## I. APPLICATION

A. THE POLE TO BE WIRED 2-WIRE SPECIFICATION IS TO BE UTILIZED WHEN CONNECTING TO EXISTING 2 WIRE STREET LIGHTING CIRCUITS.

## II. MATERIALS

- A. THE GROUND ROD SHALL BE 1/8" X 10' COPPERCLAD. PORCELAIN PRODUCT #8430: BLACKBURN #5010. GALVAN OR APPROVED EQUAL.
- B. THE GROUND WIRE TO THE POLE SHALL BE #6 AWG SOLID COPPER.
- C. THE GROUND ROD CLAMP SHALL BE 1/2" COPPER ALLOY, WITH 1/2"-13UNC HEX OR SQUARE HEAD SCREW ; JOSLYN #J8591H; BLACKBURN #JAB 1/2H OR APPROVED EQUAL.
- D. THE CRIMP COMPRESSION CONNECTORS SHALL BE COPPER, BURNDY YC2C4 AND YC4C4, PENN UNION OR APPROVED EQUAL.
- E. THE COPPER COMPRESSION TERMINAL LUG SHALL ONE HOLE TYPE TO FIT 1/4" MACHINE BOLT. THE SEAMLESS COPPER TUBING SHALL BE A MINIMUM OF 1" AND BE MARKED FOR #4 CONDUCTOR. THE LUG SHALL BE HOT TIN DIPPED TO PROVIDE CORROSION RESISTANCE AND BE HOMAC L4-14, BURNDY OR APPROVED EQUAL.
- F. THE FUSE KIT SHALL BE BUCHANAN 82S-EAFB1-C OR APPROVED EQUAL. THE FUSE KIT FOR THE PHASE (HOT) WIRE SHALL HAVE A KTK-3 AMP FUSE WITH LUMINAIRES WATTAGES 250 OR LESS. 400 WATT LUMINAIRES SHALL USE A KTK-6 AMP FUSE.
- G. THE POLE AND BRACKET WIRE SHALL BE #10AWG COPPER, 7 STRAND, THERMOSETTING CHEMICALLY CROSSLINKED POLYETHYLENE INSULATION, 600 VOLT AWG-TYPE XHHW. THE HOT WIRE SHALL BE BLACK. THE NEUTRAL SHALL BE WHITE AND THE GROUND FROM LUMINAIRE SHALL BE GREEN.
- H. THE CABLE GRIP SHALL BE FOR INSULATED WIRE.
- TAPE SHALL BE 1/2" VINYL TAPE. THE TAPE SHALL BE CODED RED OR WHITE, SCOTCH #35, TAPE-RITE CO. OR APPROVED EQUAL.

## **III. INSTALLATION**

- A. THE GROUND ROD (AS PER THE APPROPRIATE FOUNDATION MIS SPECIFICATION) SHALL BE INSTALLED IN UN-DISTURBED EARTH. TESTING SHALL INDICATE 25 OHMS OR LESS.
- B. TO GROUND A METAL POLE-THE BARE GROUND WIRE SHALL BE CONNECTED TO THE GROUND ROD WITH A GROUND ROD CLAMP. THE GROUND WIRE SHALL BE CRIMPED TO THE TERMINAL LUG AND BOLTED TO THE POLE, AND TIGHTENED WITH A NUT AND WASHER UNTIL SECURE. A JUMPER GROUND WIRE SHALL BE CRIMPED TO THE MAIN GROUND WIRE AND BONDED TO THE #4 NEUTRAL (BLACK WITH WHITE TRACER) BY USING A CRIMP CONNECTION. WHITE TAPE SHALL BE WRAPPED AROUND THE #4 NEUTRAL WIRE FIVE (5) TIMES BELOW THE CRIMP. SEE "DETAIL 1".
- C. TO GROUND A FIBERGLASS POLE-THE BARE GROUND WIRE SHALL BE CONNECTED TO THE GROUND ROD WITH A GROUND ROD CLAMP. THE GROUND WIRE SHALL BE WRAPPED AROUND AN ANCHOR BOLT AND TIGHTENED WITH THE ANCHOR NUT AND WASHER UNTIL SECURE. A JUMPER GROUND WIRE SHALL BE CRIMPED TO THE MAIN GROUND WIRE AND BONDED TO THE #4 NEUTRAL (BLACK WITH WHITE TRACER) BY USING A CRIMP. WHITE TAPE SHALL BE WRAPPED AROUND THE #4 NEUTRAL WIRE FIVE (5) TIMES BELOW THE CRIMP. SEE "DETAIL 2".
- D. THE #4, PHASE (HOT) WIRE AND THE BLACK, #10 POLE WIRE SHALL BE CONNECTED TO THE TERMINAL BLOCK & FUSE KIT. RED TAPE SHALL BE WRAPPED FIVE (5) TIMES AROUND THE HOT WIRE BELOW THE FUSE KIT.
- E. THE #10 BLACK WIRE SHALL RUN FROM THE FUSE KIT THROUGH THE POLE SHAFT TO THE LUMINAIRE.
- F. THE WHITE #10 WIRE SHALL RUN FROM THE COMPRESSION CRIMP OF THE #4 NEUTRAL (BLACK WITH WHITE TRACER) AND THE GROUND WIRE, THROUGH THE POLE SHAFT TO THE LUMINAIRE.
- G. THE GREEN #10 WIRE SHALL RUN FROM THE COMPRESSION CRIMP OF THE #4 NEUTRAL (BLACK WITH WHITE TRACER) AND THE GROUND WIRE, THROUGH THE POLE SHAFT TO THE LUMINAIRE.
- H. THE #10 BLACK, GREEN AND WHITE POLE WIRES SHALL BE SUPPORTED BY THE CABLE GRIP NEAR THE MAST ARM OR LUMINAIRE ENTRANCE.

## **IV. BASIS OF PAYMENT**

DESCRIPTION ITEM UNIT MIS-500 EACH POLE TO BE WIRED, 2-WIRE









