SEATTLE CITY LIGHT

## **CONSTRUCTION GUIDELINE**

STANDARD NTP-70

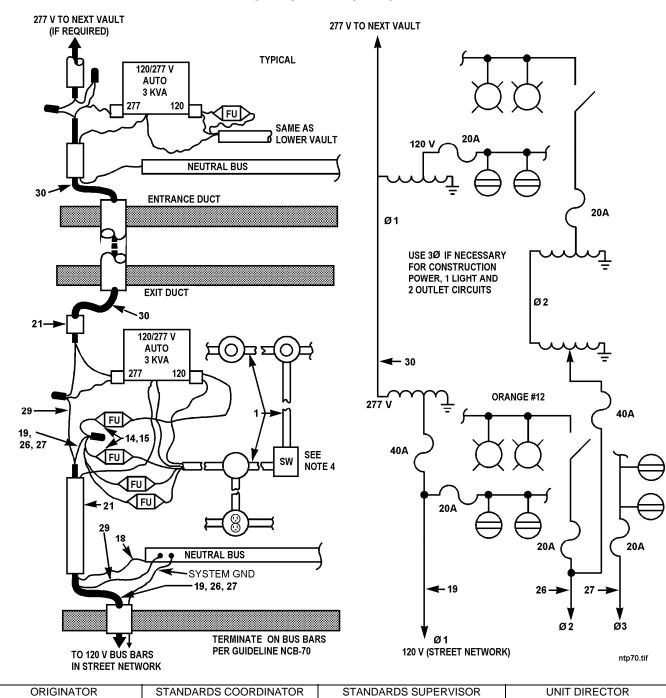
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DATE: November 6, 1981 REV: September 28, 2000

# HIGH VOLTAGE SWITCHROOM & MULTI-TRANSFORMER NETWORK VAULT LIGHT and RECEPTACLE CIRCUITS

(For Sump Pump Installation and additional information, See NTP-60)

HIGH RISE WIRING DIAGAM



ORIGINATOR	STANDARDS COORDINATOR	STANDARDS SUPERVISOR  Solo Glina	UNIT DIRECTOR	
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### **CONSTRUCTION GUIDELINE**

# HIGH VOLTAGE SWITCHROOM & MULTI-TRANSFORMER NETWORK VAULT LIGHT and RECEPTACLE CIRCUITS

#### NOTES:

- All the material listed for vault or a switchroom is designed for three watts per square foot floor lighting. Place lights so that all sides of the transformer can be seen. Place outlets at primary and secondary ends of transformers.
- Material required
  - A. In a vault use the column indicated by the number of transformers to be installed.
  - B. In a switchroom use the column for a two-transformer vault.
- 3. All boxes for switches, receptacles and lampholders, shall have approximate locations as shown on the project drawings and shall be anchored to the concrete surface with two anchors (Item 11).
- 4. All switches (Item 7) shall be on the latch side of the door approximately 40 inches above the floor, unless otherwise noted. Use color code for #12 wiring from Guideline NTP-60, page 3.
- 5. All conduit runs (both horizontal and vertical) shall be anchored to the wall or ceiling every 3 feet. If only one support is required, it shall be located approximately at the mid-point of the run.
- 6. The 3/4 inch conduits shall terminate 6 inches or less from the entrance (or exit) ducts and from the auto-transformer, if used.
- 7. The lengths of #4 copper (Items 19, 26, & 27) shown in the material list are for use within the vault or switchroom only. The total length required will be shown on the M.R. Pull in 250 kcmil copper system ground with 3 #4 hot legs and 1 #4 white neutral.
- 8. All lampholders shall be 7 to 8 feet from the floor unless noted otherwise on the vault/switchroom drawing.
- 9. Auto-transformers (Item 20) and 3-way switches (Item 8) for more than one entrance, are to be used only when shown on the vault/switchroom drawing.
- 10. Add one Item 14 and one Item 15 when auto-transformer is used.

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## CONSTRUCTION GUIDELINE

### HIGH VOLTAGE SWITCHROOM & MULTI-TRANSFORMER NETWORK VAULT **LIGHT and RECEPTACLE CIRCUITS**

### MATERIAL LIST, PER VAULT

	QTY PER NUMBER OF TRANSFORMERS					STOCK NO.	MAT'L STD.
ITEM	TEM 1 2 3 4		4	DESCRIPTION			
1	60 ft.	80 ft.	140 ft.	160 ft.	CONDUIT, 1/2" Schedule 40 PVC	734525	7345.2
2	5	10	14	18	BOX, OUTLET, Bakelite	734569	-
3	2	4	6	8	RECEPTACLE, Duplex with 4" cover plate	733041	7330.0
4	3	6	8	10	LAMPHOLDER, 4" Porcelain	733115	-
5	1	1	1	1	BOX, Switch, without cover	734567	-
6	1	1	1	1	Cover, Switch	732317	-
7	1	1	1	1	SWITCH, 1 pole, glow handle	733376	7333.0
8	2	2	2	2	SWITCH, 3-way, 15 A, glow handle (See Note 9)	733379	7333.0
9	3	6	8	10	LAMP, 200 W, 130V	730629	-
10	12	16	28	32	STRAP, 1/2" Pipe, one hole	713442E	7134.5
11	18	28	46	56	ANCHOR, Nail Drive	780010E	-
12	9	18	24	30	ADAPTER, Coupling, PVC Male, 1/2"	734920	7345.2
13	6	6	6	6	BOOT, Insulating, for fuse holder	682360	-
14	3	3	3	3	HOLDER, Fuse, 600 V, inline	682346	-
15	3	3	3	3	FUSE, Streetlight, 600 V, 20 A	683158	-
16	40 ft.	60 ft.	95 ft.	110 ft.	WIRE, #12, Cu.,1/C, THWN, BLACK	612220	6122.3
17	40 ft.	60 ft.	95 ft.	110 ft.	WIRE, #12, Cu.,1/C, THWN, WHITE	612222	6122.3
18	25 ft.	50 ft.	75 ft.	100 ft.	WIRE, #12, Cu.,1/C, THWN, GREEN	612226	6122.3
19	-	-	-	-	WIRE, #4, Cu.,1/C, THWN, BLACK (See Note 7)	612298	6122.3
20	1	1	1	1	TRANSFORMER, 3 kVA, Auto, Dry, Outdoor (See Note 9)	391285	-
21	10 ft.	10 ft.	10 ft.	10 ft.	CONDUIT, 3/4", Schedule 40 PVC	734526	7345.2
22A	2	4	6	8	CONNECTOR, Twist Lock, YELLOW	677180	-
22B	5	8	12	16	CONNECTOR, Twist Lock, BLUE	677182	-
23	10	15	20	25	CONNECTOR, Twist Lock, RED	677181	-
24	1	1	1	1	COVER, Outlet Box	732214	-
25	1	1	1	1	BUSHING, Insulated, 1/2"	731591	-
26	-	-	-	-	WIRE, #4, Cu.,1/C, THWN, RED (See Note 7)	612302	6122.3
27	-	-	-	-	WIRE, #4, Cu.,1/C, THWN, BLUE (See Note 7)	612304	6122.3
28	1	1	1	1	FUSE, 600 V, 40 A, 13/32" x 1-1/2"	683162	-
29	-	-	-	-	WIRE, #4, Cu.,1/C, THWN, WHITE (See Note 7)	612300	6122.3
30	-	-	-	-	CABLE, #2, Al., Triplex or Quadruplex	600672 600734	6007.5