I. MATERIALS

THE CABLE FOR PHASE CONDUCTORS SHALL BE AS FOLLOWS:

A. THE CABLE SHALL BE SPECIFICATION FAA–L–824 TYPE C, SINGLE CONDUCTOR AND SUITABLE FOR OVERHEAD OR DIRECT BURIAL INSTALLATION.

B. THE INSULATION SHALL BE RATED AT 90 DEGREES CELSIUS CONTINUOUS OPERATION, 130 DEGREES CELSIUS EMERGENCY AND 250 DEGREES CELSIUS SHORT CIRCUIT.

C. THE CABLE SHALL CONSIST OF NO. 4 AWG SOFT ANNEALED 7 STRAND BARE COPPER CONDUCTOR.

D. THE INSULATION SHALL NOT BE LESS THAN 0.110 INCHES OF LIGHT AND HEAT STABILIZED CHEMICALLY CROSS–LINKED POLYETHYLENE AND SHALL MEET ICEA S–96–659 SPECIFICATIONS FOR CABLE VOLTAGES 5000 VOLTS. THE MINIMUM WALL THICKNESS SHALL NOT BE LESS THAN .099 INCHES

E. THE ICEA (3 CABLES PER CONDUIT, 40 DEGREES CELSIUS AMBIENT, 90 DEGREES CELSIUS CONDUCTOR TEMPERATURE) AMPACITY SHALL NOT BE LESS THAN 107 AMPERES.

F. THE OUTSIDE DIAMETER OF THE CABLE SHALL BE NO LESS THAN 0.445 INCHES.

G. THE CABLE SHALL BE 5KV # 4 AWG–PRYSMIAN GROUP 389181–31 / 20316495 (SINGLE CONDUCTOR), CME #AIRPTFAA42LPYK77 MT50 CABLE, NEHRING XLP INSULATED, OR APPROVED EQUAL. IDENTIFICATION OF CONDUCTORS SHALL BE ACCOMPLISHED BY LONGITUDINALLY COLOR STRIPING BLACK CONDUCTORS. NEUTRAL CABLE SHALL BE IDENTIFIED WITH WHITE STRIPE. DATE OF MANUFACTURE SHALL BE INCLUDED ON ALL CABLE.

THE CABLE FOR THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE AS FOLLOWS:

A. THE CABLE SHALL BE #8AWG, XHHW–2, 600V, COPPER, GREEN JACKET COLOR, STRANDED, SINGLE CONDUCTOR AND SUITABLE FOR WET LOCATION OR DIRECT BURIAL INSTALLATION.

B. THE INSULATION SHALL BE GREEN COLOR AND RATED AT 90 DEGREES CELSIUS CONTINUOUS OPERATION.

C. UL LISTED COPPER COMPRESSION CRIMP CONNECTORS SHALL BE USED FOR CONNECTIONS BETWEEN CONDUCTORS. USE COMPRESSION CONNECTORS SIMILAR TO BURNDY YC4C4 FOR CONNECTIONS. BRUSH THE CONDUCTORS WITH STEEL WOOL AND COAT CONDUCTORS WITH OXIDE INHIBITOR PRIOR CONNECTION/TERMINATION.

II. INSTALLATION

A. THE CABLE SHALL BE UNREELED FROM ITS REEL, NOT ALLOWING SAME TO DRAG OVER PAVEMENTS OR SIDEWALKS AND CAREFULLY PULLED INTO DUCTS WITHOUT DAMAGING THE INSULATION. INSTALLATION OF CABLE CAN ONLY BE MADE UNDER THE SUPERVISION AND INSPECTION OF THE CITY OF COLUMBUS DIVISION OF DESIGN AND CONSTRUCTION INSPECTOR. NO SPLICES WILL BE PERMITTED TO BE PULLED INTO THE DUCTS. THE CONTRACTOR SHALL, IN THE PRESENCE OF THE CITY OF COLUMBUS DIVISION OF DESIGN AND CONSTRUCTION INSPECTOR TEST ALL CABLES IN PLACE TO SEE THAT THE CIRCUIT IS FREE OF SHORTS AND GROUNDS AND IS PROPERLY CONNECTED. A MINIMUM OF FIVE (5) FEET OF SLACK CABLE SHALL BE REQUIRED PER POLE AND PER PULL BOX, FOR EACH CONDUCTOR. NEUTRAL CABLE SHALL BE IDENTIFIED WITH WHITE STRIPE.

B. IN–LINE SPLICES SHALL NOT BE MADE BETWEEN POLES.

C. ALL SPLICES AND CONNECTIONS SHALL ONLY BE MADE IN POLE BASES (SEE MIS–501) OR PULL BOXES.

D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN MEASUREMENTS AS WELL AS FURNISHING AND INSTALLING ALL NECESSARY MATERIALS TO COMPLETE THE STREET LIGHTING CIRCUIT.

III. BASIS OF PAYMENT

ITEM	UNIT	DESCRIPTION
MIS–404	CIRCUIT FOOT	UNDERGROUND CIRCUIT, 3 WIRE

CITY OF COLUMBUS, OHIO

DEPARTMENT OF PUBLIC UTILITIES - DIVISION OF POWER

MIS-404

UNDERGROUND CIRCUIT, 3 WIRE

DR- N BY: S-	D-TE: 7/15/24	
SC-LE: NONE	SHEET: 1 OF 1	404