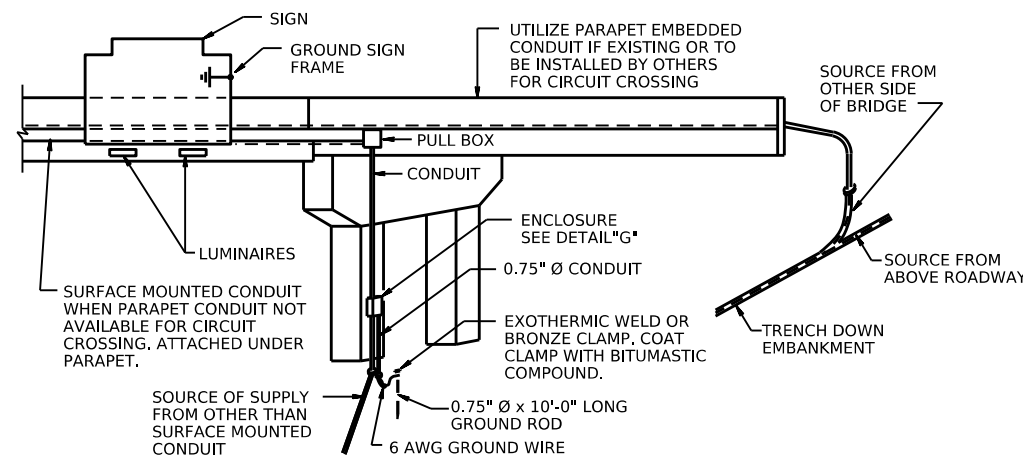
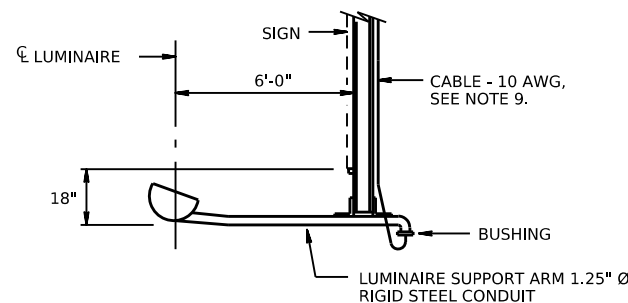
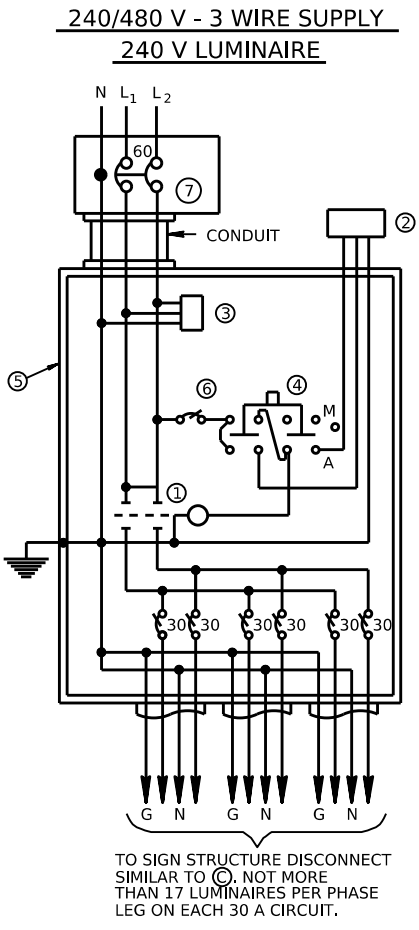
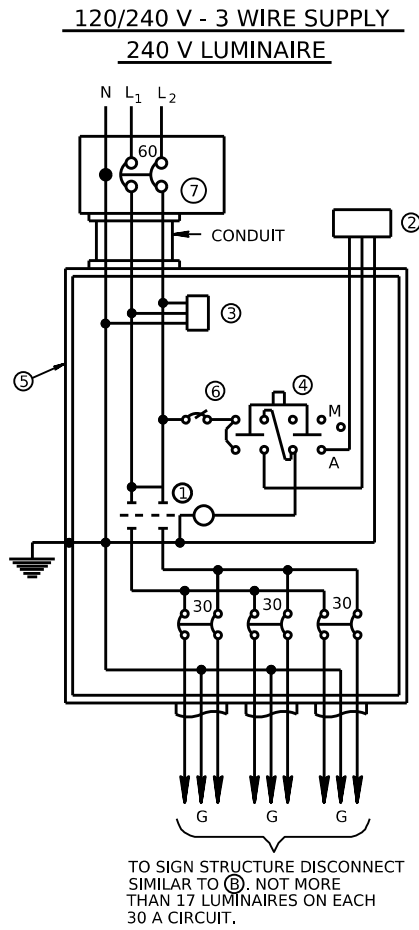
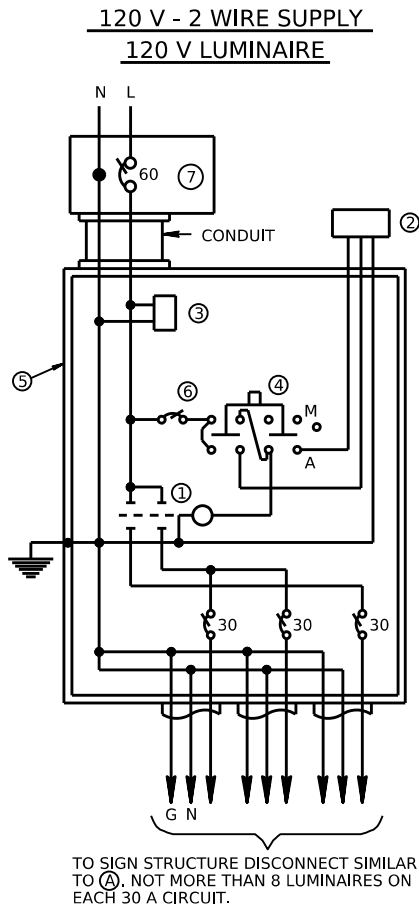
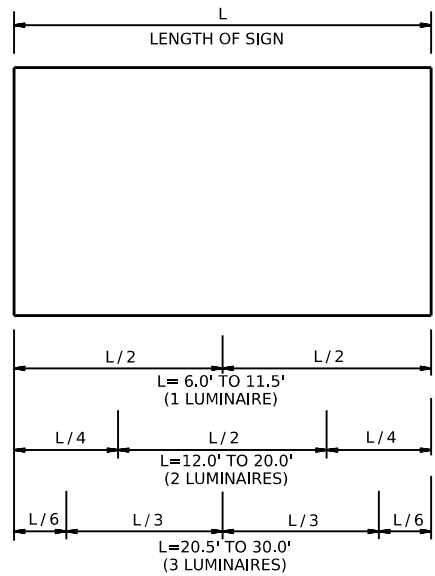


- ## NOTES:
1. PROVIDE COPPER ELECTRIC CONDUCTORS. INCLUDE EQUIPMENT GROUNDING CONDUCTOR WITH ALL CIRCUITS. PROVIDE WITH SAME INSULATION AND SIZE AS CIRCUIT CONDUCTORS.
 2. ELECTRIC COMPANY SERVICE DROPS ARE MADE TO THE SERVICE POLE, UNLESS OTHERWISE SPECIFIED, MEETING THE ELECTRIC COMPANY REQUIREMENTS. WHEN SERVICE DROP IS TO SIGN STRUCTURE, THE SIGN STRUCTURE ENCLOSURE WILL CONTAIN ALL NECESSARY SERVICE AND BRANCH CIRCUIT EQUIPMENT.
 3. BOND THE EQUIPMENT GROUNDING CONDUCTOR TO THE GROUNDING LUG PROVIDED IN THE HANDHOLE OF THE SIGN STRUCTURE. DO NOT CONNECT N TO G EXCEPT AT SERVICE LOCATION.
 4. GROUND THE SIGN FRAME OF OVERPASS BRIDGE-MOUNTED SIGNS.
 5. SIGN STRUCTURE DISCONNECT MAY BE OMITTED WHEN THE MAIN SERVICE IS WITHIN 50 FT. OF THE SIGN STRUCTURE. PROVIDE BRANCH CIRCUIT PROTECTION WITHIN THE MAIN SERVICE ENCLOSURE.
 6. MOUNT EACH REMOTE BALLAST ON THE SIGN SUPPORT STRUCTURE AND IDENTIFY THE SIGN AND LUMINAIRE SERVED. MOUNT OVER SHOULDER WHEN FEASIBLE.
 7. PROVIDE ALUMINUM, STAINLESS STEEL OR GALVANIZED STEEL HARDWARE, CONDULETS, BOLTS, ETC. ASSOCIATED WITH MOUNTING ENCLOSURE FOR MAIN SERVICE AND SIGN STRUCTURE DISCONNECT.
 8. FOR DETAILS OF LUMINAIRE SUPPORTS, SEE STANDARD DRAWINGS BD-641M, BD-644M, BD-645M, AND BD-647M.
 9. PROVIDE 10 AWG, 2 CONDUCTOR, TYPE TC CABLE FROM THE SIGN ENCLOSURE TO THE LUMINAIRES.





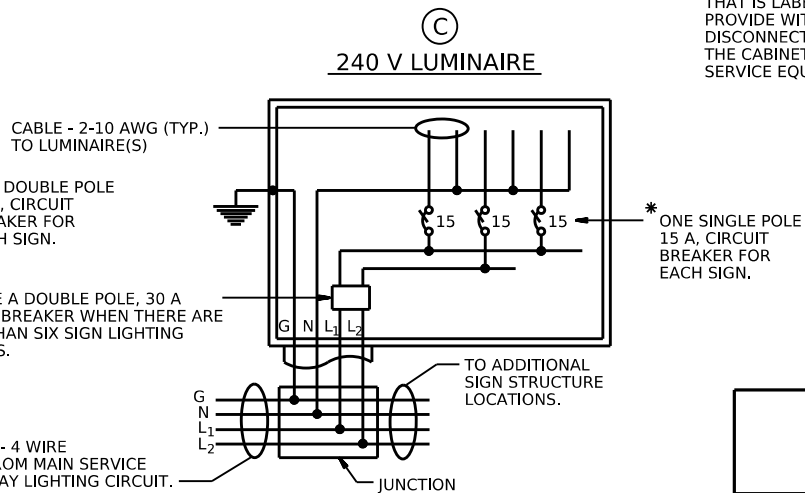
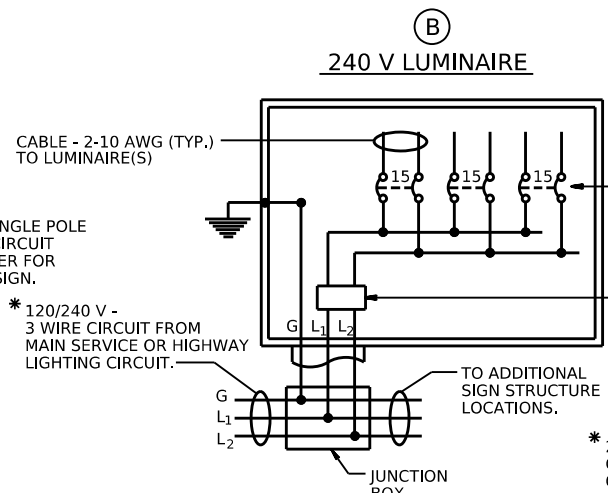
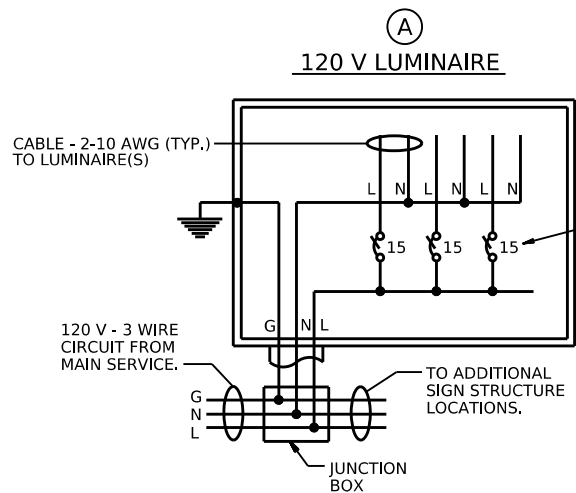
- ① TWO POLE, 60 A, LIGHTING CONTACTOR
- ② PHOTOELECTRIC CONTROL DEVICE
- ③ LIGHTNING ARRESTOR
- ④ SELECTOR SWITCH (MANUAL-OFF-AUTO.)
- ⑤ ENCLOSURE
- ⑥ 15 A, SINGLE POLE CIRCUIT BREAKER
- ⑦ SERVICE DISCONNECT



QUANTITY AND LOCATION OF LUMINAIRES

NOTES:

1. PROVIDE A CIRCUIT BREAKER FOR THE MAIN DISCONNECT UNLESS THE POWER COMPANY REQUIRES FUSES.
2. PROVIDE A MAIN DISCONNECT IN A SEPARATE NEMA 3R OR 4 ENCLOSURE THAT IS LABELED AS "SUITABLE FOR USE AS SERVICE EQUIPMENT". PROVIDE WITH A LOCKABLE COVER AND NO EXTERNAL HANDLE. THE DISCONNECT MAY BE PROVIDED INTEGRAL TO THE CONTROL CABINET IF THE CABINET IS DEAD FRONT AND LABELED AS "SUITABLE FOR USE AS SERVICE EQUIPMENT".



* FOR PROPER PHASE LEG CONNECTION, SEE SIGN LIGHTING PLAN OR HIGHWAY LIGHTING CIRCUIT SCHEMATIC, AS APPLICABLE.

SIGN STRUCTURE DISCONNECT (TYPICAL)

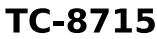
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF OPERATIONS

SIGN LIGHTING

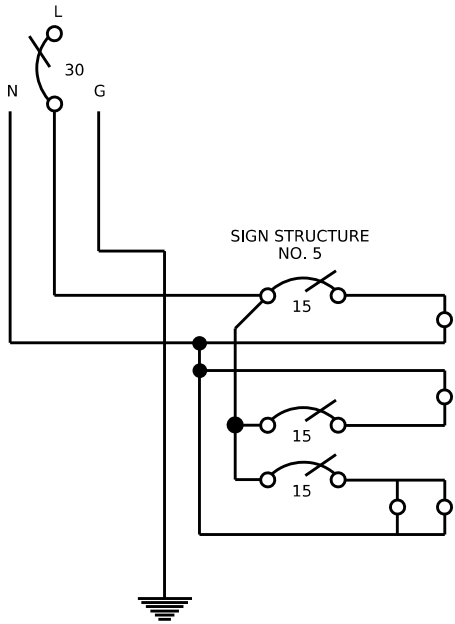
RECOMMENDED _____
MANAGER, TRAFFIC ENGINEERING AND PERMITS SECTION

RECOMMENDED _____
CHIEF, HIGHWAY SAFETY AND TRAFFIC OPERATIONS DIVISION

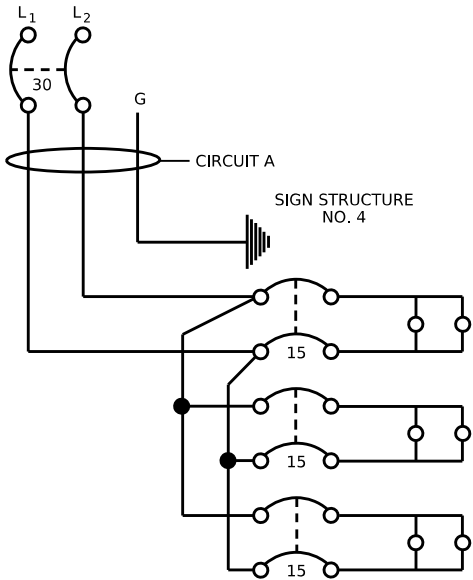
SHEET 2 OF 4
TC-8715



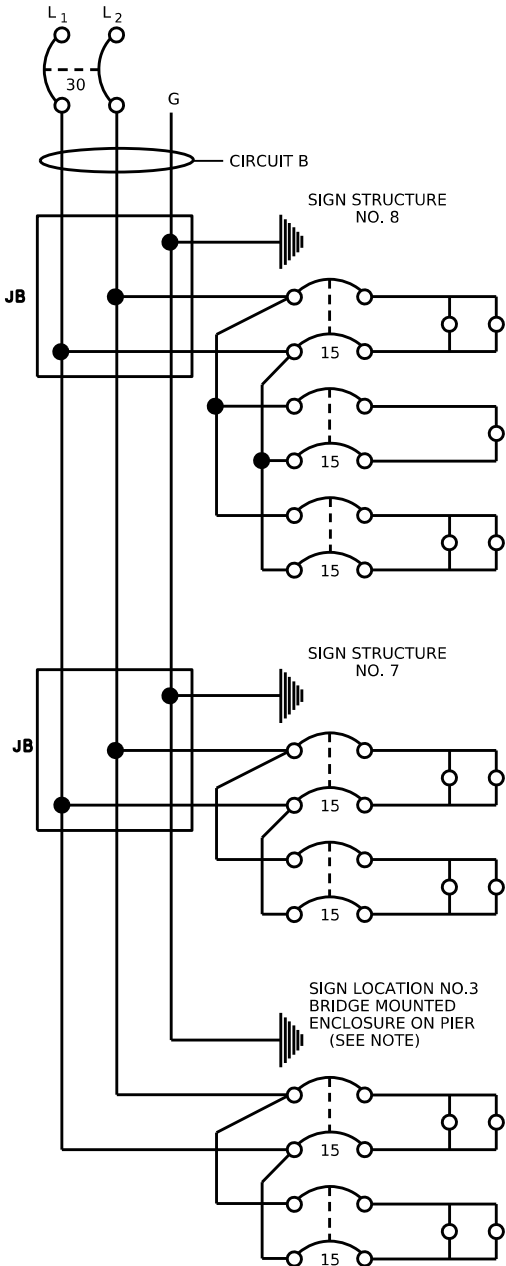
MAIN SERVICE NO.1
120 V - 2 WIRE SUPPLY



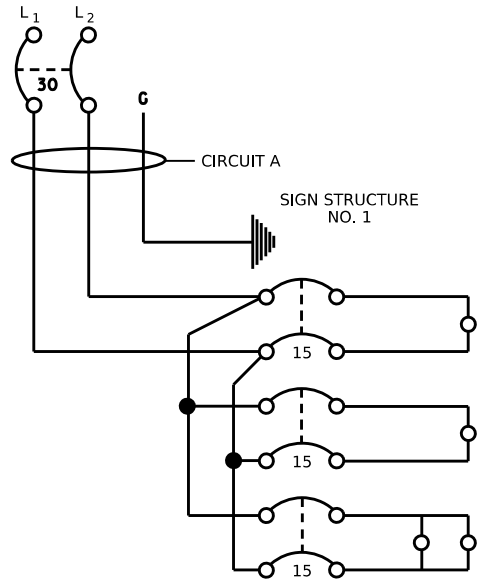
MAIN SERVICE NO.2
120/240 V - 3 WIRE SUPPLY



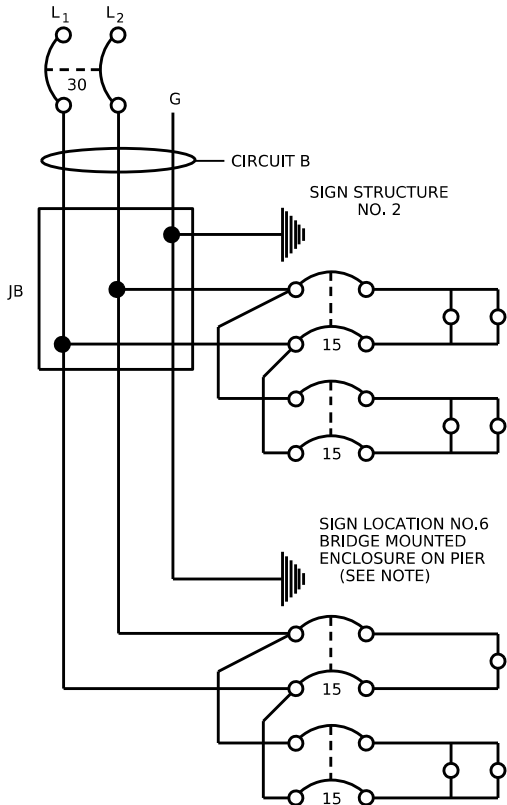
MAIN SERVICE NO.2
120/240 V - 3 WIRE SUPPLY



MAIN SERVICE NO.3
120/240 V - 3 WIRE SUPPLY



MAIN SERVICE NO.3
120/240 V - 3 WIRE SUPPLY



ESTIMATE OF REQUIRED QUANTITIES

MAIN SERVICE REQUIRED QUANTITIES	M.S. #1	M.S. #2	M.S. #3	TOTAL
SERVICE POLE	1	1	1	3
METER BASE (IF REQUIRED)	1	1	1	3
SERVICE DISCONNECT	1	1	1	3
ENCLOSURE	1	1	1	3
WEATHERHEAD & SERVICE CLOSURE	1	1	1	3
LIGHTNING ARRESTER	1	1	1	3
PHOTOELECTRIC CELL	1	1	1	3
GROUND ROD	1	1	1	3
SELECTOR SWITCH	1	1	1	3
LIGHTING CONTACTOR, 2 POLES, 60 A	1	1	1	3
CIRCUIT BREAKER, 1 POLE, 60 A	1			1
CIRCUIT BREAKER, 2 POLES, 60 A		1	1	2
CIRCUIT BREAKER, 1 POLE, 15 A	1	1	1	3
CIRCUIT BREAKER, 1 POLE, 30 A	1			1
CIRCUIT BREAKER, 2 POLES, 30 A		2	2	4
CONDUIT, FITTINGS, MISC. HARDWARE	1	1	1	3

SIGN STRUCTURE REQUIRED QUANTITIES					
SIGN STRUCTURE	ENCLOSURE	GROUND ROD	15 A 1P, C.B.	15 A 2P, C.B.	100 W LUM.
1	1	1		3	4
2	1	1		2	4
3	1*	1		2	4
4	1	1		3	6
5	1	1	3		4
6	1*	1		2	3
7	1	1		2	4
8	1	1		3	5
TOTAL	8	8	3	17	34

* BRIDGE MOUNTED SIGNS - ENCLOSURE MOUNTED ON
BRIDGE PIER, SEE SHEET 1.

CIRCUIT REQUIRED QUANTITIES - ENTIRE		
ITEM	QUANTITY	REMARKS
AWG 2, UNDERGROUND CABLE, COPPER, 1 CONDUCTOR	2190 FT.	
AWG 4, UNDERGROUND CABLE, COPPER, 1 CONDUCTOR	6588 FT.	
AWG 6, UNDERGROUND CABLE, COPPER, 1 CONDUCTOR	4350 FT.	
AWG 8, UNDERGROUND CABLE, COPPER, 1 CONDUCTOR	5090 FT.	
AWG 10, TYPE TC CABLE, COPPER, 2 CONDUCTOR	1500 FT.	FROM S.S.ENCLOSURE TO LUMINAIRE
CABLE & CONDUIT MARKER	4 EACH	
2" Ø DIRECT BURIAL CONDUIT	5730 FT.	
TRENCH	5730 FT.	
JUNCTION BOX JB-1	3 EACH	
JUNCTION BOX JB-12	6 EACH	

NOTE:

IT MAY BE MORE DESIRABLE TO USE ONE COMMON ENCLOSURE ON
NEARBY SIGN STRUCTURE COLUMN FOR BOTH THE STRUCTURE SIGN
AND THE BRIDGE-MOUNTED SIGN IN LIEU OF A SEPARATE ENCLOSURE
MOUNTED ON THE BRIDGE PIER AS SHOWN ON SHEET 1, IF
THIS OPTION IS DESIRED, IT MUST BE CLEARLY SPECIFIED ON
THIS SHEET. IN THE SAMPLE, ENCLOSURES FOR SIGN LOCATIONS 3
AND 6 WOULD NOT BE SPECIFIED AND A NOTE EXPLAINING THE
OMISSION WOULD BE NECESSARY.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF OPERATIONS

SIGN LIGHTING
(SAMPLE DRAWING)

RECOMMENDED _____
MANAGER, TRAFFIC ENGINEERING AND
PERMITS SECTION

RECOMMENDED _____
CHIEF, HIGHWAY SAFETY AND TRAFFIC
OPERATIONS DIVISION

SHEET 4 OF 4
TC-8715