole, sleeves, foundation, conduits in foundation for circuit conductors, J-hooks, pole cap, hand holes, etc., are all included in the Traffic Control General Quantities.

LIGHTING KEY

- Typical Ground Mounted Lighting Unit; with aluminum transformer base, 400 watt size luminaire with ANSI-IES Type III, M-C, light distribution and with 400 watt, clear, mercury vapor lamp.
- Pull Box, 24-inch diameter.
- Duct-Cable, directly buried, with 3-1/8 No. 4 AWG, 600 volt, conductors.
- Circuit Cables, in 3-inch diam., Type III, conduit jacked or pushed under paved areas.

| LIGHT POLE DATA | | | | | | |
|------------------|---------------|-------|-------------------------|---------|------------------------|---------------------|
| REFERENCE LETTER | DESIGN NUMBER | STYLE | FOUNDATION ANCHOR BOLTS | | TRANSFORMER BASE STYLE | SHAFT BASE DIAMETER |
| | | | SIZE | LENGTH | | |
| A | A30BB50 | III | 1 1/2" x 48" | 13 1/2" | NONE | 10" |
| B | AT15B34.2 | II | 1" x 40" | 15" | AT-A | 9" |
| C | AT10B34.2 | II | 1" x 40" | 15" | AT-A | 8" |

The Project Engineer shall give District 12 advance notification when removal of the existing poles is necessary.

Estimated quantities

An estimated quantity of 140 lin. ft. of Item 605, 4" shallow pipe underdrains, is provided in the lighting general summary for use as directed by the Engineer in providing positive drainage for pull boxes in fill areas, including pull boxes for signs No. 31432, pull boxes at each of bridges Lak-90-1486 LR, and the pull box rt. of sta. 380+30± I-90. It is intended that all pull boxes in these areas be provided with such drainage, provided the length of underdrain necessary to obtain a satisfactory outfall does not exceed 20' ±. A perforated PVC pipe or conduit material approved by the Engineer may be used in the construction of this item.