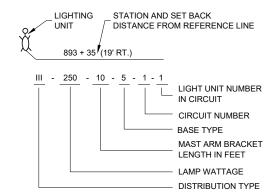
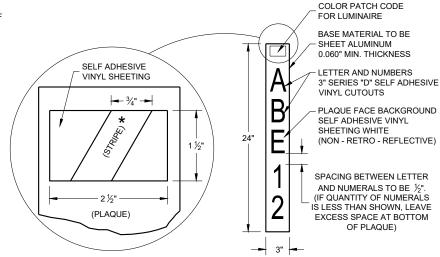
THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED. ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.



LIGHTING UNIT CODE (TYPICAL)

09E02



(MERCURY VAPOR)

250 WATT - YELLOW

400 WATT - NO PATCH

COLOR PATCH CODE

FOR LUMINAIRES

250 WATT - ORANGE W / WHITE STRIPE *

(HIGH PRESSURE SODIUM)

1000 WATT - NO PATCH

400 WATT - ORANGE

310 WATT - BI UF

200 WATT - RED

150 WATT - GREEN

100 WATT - BROWN

IDENTIFICATION **PLAQUE**

DIRECTION PLACE UNIT DIRECTION OF TRAFFIC OF TRAFFIC PLACE UNIT NUMBER SINGLE ARM POLE MEDIAN POLE

NOTES

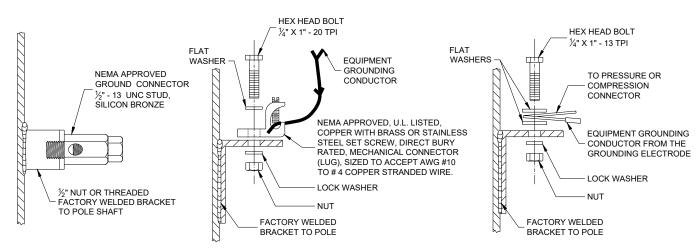
- 1) PLACE BOTTOM OF UNIT NUMBER PLAQUE 5'-0" ABOVE ELEVATION OF ADJACENT CURB OR SHOULDER.
- 2) UNIT NUMBER: ONE REQUIRED FOR SINGLE ARM POLES. TWO REQUIRED FOR MEDIAN MOUNT POLES.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE WITH 3 ALUMINUM POP RIVETS (ALUMINUM POLES) OR STAINLESS STEEL POP RIVETS (STEEL POLES).

LIGHTING UNIT IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENT (TYPICAL, ALL LIGHTING UNITS)

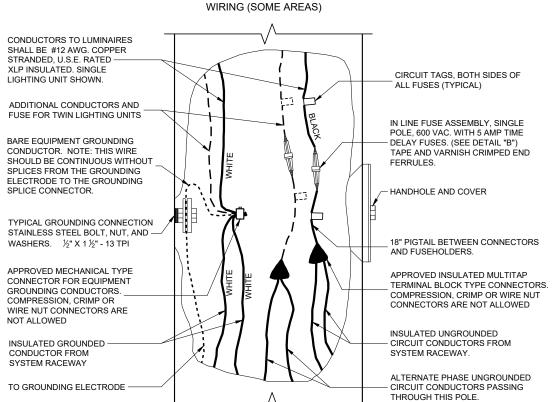
FURNISH PLAQUE WHEN CALLED FOR BY SPECIAL PROVISIONS

B E



TYPICAL GROUNDING CONNECTIONS

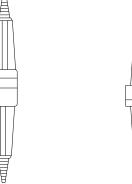
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



OLD EXISTING FREEWAY

TWIN LIGHTING UNITS REQUIRE UNGROUNDED CONDUCTORS TO INDIVIDUAL SETS OF UNGROUNDED LUMINAIRES SHALL BE #12 AWG. COPPER STRANDED, U.S.E. RATED, XLP INSULATED. SINGLE LIGHTING UNIT SHOWN TWIN LIGHTING UNIT EQUIPMENT GROUNDING CONDUCTOR EQUIPMENT GROUNDING CONDUCTOR IN LINE FUSE ASSEMBLY, TWO AWG #4 (MIN.) BARE EQUIPMENT POLE, 600 VAC, WITH 5 AMP TIME GROUNDING CONDUCTOR. DELAY FUSES. (SEE DETAIL "A") NOTE: THIS WIRE SHOULD BE CONTINUOUS WITHOUT SPLICES -**FERRULES** FROM THE GROUNDING ELECTRODE TO THE GROUNDING SPLICE - HANDHOLE AND COVER CONNECTOR. TYPICAL GROUNDING CONNECTION CIRCUIT TAGS, BOTH SIDES STAINLESS STEEL BOLT, NUT, AND -OF ALL FUSES. (TYPICAL) WASHERS. 1/3" - 13 TPI 18" PIGTAIL BETWEEN CONNECTORS APPROVED MECHANICAL TYPE AND FUSEHOLDERS CONNECTOR FOR EQUIPMENT GROUNDING CONDUCTORS COMPRESSION, CRIMP OR APPROVED INSULATED MULTITAP WIRE NUT CONNECTORS ARE TERMINAL BLOCK TYPE CONNECTORS NOT ALLOWED COMPRESSION, CRIMP OR WIRE NUT CONNECTORS ARE NOT ALLOWED. INSULATED EQUIPMENT GROUNDING CONDUCTORS FROM SYSTEM RACEWAY. INSULATED UNGROUNDED **EXOTHERMICALLY WELDED** CIRCUIT CONDUCTORS FROM TO GROUNDING ELECTRODE. SYSTEM RACEWAY

DETAIL "A" BREAKAWAY DOUBLE POLE WITH WATERPROOF **INSULATING BOOT**



DETAIL "B" BREAKAWAY SINGLE POLE WITH WATERPROOF **INSULATING BOOT**

FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED November 2018 DATE

/S/ Ahmet Demirbilel STATE ELECTRICAL ENGINEER

2 WIRE - 120, 240, OR 480 VAC TO GROUND

O

0

2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

Freeway Lighting Unit Pole Wiring

References:

FDM15-5 Attachment 30.5 and 30.6 for conventional symbols.

Standard Spec. 655 Electrical Wiring

TEOpS X-X-X Cable and Wire Measurement Lengths

Bid items associated with this drawing:

<u>ITEM NUMBER</u>	DESCRIPTION	<u>UNIT</u>
655.0600 - 0699	Electrical Wire Lighting (AWG)	LF

Standardized Special Provisions associated with this drawing:

STSP NUMBER TITLE

NONE

Other SDDs associated with this drawing:

SDD 9E1	Pole Mountings, sheets "a", "b", "c", "d", "e" and "f"
SDD 9E8 sheets "e". "f". "	Type 9, Type 10, Type 9/10 Special, Type 12 and Type 13 Poles with Monotube Arms, [g", "e", "h", "j", and "k"
SDD 9E12	Over Height Poles and Monotube Arms, sheets, "b", "d", and "e"
SDD 10A1	Electrical Handhole Wiring
SDD 10A2	Identification Plaques Light Poles
SDD 10A3	Circuit Identification Plaques Sign Bridges
SDD 10A4	Identification Plaques Underdeck and High Mast Lighting
SDD 10A5	Electrical Details Ground Mount Light Poles Isolated Neutral Systems
SDD 10A6	Electrical Details Ground Mount Light Poles Phase-to-Phase Systems
SDD 10A7	Electrical Details Ground Mount Light Poles Phase-to-Phase Systems
SDD 10A8	Electrical Details Structure Mount Light Poles Isolated Neutral Systems
SDD 10A9	Electrical Details Median Mount Light Poles Isolated Neutral Systems
SDD 10A10	Electrical Details Structure Mount Light Poles Phase-to-Phase Systems
SDD 10A11	Electrical Details Median Mount Light Poles Isolated Neutral Systems
SDD 10A12	Electrical Details Median Mount Light Poles Grounded Neutral Systems
SDD 10A14	Electrical Details High Mast Lighting, sheets "a" and "b"
SDD 10A15	Electrical Details Underdeck Lighting, sheets "a" and "b"
SDD 10A17	Poles, sheets "a", "b", and "c"
SDD 10A18	Luminaire Arms, sheets "a" and "b"

Design Notes:

NONE

Contact Person:

```
Ahmet Demirbilek (414) 220-6801
(414) 322-9606 (Mobile)
```