STREET LIGHTING
AND
ELECTRICAL DETAILS
NOTES

SINGLE LUMINAIRE AND POST ASSEMBLY SHALL BE USED BETWEEN INTERSECTIONS AND SHALL BE SPACED AT 75 FOOT INTERVALS (AVG.) EACH SIDE OF STREET (OR ONE UNIT PER EACH 37.5 LINEAL FEET OF STREET LENGTH).

OPTIONAL EQUIPMENT AND POLE STYLE WILL BE REVIEWED FOR APPROVAL BY THE CITY ENGINEER UPON SUBMISSION OF COMPLETE PERFORMANCE AND CATALOG DATA.

LUMINAIRE FURNISHED WITH 150 WATT/240 VOLT HIGH PRESSURE SODIUM BALLAST AND SOCKET ASSEMBLY.

POST OF HEAVY-DUTY CAST IRON CONSTRUCTION.

POST ANCHORED BY MEANS OF (4) 3/4" L-TYPE GALVANIZED ANCHOR BOLTS LOCATED ON A 15" BOLT CIRCLE. (ANCHOR BOLTS FURNISHED WITH POST)

POST FURNISHED PRIME PAINTED WITH RED OXIDE PRIMER AS STANDARD.

SEE STANDARD DRAWING NO. 3-3 DECORATIVE STREET LIGHT BASE DETAIL FOR ADDITIONAL NOTES.
DOUBLE LUMINAIRE AND POST ASSEMBLY SHALL BE USED AT INTERSECTION CORNERS.

LUMINAIRES FURNISHED WITH 150 WATT/240 VOLT HIGH PRESSURE SODIUM BALLAST AND SOCKET ASSEMBLIES.

POST OF HEAVY DUTY CAST IRON CONSTR.

POST ANCHORED BY MEANS OF (4) 3/4" L-TYPE GALVANIZED ANCHOR BOLTS LOCATED ON A 15" BOLT CIRCLE. (ANCHOR BOLTS FURNISHED WITH POST)

POST FURNISHED AS STANDARD PRE-FINISHED FLAT BLACK.

SEE STANDARD DRAWING NO. SL-3 DECORATIVE STREET LIGHT BASE DETAIL FOR ADDITIONAL NOTES.

CITY OF KENT, OHIO
DEPARTMENT OF PUBLIC SERVICE
ENGINEERING DIVISION

CONSTRUCTION STANDARDS
DECORATIVE STREET LIGHT
DOUBLE LUMINAIRE AND POST ASSEMBLY

POST ANCHOR DETAIL

(4) 1" x 2" Slots for 3/4" Anchor Bolts.

45°
Typ.

15" Dia. Bolt Circle

12" Dia. Opening

Post Height 12'-0"
Light Center Height 14'-5"
Overall Height 16'-3"
NOTES

1. ALL CONDUCTORS SHALL BE #6 THW COPPER WITH GROUNDING CONDUCTOR WHICH SHALL HAVE A GREEN JACKET.


3. AFTER INSTALLATION, ALL LIGHT POLES & FIXTURES SHALL BE PAINTED WITH 2 COATS OF INDUSTRIAL BLACK ENAMEL PAINT.

4. FOR FIXTURE WIRING AT BASE OF POLE ELECTRICAL CONTRACTOR SHALL PROVIDE BUSSEY FUSE HOLDERS TYPE HEB-AK. PROVIDE 10A DUEL ELEMENT TIME DELAY FUSE FOR LUMINAIRES. EXTEND No. 10 AWG WIRE FROM FUSE HOLDER TO FIXTURE BALLAST(S). PROVIDE INSULATING BOOTS TYPE IA0512 OVER ENTIRE FUSE HOLDER ASSEMBLY.

5. ELECTRICAL CONTRACTOR SHALL PROVIDE SAME FUSE HOLDER AND INSULATING BOOTS AS INDICATED IN NOTE ABOVE WHEN WIRING OF RECEPTACLE AT BASE OF POLE. FUSE AT 20A. FEEDER FOR RECEPTACLE WIRING SHALL BE COLOR CODED THROUGHOUT CONDUIT SYSTEM TO READILY IDENTIFY IT FROM THE LIGHTING FEEDER.

6. WIRE NUTS SHALL NOT BE ACCEPTABLE FOR SPLICING OF FEEDERS IN FIXTURE BASES.

7. GROUNDING CONDUCTOR IN CONDUIT SYSTEM SHALL BE ELECTRICALLY CONTINUOUS WITH TAPS MADE INSIDE FIXTURE BASES. TAPS SHALL BE MADE WITH BURNDY CONNECTORS TYPE KSU17 OR EQUAL. EXTEND No. 10 AWG WIRE FROM TAP TO POLE AND RECEPTACLE.

8. CONDUIT SHALL BE PROVIDED THROUGHOUT FOR STREET LIGHTING SYSTEM & SHALL BE 2" PVC SCHEDULE 40 UNLESS NOTED OTHERWISE.
NOTES

2. BASE PLATE: ASTM A36.
3. ARM SHAFT: 2.375" O.D. x .154" WALL TUBE 36 KSI MINIMUM YIELD STRENGTH.
4. ANCHOR BOLTS: ASTM A36 MODIFIED TO 55 KSI MINIMUM YIELD STRENGTH.
5. ENTIRE UNIT SHALL BE HOT DIP GALVANIZED (GV).
6. POLE SHALL BE VALMONT INDUSTRIES DS 50 SERIES OR EQUAL.
4" WIDE PLASTIC MARKING TAPE SHALL BE PLACED 1' BELOW FINISHED GRADE AND SHALL BE PLACED DIRECTLY OVER THE ELECTRICAL CONDUIT. TAPE SHALL BE YELLOW IN COLOR AND SHALL HAVE THE WORDS "BURIED ELECTRICAL CONDUIT" PRINTED REPEATEDLY ALONG IT'S ENTIRE LENGTH.
1. POLE - Steel, anchor base 22' x 7" 11 gauge, without mast arm, unpainted hot dipped galvanized steel 4" x 6-1/2" handhole, J hook and 1/2" grounding nut, without anchor bolts and nuts. Union Metal design 1400A and 1402A. Union Metal 1400A, F-220PP or Valmont BS50-7.0-A220PP.

2. ARM - Mast, street light unpainted hot dipped galvanized steel 6' x 2" for Union Metal steel pole design 1400A and 1402A complete with mounting cap screws (2 bolt simplex). Union Metal cat. no. B2 or Valmont FS50-08-036FP.

3. ARM - Mast, street light unpainted hot dipped galvanized steel 8' x 2" for Union Metal steel pole design 1400A complete with mounting cap screws (2 bolt simplex). Union Metal cat. no. C2 or Valmont FS50-08-036FP.

4. LUMINAIRE - Street light HPS streamlined 2-way 100 watt, 120 volt, internal reactor normal power factor ballast with twist lock receptacle for photocontrol and slipfitter for 1-1/4" to 2" pipe, IES Type III distribution (clear lamp) Westinghouse 394F919606 or approved equal.

5. CONTROL - Photoelectric street light 1,000 watt, 2.0 - 5.0 footcandle cadmium sulfide cell unit with 3 prong twist lock plug base. Set for 2.0 +/- 0.5 FC turn on and 4.0 to 6.0 FC turn off.

6. LAMP - High pressure sodium clear, 100W. mogul base.

7. BOLT - Anchor with galvanized threads and DBL nuts, 1" x 40" F/anchor base poles - (furnished in sets of four) (see Electrical Note No. 11)

8. PULL BOX - Blackburn ITT, cat. #SDRP or approved equal.

EQUIPMENT NOTES - 1/9/87
ELECTRICAL NOTES

1. The Contractor shall use copper wire direct burial cable. Direct burial cable installed in 2" PVC pipe conduit. Conduit shall be cleaned of all debris before installation of wire. The trench shall have a minimum 24" depth and maximum 12" width.

2. Final connections at the transformer shall be performed by Ohio Edison Company. The Contractor shall leave 10' tails at the transformer for Ohio Edison at termination. Contact Ohio Edison when working in area of existing transformer.

3. Street lighting materials and construction shall conform to Ohio Department of Transportation Construction and Materials Specifications Item No. 625 "Highway Lighting".

4. The Contractor shall install a 1" x 10' galvanized ground rod at each pole and shall ground pole using #6 ground wire. The ground rod shall be installed a minimum of five feet from any existing water main.

5. The Contractor shall verify the location of all existing underground utilities before constructing the foundations for all light poles and any excavations.

6. All crossing under existing or proposed pavements shall be made using minimum 2" galvanized iron pipe conduit from back of curb to back of curb, or 2" diameter schedule 80 PVC encased in concrete.

7. Backfill around light pole foundations:
   a. The Contractor shall make the excavation wide enough to accommodate hand-compaction equipment between foundation and excavation walls.
   b. Backfill material shall be approved prior to use and tested as outlined in ASTM D-698 to determine maximum dry density and optimum moisture content.
   c. The Contractor shall place approved backfill in controlled lifts not exceeding 6" loose measure. Compact each lift to 98% maximum dry density per ASTM D-98 prior to placing next lift.
d. Use vibrating base-plate compactor for granular soil; use "jumping jack" or similar for silty or cohesive soil.

8. 2-Conductor wire is acceptable for installation from the foundation to the luminaire.

9. Poles and arm masts shall meet or exceed State of Ohio specifications; and shall be unpainted hot dipped galvanized steel.

10. Each light shall be individually fused in a weather proofed fuse holder and shall be accessible through the handhole.

11. Anchor bolts shall be steel with 85,000 PSI minimum yield strength. Galvanized minimum 2" below threads.

12. All wiring shall be clearly and permanently marked to assure proper connections.

ELECTRICAL NOTE - 1/9/87
POLE
MAIN STREET LIGHTING WINDSOR SERIES
AF602-BK

LUMINAIRE
HOLOPHANE
RLPT-100-HPI2BK33R-R-RLPTCBK

POLE & BASE
NOTE: SEE SHEET SL-12 FOR BASE DETAILS

CITY OF KENT, OHIO
DEPARTMENT OF PUBLIC SERVICE
ENGINEERING DIVISION
CONSTRUCTION STANDARDS
STANDARD RESIDENTIAL DECORATIVE
LUMINAIRE AND POST ASSEMBLY
DATE 2/29/88 BY CLW NO. SL-11
CITY ENGINEER R. ALLAN RUMBAUGH
EQUAL SPACES ≤ 150'
26'

150' MAX.

EQUAL SPACES ≤ 150'
150' MAX.

LOCATE LIGHT "A" FIRST BY USE OF Δ/2 TO CALC. "D", THEN LOCATE LIGHT "B".

STANDARD RESIDENTIAL DECORATIVE STREET LIGHT

NOTE: THIS LAYOUT IS FOR THE DECORATIVE LIGHT AND DETAILS SHOWN ON SHEET SL-11.
1. All conductors shall be #6 THW copper with grounding conductor which shall have a green jacket.


3. Conduit shall be provided throughout for street lighting system & shall be 2" PVC Schedule 40 unless noted otherwise.

4. For fixture wiring at base of pole electrical contractor shall provide Bussman fuse holders type HEB-AK. Provide 10A dual element time delay fuse for luminaires. Extend No. 10 AWG wire from fuse holder to fixture ballast(s). Provide insulating boots type IA0512 over entire fuse holder assembly.

5. Electrical contractor shall provide same fuse holder and insulating boots as indicated in note above when wiring of receptacle at base of pole. Fuse at

20A. Feeder for receptacle wiring shall be color coded throughout conduit system to readily identify it from the lighting feeder.

6. Wire nuts shall not be acceptable for splicing of feeders in fixture bases.

7. Grounding conductor in conduit system shall be electrically continuous with taps made inside fixture bases. Taps shall be made with BURNDY connectors type KSUI7 or equal. Extend No. 10 AWG wire from tap to pole and receptacle.

City of Kent, Ohio
Department of Public Service
Engineering Division

Construction Standards
Residential Decorative Street Light Base Detail

Date 4/7/86 by CLW No. SL-13
City Engineer