

CONSTRUCTION SPECIFICATIONS

GENERAL

The following are to be used in conjunction with the Standard Specifications for Roads, Bridges and Municipal Public Works Construction prepared by The Washington State Department of Transportation and the Washington State Chapter American Public Works Association, 1996 Edition.

CONCRETE STREET LIGHT FOUNDATION

All concrete foundations shall be constructed to the size and configuration shown on the plan, except where, in the judgment of the Engineer, unstable soil conditions require enlargement of the foundation. Before placing the concrete, the Contractor shall block out around any other underground utilities that lie in the excavated base so that the concrete will not adhere to the utility line. Concrete base shall be troweled, brushed, edged, and finished in a workmanlike manner. Concrete shall be promptly cleaned from anchor bolts and conduits after placement. Class 4000 concrete shall be furnished and placed as shown in the Standard Plans. Anchor bolts for all poles shall be arranged so that the pole's bracket arm is perpendicular to the centerline of the adjacent roadway right of way. After a curing period of a week, the Contractor may install the street lights. All poles shall be installed on leveling nuts secured to the anchor bolts and with locking nuts on the top of the base flange. The side of the pole shaft opposite the load shall be plumbed by adjusting the leveling nuts or as otherwise directed by the Engineer. The space between the concrete base and the bottom of the pole flange shall be filled with dry pack mortar to completely fill the space under the flange and around the conduits and be neatly troweled to the contour of the pole flange. A plastic drain hose (1/2" dia.) shall be inserted through the mortar to provide drainage from the interior of the pole base and be trimmed flush with the interior and exterior surface of the mortar. Dry pack mortar shall consist of a 1:3 mixture of cement and fine sand with just enough water so that the mixture will stick together on being molded into a ball by hand and will not exude free moisture when so pressed.

CONDUIT

All conduit shall be schedule 40 PVC except conduit under driveways, and street crossings. These exceptions shall be rigid steel conduit and shall be a minimum of two inches in diameter. All elbows shall be rigid steel. Rigid conduit to be provided as specified on the plans shall be of hot dipped galvanized steel metallic conduit conforming to the requirement of the National Electrical Code. All underground conduits, except those crossing the streets and alleys, shall be installed a minimum of 18" below grade. Conduits crossing the streets, alleys and driveways shall be installed a minimum of 24" below grade. In the driveway or roadway areas, electrical conduit should be installed by approved pushing or boring methods.

GROUNDING

All poles, metal conduits and cabinets in the same area covered by the same power service shall be made mechanically and electrically secure for a continuous grounding system in accordance with the Standard Specifications. Bonding jumpers shall be provided and installed by the Contractor in accordance with Standard Plan J-9a to connect all #8 bare metal conduits in the junction box. Grounding of conduit and ground wire at the service point to the PUD service ground on the PUD power pole shall be accomplished as required under the National Electrical Code.

CATALOG CUTS

Prior to the beginning of construction, catalog cuts of the following items shall be submitted and approved by the County Engineer. 1)Street Light Standards 2)Luminaires 3)Junction Boxes 4)Wye & In-Line Connectors 5)Service Cabinet 6)In-Line Fuse Holders 7)Conduit 8)Wire

CRITICAL INSPECTION POINTS

The illumination system will be inspected by both Cowlitz County Public Works and the applicable Electrical Inspector. The following are the critical inspection points. No work shall be done until inspection is completed. Electrical Inspector: 1) Check of conduit depth. No trenching shall be filled without the depth of conduit verified. 2) Service. The service shall be approved by the inspector. 3) Wiring. The wiring, splices, grounding, and fusing shall be approved by the inspector. Cowlitz County Public Works: 1) Pole locations. The pole locations shall be approved by the County prior to excavation of the pole bases. 2) Pole bases. The pole bases shall be inspected and approved prior to the pouring of the concrete.

RGL
DESIGNED BY
JMC 3/6/07
DRAWN BY
KAC
APPROVED BY
3-21-07
DATE

**STREET LIGHTING
CONSTRUCTION NOTES**

NTS



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