



10A5: Electrical Details Ground Mount Light Poles Isolated Neutral Systems

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

USE THIS DETAIL IN CONJUNCTION WITH THE DETAIL FOR ELECTRICAL HANDHOLE WIRING.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

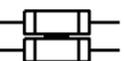
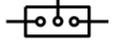
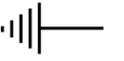
WIRING FOR SINGLE LUMINAIRE POLES IS SHOWN WITH SOLID LINES. WIRING FOR THE SECOND LUMINAIRE OF TWIN LUMINAIRE POLES IS SHOWN WITH DOTTED LINES.

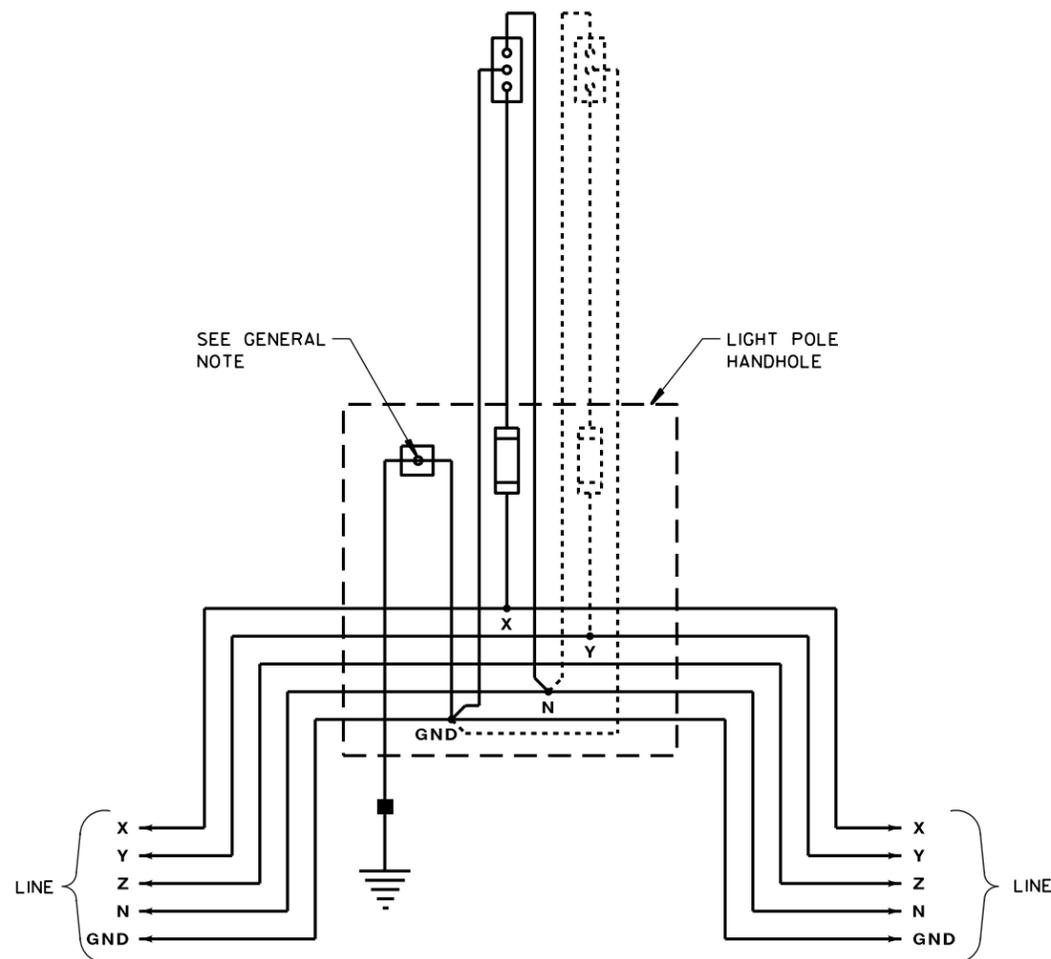
THE PLANS WILL SHOW WHICH CIRCUIT LEG(S) ARE CONNECTED TO EACH INSTALLATION.

HANDHOLE FUSE SCHEDULES

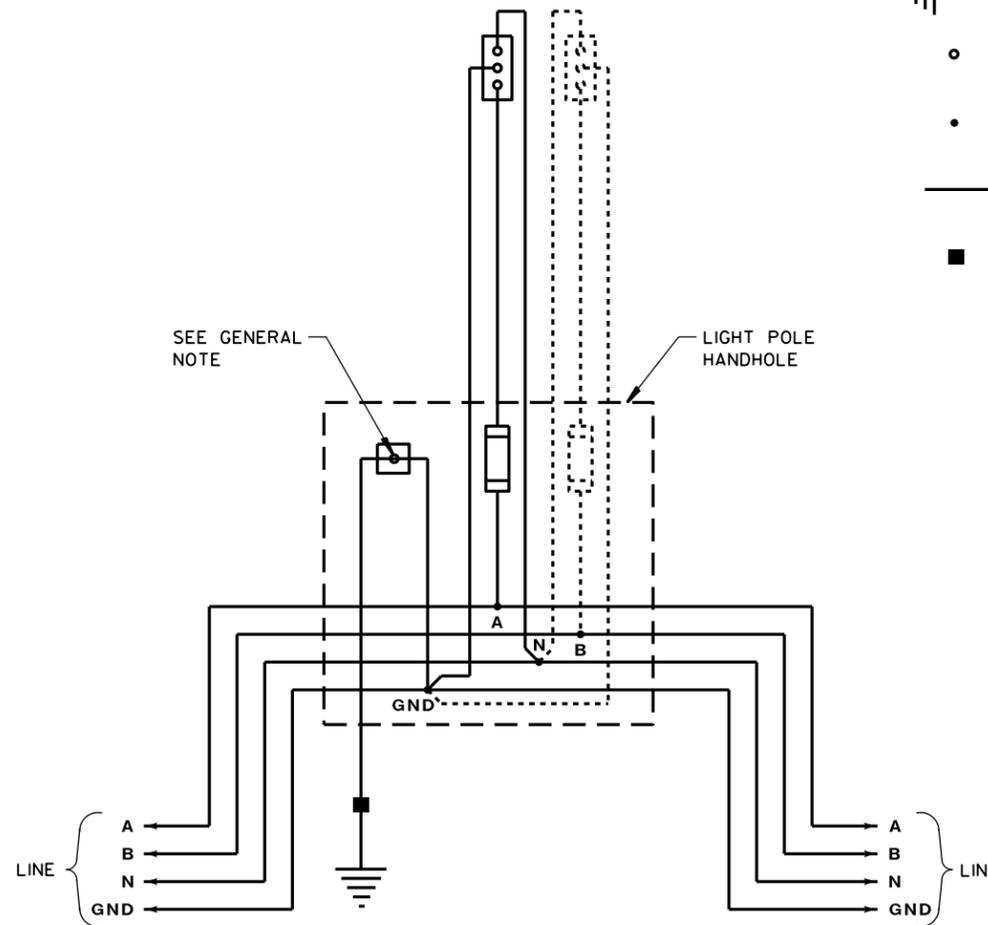
LINE VOLTAGE φ-GROUND	BALLAST WATTAGE	
	70-200 W	250-400 W
120 VAC	5 A	10 A
240 VAC	5 A	5 A
277 VAC	5 A	5 A
480 VAC	3 A	5 A

LEGEND

- A . B . X . Y . Z UNGROUNDED CIRCUIT CONDUCTORS
- N GROUNDED CIRCUIT CONDUCTORS
- GND EQUIPMENT GROUNDING CONDUCTOR
- P POLE (ELECTRICAL CIRCUIT)
- φ PHASE (ELECTRICAL CURRENT)
-  HANDHOLE GROUND LUG
-  SINGLE-POLE (1P) FUSE ASSEMBLY
-  TWO-POLE (2P) FUSE ASSEMBLY
-  UNFUSED LUMINAIRE
-  EQUIPMENT GROUNDING ELECTRODE
- o TERMINAL
- SPLICE
- CONDUCTOR
- EXOTHERMIC WELD



TYPICAL WIRING DIAGRAM
ISOLATED NEUTRAL SYSTEM
3-φ 208Y/120VAC OR 480Y/277VAC 4 WIRE



TYPICAL WIRING DIAGRAM
ISOLATED NEUTRAL SYSTEM
1-φ 120/240VAC OR 240/480VAC 3 WIRE

ELECTRICAL DETAILS
GROUND MOUNT LIGHT POLES
ISOLATED NEUTRAL SYSTEM

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED
 10/25/2010 /S/ John Corbin
 DATE STATE ELECTRICAL ENGINEER FOR HWYS
 FHWA

Electrical Details Ground Mount Light Poles Isolated Neutral Systems

References:

NONE

Bid items associated with this drawing:

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
659.1100 - 1199	Luminaires Utility LED (Category).....	EACH

Standardized Special Provisions associated with this drawing:

<u>STSP NUMBER</u>	<u>TITLE</u>
NONE	

Other SDDs associated with this drawing:

[SDD 10A1](#) Electrical Handhole Wiring

Design Notes:

This SDD describes the most common wiring system for lighting, and includes most traffic signal intersection lighting. Use in conjunction with SDD for Electrical Handhole Wiring.

Contact Person:

Ahmet Demirbilek (414) 220-6801