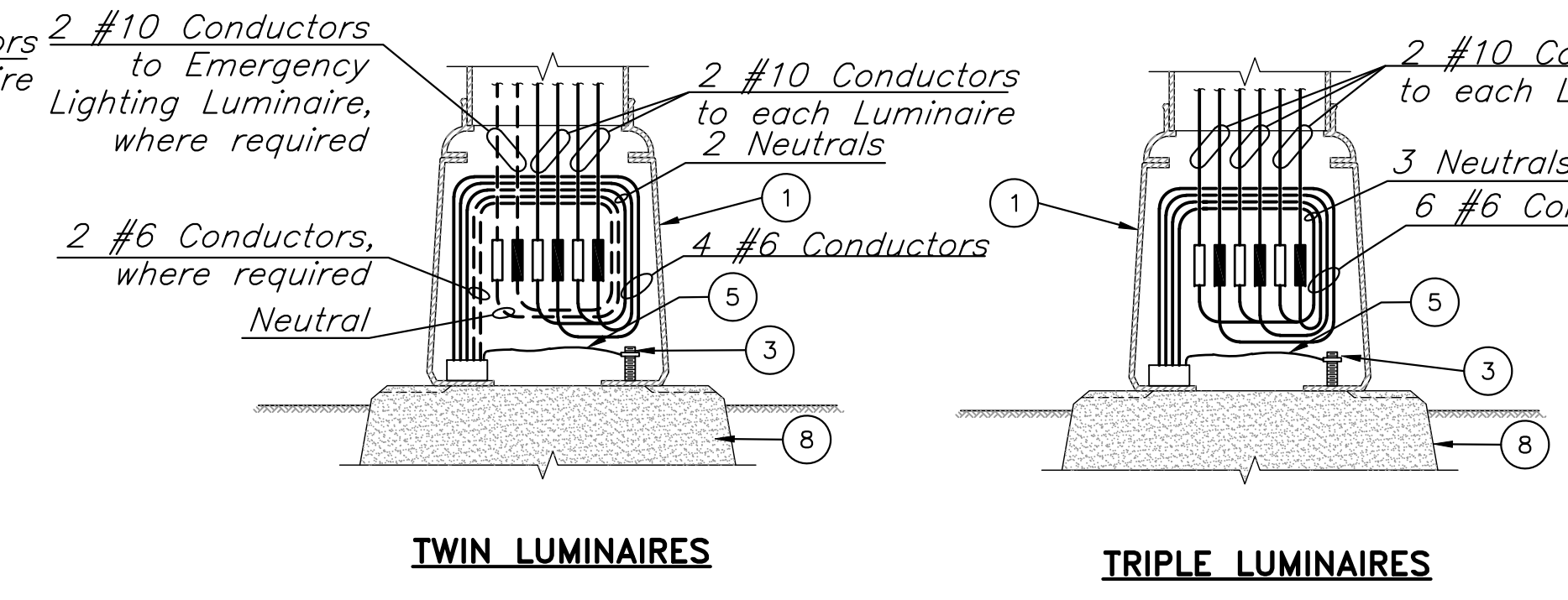
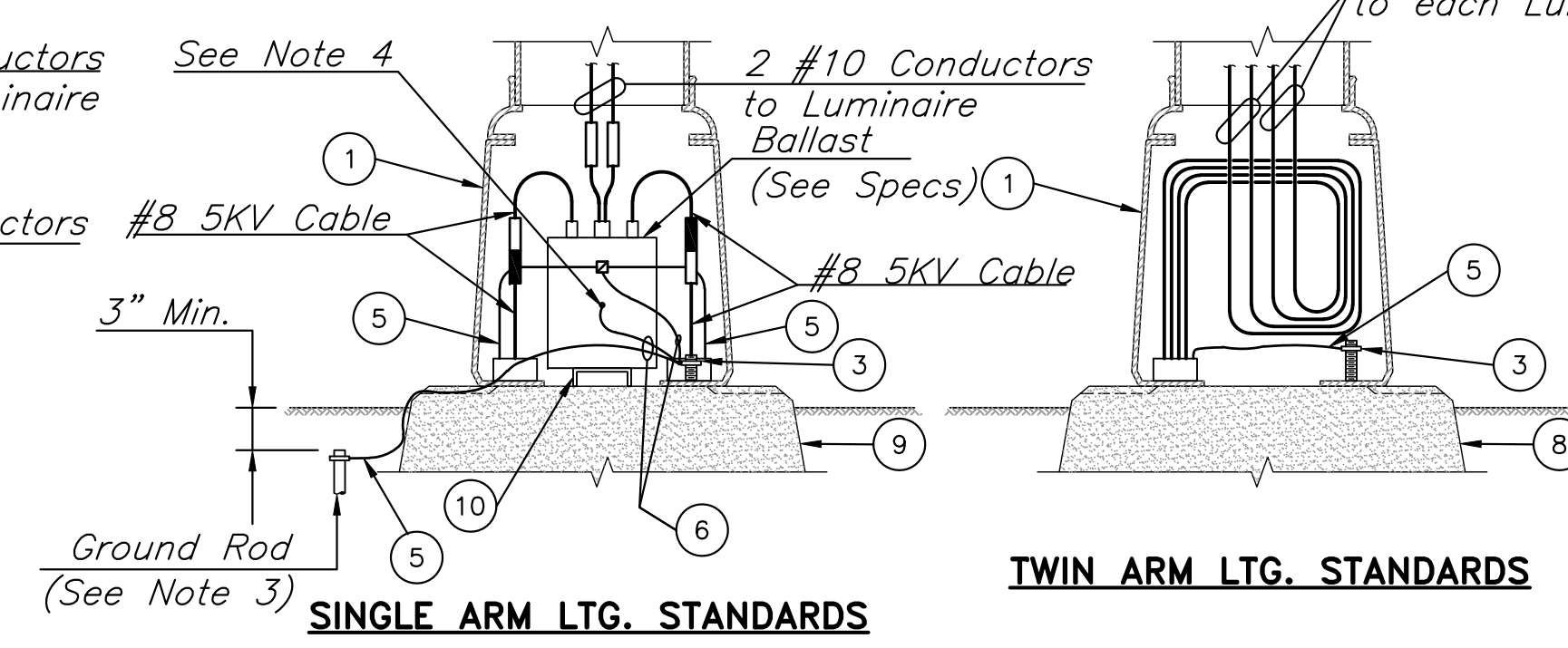


SINGLE ARM LTG. STANDARDS TWIN ARM LTG. STANDARDS
LUMINAIRES WITH INTEGRAL MULTIPLE BALLASTS
 Not To Scale

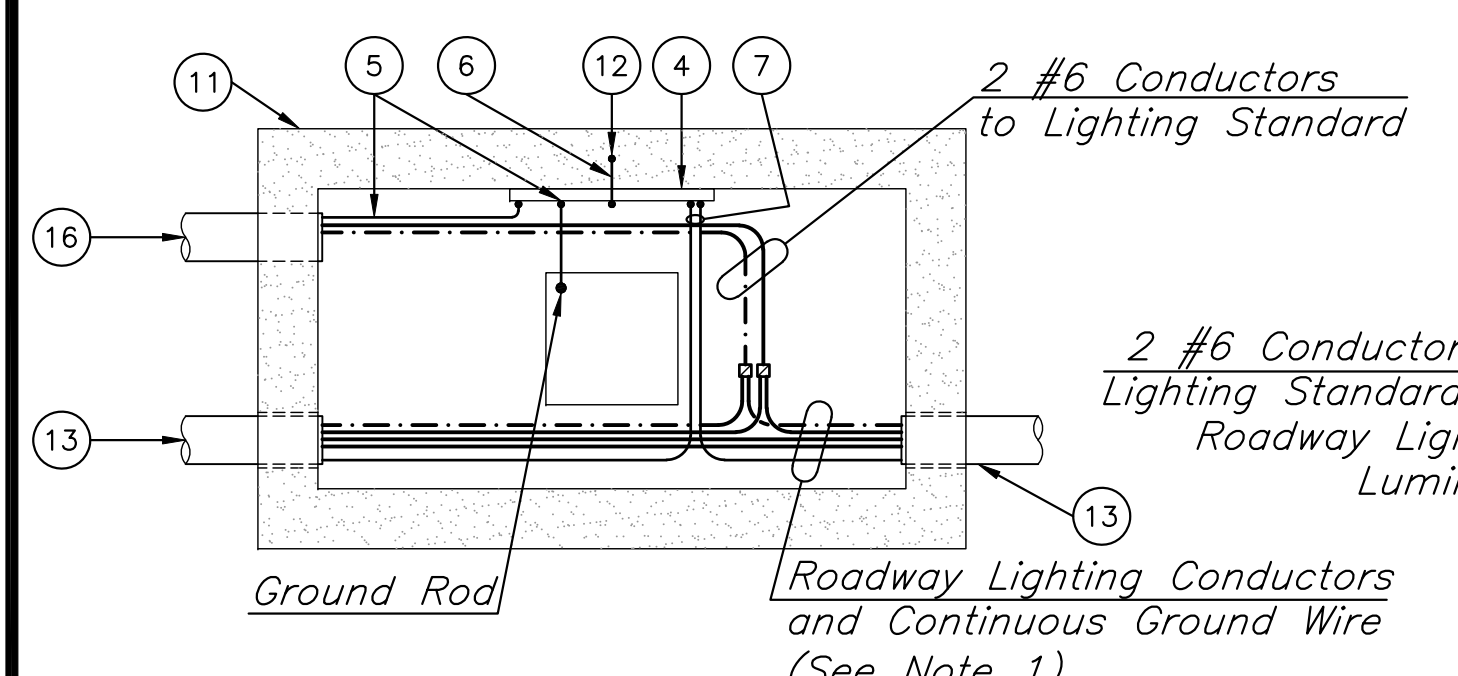


TWIN LUMINAIRES TRIPLE LUMINAIRES
LUMINAIRES WITH INTEGRAL MULTIPLE BALLASTS
 Not To Scale

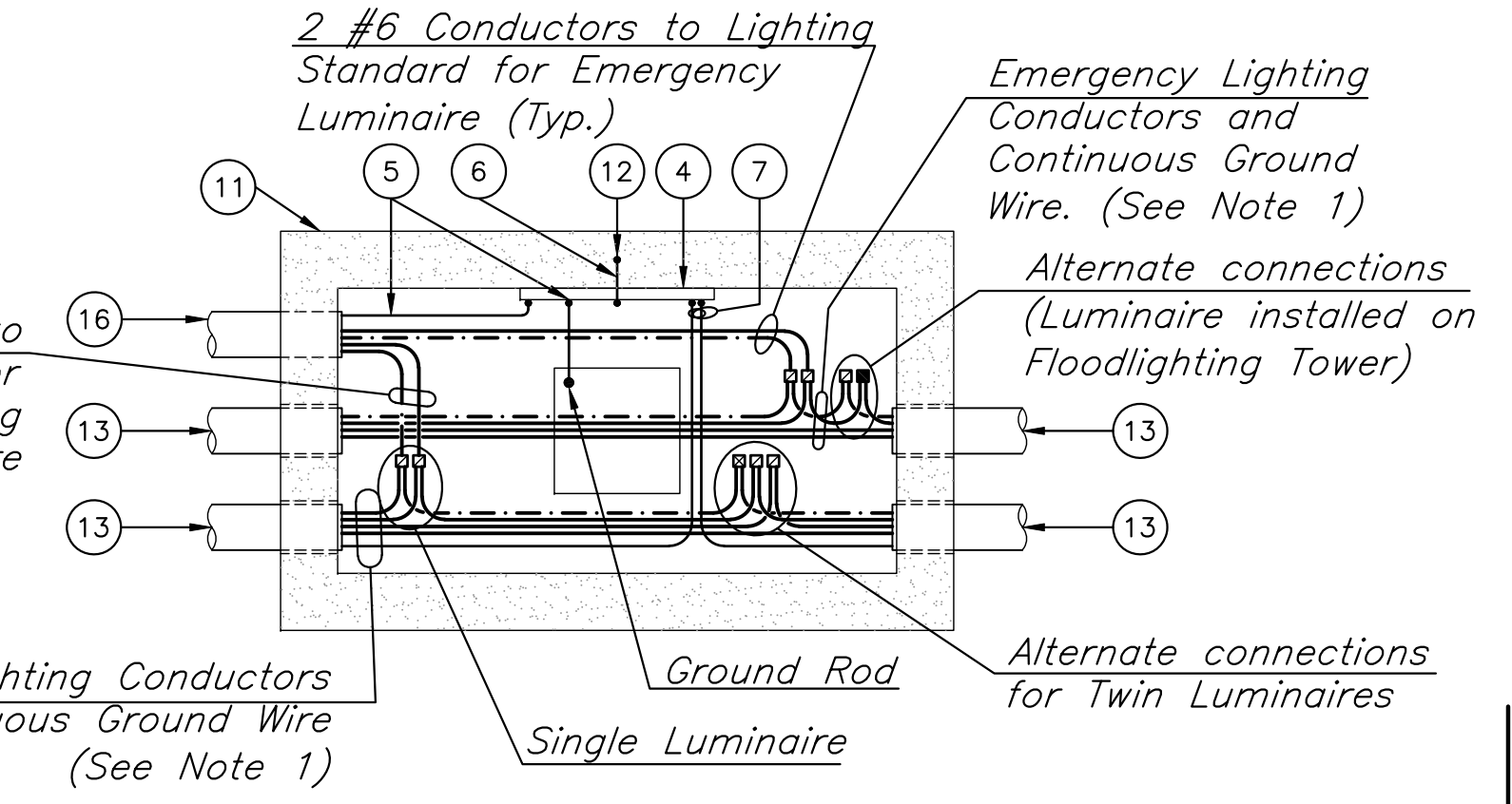


SINGLE ARM LTG. STANDARDS TWIN ARM LTG. STANDARDS
LUMINAIRES WITH REMOTE SERIES BALLASTS
 Not To Scale

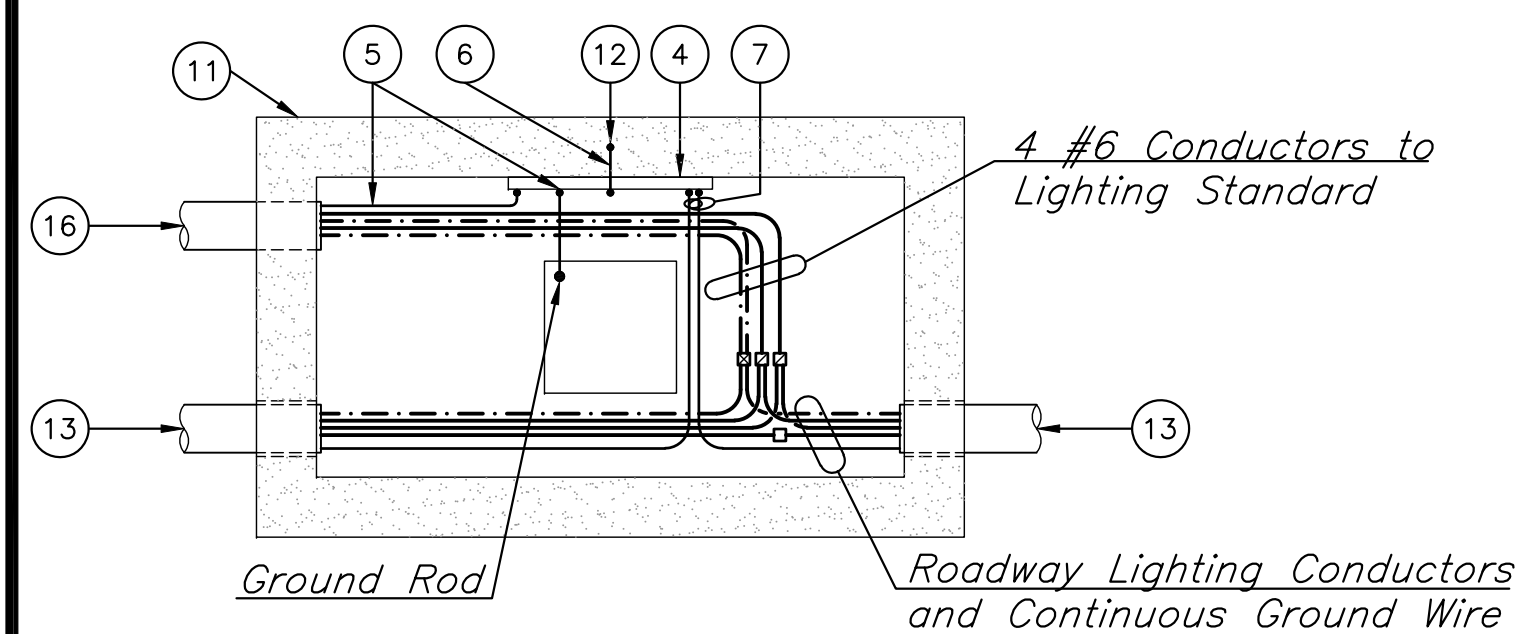
- CABLE CONNECTOR NOTES:**
- Abbreviations: (F) - Fused (NF) - Non-Fused
 - All fused and non-fused In-Line and Wye connector kits shall be "Breakaway" type.
 - All fuses shall be 6A, except those fuses for 1500W emergency lighting luminaires, which shall be 10A.
 - Crimp type connector kits (FYC, DYC) shall be used only for large size cables where screw terminal type connector kits are not available.



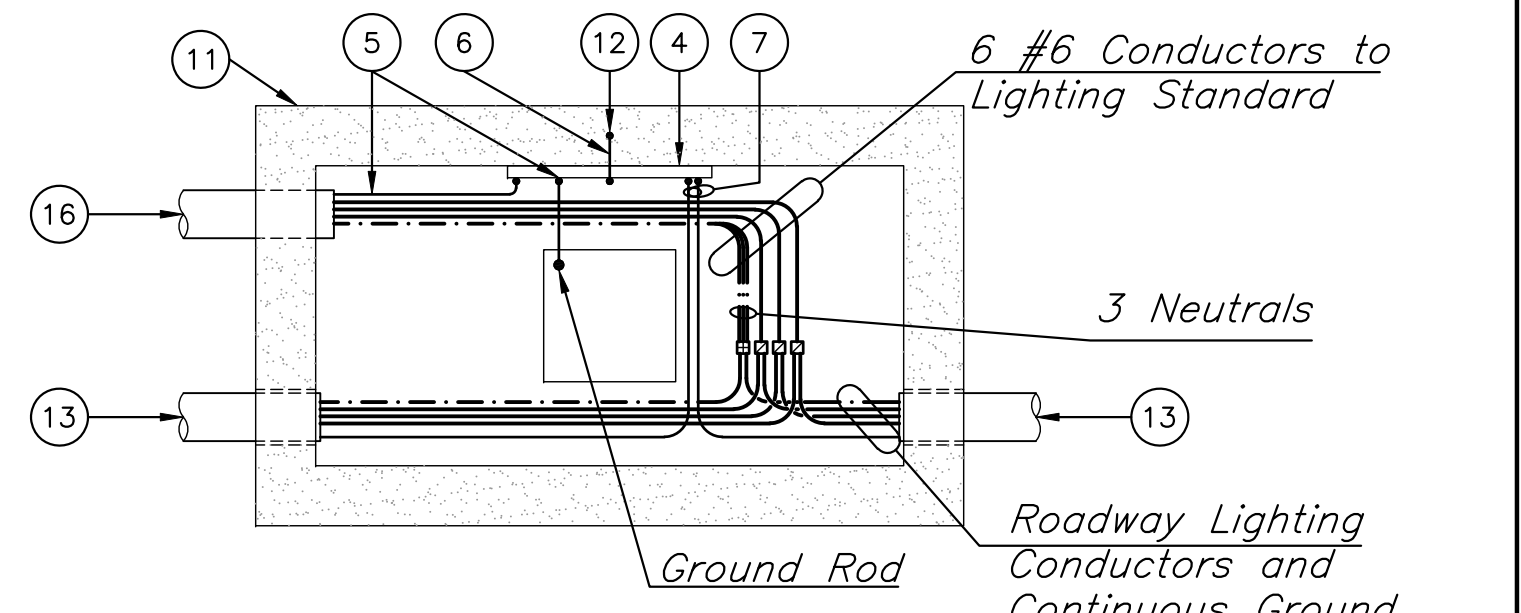
FOR SINGLE ARM LIGHTING STANDARDS



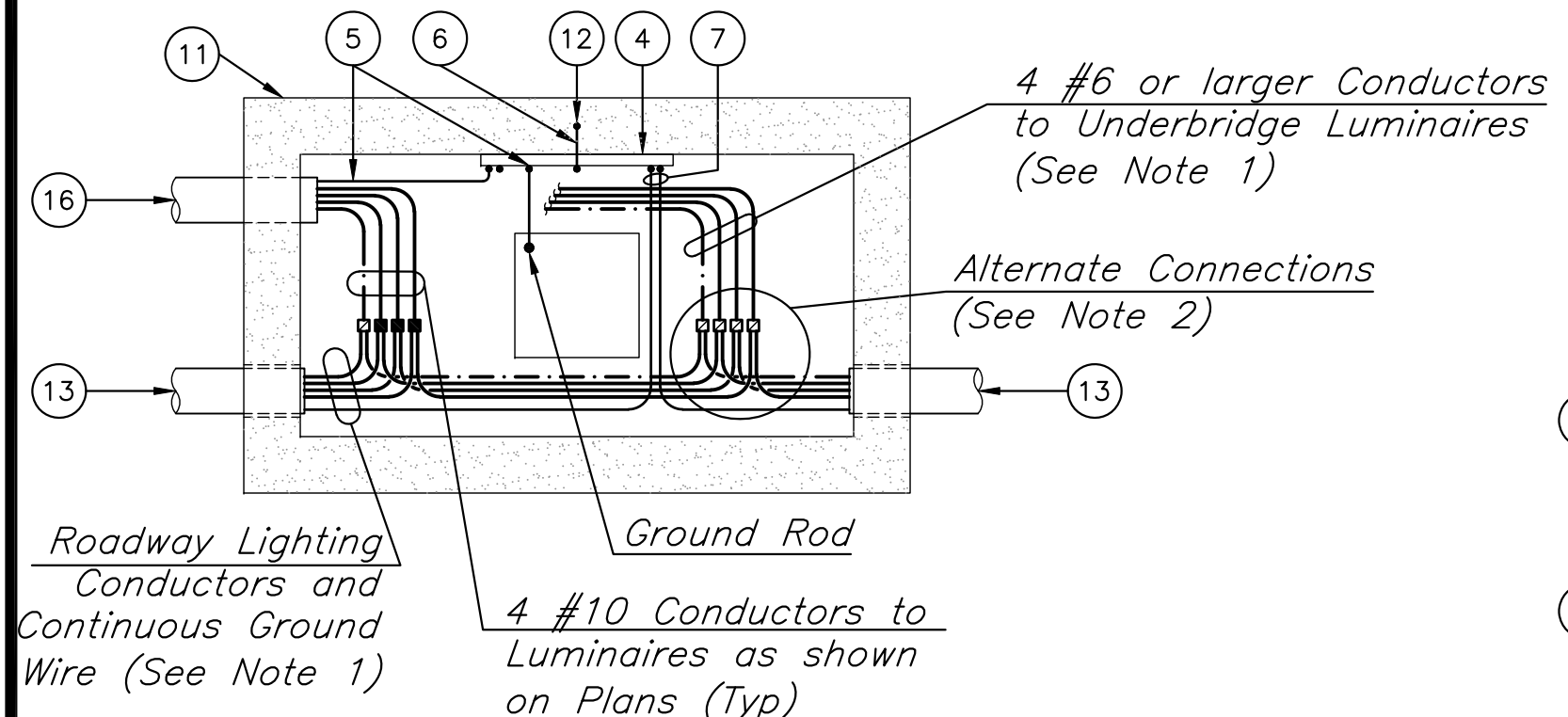
FOR LIGHTING STANDARDS WITH ROADWAY AND EMERGENCY LIGHTING LUMINAIRES



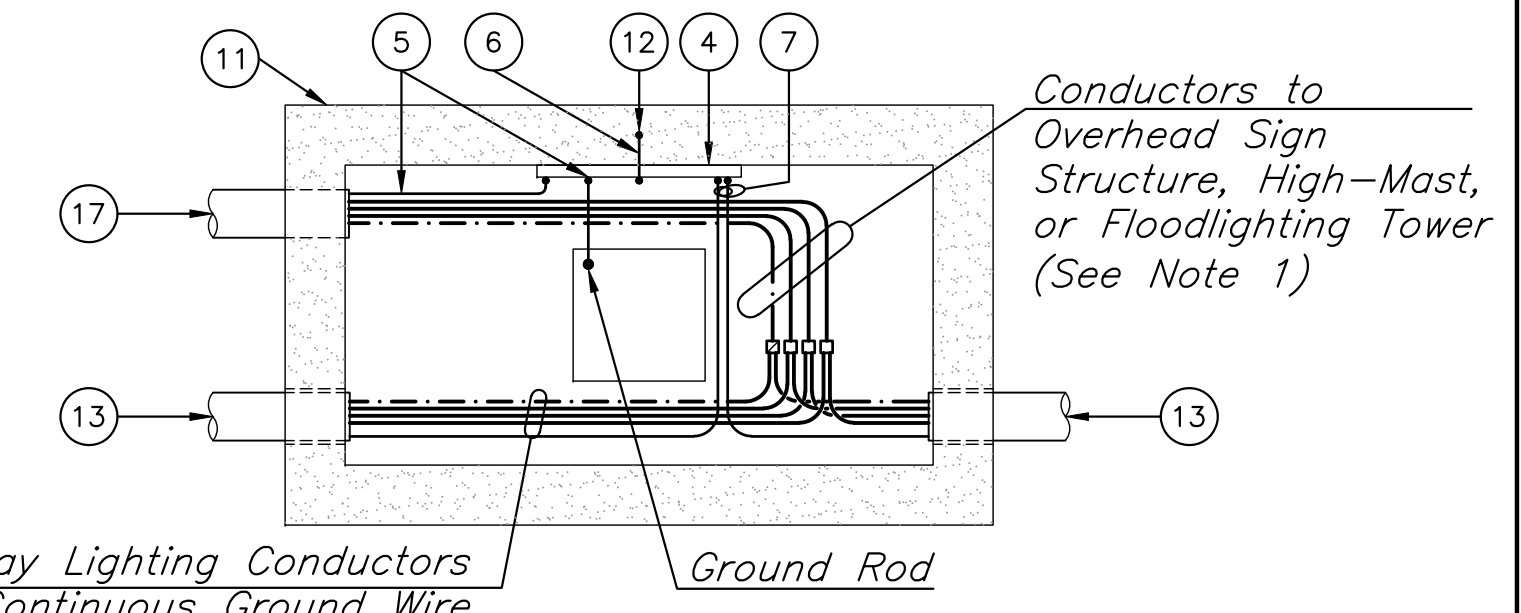
FOR TWIN ARM LIGHTING STANDARDS



TRIPLE ROADWAY LIGHTING LUMINAIRES



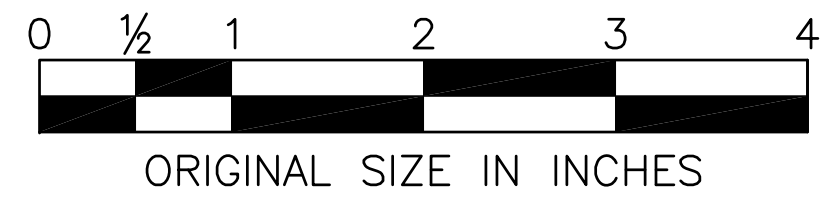
FOR UNDERBRIDGE LIGHTING CIRCUITS



FOR FLOOD, HIGH-MAST, AND SIGN LIGHTING CIRCUITS

MULTIPLE LIGHTING SYSTEM

BY	EMG	05/2009
MADE	EMG	05/2009
TRACED	MDC	05/2009
CHECKED	EMG	05/2009
SUPERVISED	ALB	05/2009



TYPICAL WIRING IN TRANSFORMER BASES AND JUNCTION BOXES
 Not To Scale

SCHEDULE OF CABLE CONNECTORS
 (See note 9 and Connector Kit notes)

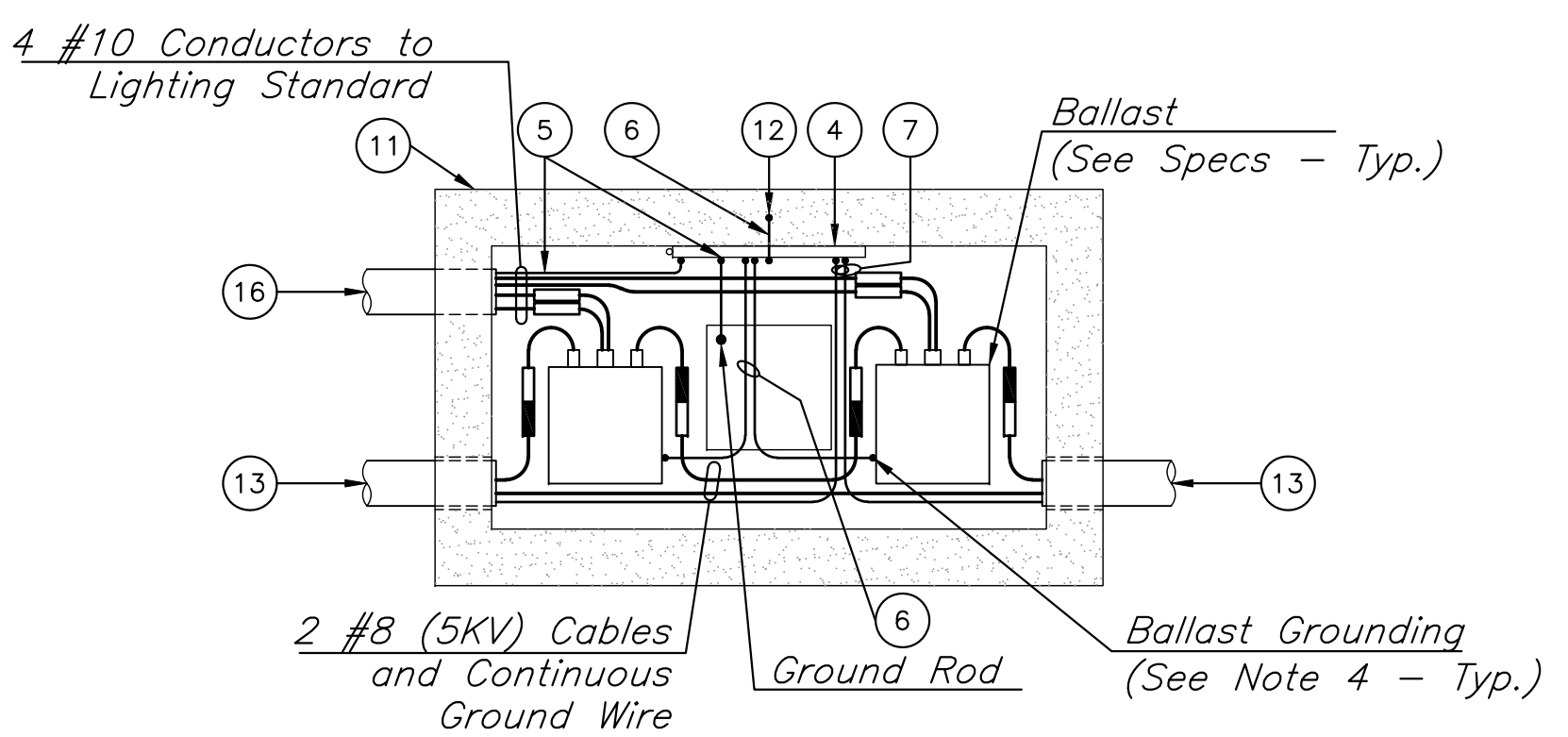
- HOMAC MFG. CO. (Flood-Seal Series)
- In-Line Connector Kit (F) SLK
 - In-Line Connector Kit (NF) SDK
 - Wye Connector Kit (F) FYU or FYC
 - Wye Connector Kit (NF) DYU or DYC
 - Three-Way Connector Kit SL3 or RAB-3
 - Four-Way Connector Kit RAB-4
 - Six-Way Connector Kit RAB-5 or RAB-6
 - Plug 5 KV Connector Kit See Note 10
 - Receptacle

LEGEND:

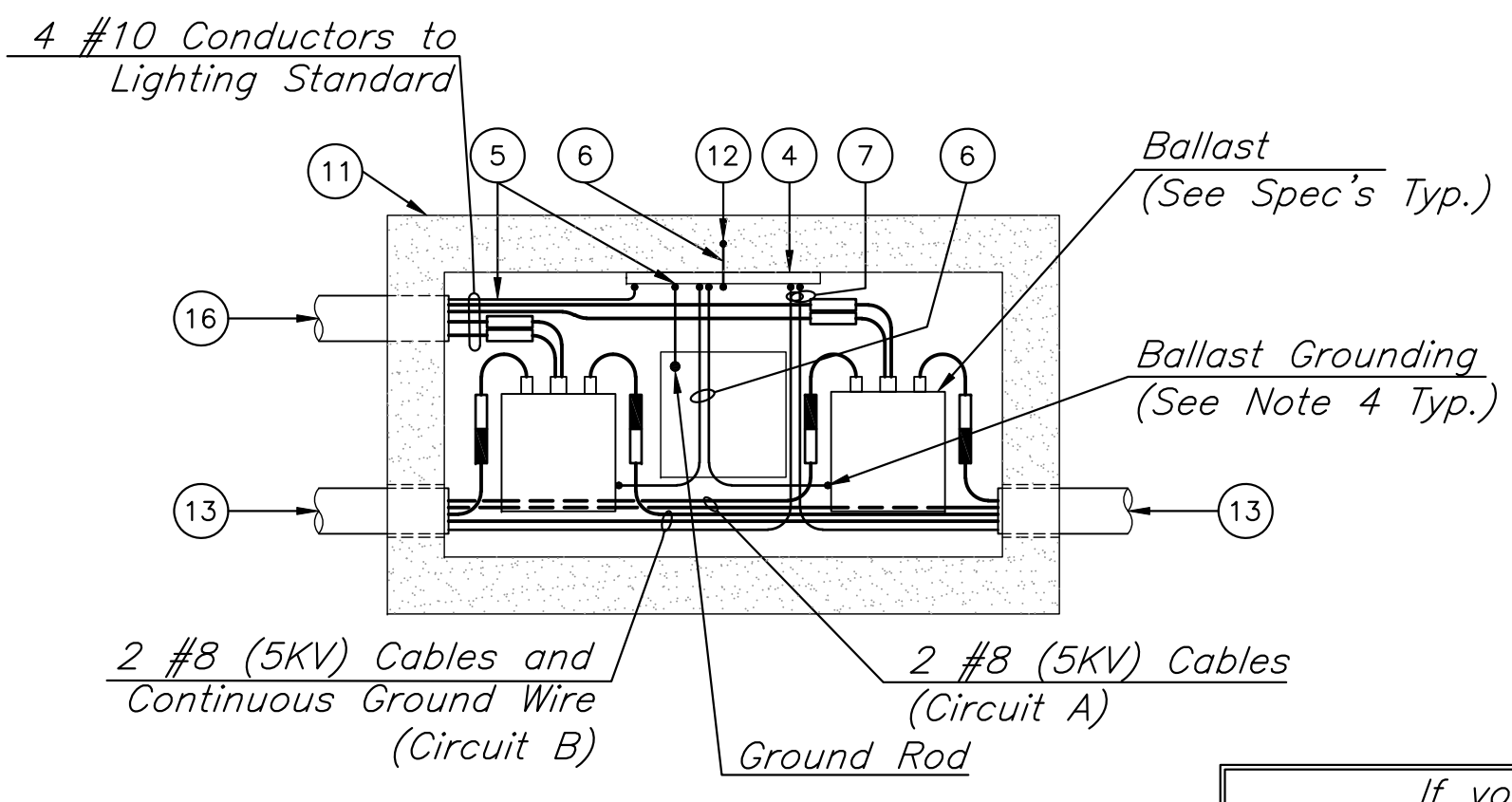
- Neutral Wire Designation (Typ.)
- ① Lighting Standard Transformer Base
- ③ Grounding Terminal (See Detail C Standard Dwg. E-11)
- ④ 12"x1"x 3/8" Grounding Bus Bar
- ⑤ No.8 Ground Wire
- ⑥ No.10 Ground Wire
- ⑦ Bare Copper Ground Wire (Size as noted on the Plans)
- ⑧ Lighting Standard Base, Type I, II, IV or V, as required
- ⑨ Lighting Standard Base, Type III
- ⑩ Ballast Seat - 4L 5.4, 6" Long, H.D. Galv or Nonmetallic, as approved
- ⑪ Concrete Junction Box, Type C
- ⑫ Junction Box Frame Grounding
- ⑬ 3" Nonmetallic Conduit
- ⑭ 3" Nonmetallic Conduit to Lighting Standard
- ⑮ 3" Nonmetallic Conduit to Miscellaneous Facilities

NOTES

- Number and size of conductors are shown on Plans.
- These connections to be used for large underbridge lighting loads. See Plans for arrangement and fusing.
- Similar grounding shall be installed at all lighting standards which are not adjacent to a junction box or manhole.
- Metallic handle of ballast, where used, shall be grounded.
- Conduits shown refer to typical installations. Other types and sizes shall be as noted on the Plans.
- Wiring in roadway lighting manholes shall be similar to typical wiring shown for junction boxes.
- Wiring for lighting standards installed on junction box foundations and bridge parapets shall be in accordance with applicable details shown on this Drawing.
- Wiring as shown is diagrammatic. Sufficient slack of conductors shall be provided by looping the conductors in each transformer base, junction box and manhole.
- Where approved by the Engineer, splice kits manufactured by RayChem, model GelCap SL series may be used in place of those listed by Homac.
- 5 KV connector shall be approved by the Engineer.



FOR TWIN ARM LIGHTING STANDARDS (CONNECTED TO ONE CIRCUIT)



FOR TWIN ARM LIGHTING STANDARDS (CONNECTED TO TWO CIRCUITS)
SERIES LIGHTING SYSTEM

If you use this DWG:	
You also need	-
You may need	E-09, E-12, E-13

APP.	NO.	DATE	REVISION
	0	05/2009	ORIGINAL DRAWING

NEW JERSEY TURNPIKE AUTHORITY
NEW JERSEY TURNPIKE
 ROADWAY LIGHTING INSTALLATION
 DETAILS - 3

HNTB 145 RT. 46 WEST, SUITE 400, WAYNE, NJ 07470 - CO# 24G2800070
ANTHONY L. BARTELLO
 N.J.P.E. License No. GE 45842

STANDARD DRAWING
 E-20

DATE PLOTTED: 05/20/2009 10:15:15 AM
 PLOTTER: HP DesignJet 2445 G2
 FILE: NJTA-SD E-20.dwg
 USER: emg
 PLOT SCALE: 1"=1'-0"