

WIRE

1. Contractor shall use 120/240 V single phase, 3 wire.
2. Wiring shall be daisy-chained parallel branch circuits. Wire Size to be determined by load (input watts), length of circuit and size of breaker in accordance with NEC. Wire shall be stranded copper, THWN, 600 V or IMSA 19-1.

ELECTRIC METER - PEDESTAL

1. **Re: CDOT spec M-613-1.** Pedestal/control box shall be mounted in reinforced concrete pad 6" thick with ¼" chamfered edges and pad shall project 2" above grade. Pedestal/control box shall have a minimum of 2" overlap of the enclosure on all sides, front and back or precast Polymer concrete pedestal foundation.
2. The lighting control cabinet shall be NEMA 3-R minimum.

PHOTO CONTROL

1. All pedestrian lighting shall be controlled by photo control mounted to control cabinet. Photo control should be installed facing north, and away from ambient light sources.
2. Photo control shall be ANSI C136.10 compliant and UL listed.
3. The load on a photo control shall not exceed 80% of its rating.

CIRCUITRY

1. Separate circuits for street luminaire and pedestrian lighting shall be required.
2. Circuits for pedestrian lighting:
 - a. A lighting contactor will be required for single point switching the lighting on the circuit.
 - b. The lighting contactor is a single multiple pole power switching device (relay) located within the branch circuits and is connected in series to the photo control.
 - c. The lighting contactor will also require control by a Hand-Off-Auto (HOA) switch that uses the operation of the photocell when the switch is in the "auto" position.
 - d. The photo control should control the contactor using a normally closed wiring configuration. This will force the lights "ON" if a failure occurs.

PULL BOXES

1. An electrical pull box shall be installed at each pedestrian light. Pull boxes/junction boxes will be a minimum 12"x12"x12" tier 15 Quazite polymer concrete (stackable) open bottom. In driveways or parking lots boxes will be 11"x18"x12" depth tier 22 Quazite polymer concrete (stackable) open bottom.
2. Splices shall be in the hand hole of the pole and not in the pull box. If necessary to splice in a pull box, waterproof splices shall be installed.
3. Pull boxes shall be bedded with 1/2"- 5/8" angular aggregate, minimum 6" deep and box set to landscape finished grade elevation.

CONDUIT

1. Conduit within the pull box shall extend approx. 4"-6" above the aggregate.
2. Conduit shall be UL listed a minimum 1-1/4"Ø sched. 80. no more than four (4) 90°bends shall be employed (shall not exceed 360°) within a 200' distance.
3. Conduit shall be buried a minimum of 18" deep in open ground, 24" in roadway and 12" min. under concrete walkways.

CAISSON/FOUNDATION

1. Caisson/foundation, 24"Ø X 48" for pedestrian lights, and 24"Ø x 60" for street lighting with steel reinforcement. Set to landscape finish grade.
2. Steel reinforcement cage (refer to City-standard detail).
3. Lights shall be grounded onto cage in caisson or by separate grounding rod.



DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION

STREET & PEDESTRIAN LIGHTING NOTES

APPROVED BY: SN _____ APPROVE DATE 7/20 _____

DETAIL
CODE

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