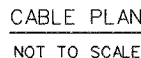
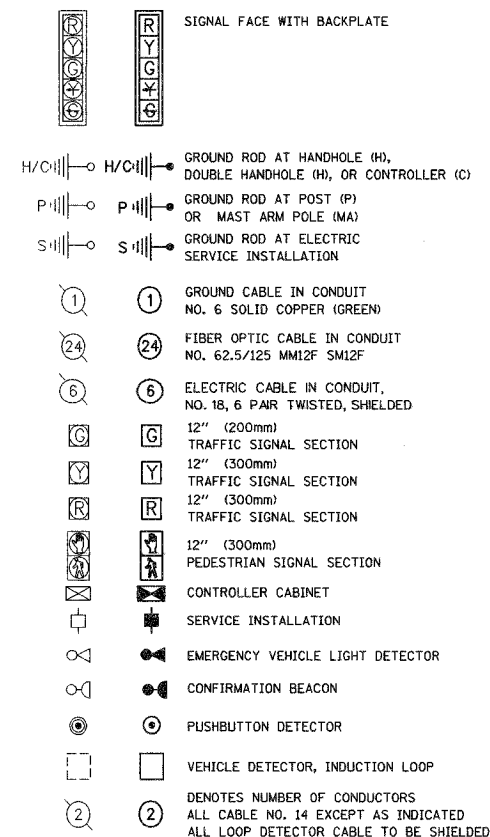


CONTRACT NO. 83773

<u>QUANTITY</u>	<u>UNIT</u>	<u>ITEM</u>
29	SQ FT	SIGN PANEL - TYPE 1
187	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
218	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
50	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
21	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
152	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
3	EACH	HANDHOLE
1	EACH	HEAVY-DUTY HANDHOLE
1	EACH	DOUBLE HANDHOLE
530	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
182	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
586	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1,508	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
230	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
210	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
250	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 14 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.
16	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE D
45	FOOT	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER
5	EACH	TRAFFIC SIGNAL BACKPLATE
2	EACH	INDUCTIVE LOOP DETECTOR
413	FOOT	DETECTOR LOOP, TYPE I
2	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER
2	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
5	EACH	REMOVE EXISTING HANDHOLE
2	EACH	REMOVE EXISTING CONCRETE FOUNDATION
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
613	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
387	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED
4	EACH	SIGNAL HEAD ,LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
4	EACH	SIGNAL HEAD ,LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD ,LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD ,LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED



EXISTING	PROPOSED
1.00	1.00
2.00	2.00
3.00	3.00
4.00	4.00
5.00	5.00
6.00	6.00
7.00	7.00
8.00	8.00
9.00	9.00
10.00	10.00
11.00	11.00
12.00	12.00
13.00	13.00
14.00	14.00
15.00	15.00
16.00	16.00
17.00	17.00
18.00	18.00
19.00	19.00
20.00	20.00
21.00	21.00
22.00	22.00
23.00	23.00
24.00	24.00
25.00	25.00
26.00	26.00
27.00	27.00
28.00	28.00
29.00	29.00
30.00	30.00
31.00	31.00
32.00	32.00
33.00	33.00
34.00	34.00
35.00	35.00
36.00	36.00
37.00	37.00
38.00	38.00
39.00	39.00
40.00	40.00
41.00	41.00
42.00	42.00
43.00	43.00
44.00	44.00
45.00	45.00
46.00	46.00
47.00	47.00
48.00	48.00
49.00	49.00
50.00	50.00
51.00	51.00
52.00	52.00
53.00	53.00
54.00	54.00
55.00	55.00
56.00	56.00
57.00	57.00
58.00	58.00
59.00	59.00
60.00	60.00
61.00	61.00
62.00	62.00
63.00	63.00
64.00	64.00
65.00	65.00
66.00	66.00
67.00	67.00
68.00	68.00
69.00	69.00
70.00	70.00
71.00	71.00
72.00	72.00
73.00	73.00
74.00	74.00
75.00	75.00
76.00	76.00
77.00	77.00
78.00	78.00
79.00	79.00
80.00	80.00
81.00	81.00
82.00	82.00
83.00	83.00
84.00	84.00
85.00	85.00
86.00	86.00
87.00	87.00
88.00	88.00
89.00	89.00
90.00	90.00
91.00	91.00
92.00	92.00
93.00	93.00
94.00	94.00
95.00	95.00
96.00	96.00
97.00	97.00
98.00	98.00
99.00	99.00
100.00	100.00



PHASE DESIGNATION DIAGRAM

[illegible]

SCALE: NONE

DATE 9/03/04
DRAWN BY GEW
CHECKED BY SRF

I.D.O.T.					TOTAL WATTAGE
TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		ZOPERATION	
		INCAND.	LED		
SIGNAL (RED)	10	135	17	0.50	85
(YELLOW)	6	135	25	0.25	37.5
(GREEN)	6	135	15	0.25	22.5
ARROW	12	135	12	0.10	14.4
PED SIGNAL	2	90	25	1.00	50
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	0	252		0.05	0
FLASHER					
ENERGY COSTS TO:				TOTAL=	309.4
CITY OF EVANSTON					
ENERGY SUPPLY CONTACT: JUDY SCHOMER					
PHONE: (847) 816-5472					
COMPANY: COM ED					

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5
D - CONTROLLER	4	DOUBLE HANDHOLE	13	MAST ARM (1) POLE	20' +/-
E - M. ARM POLE		SIGNAL POST	2		
24" (600mm)	10	CONTROLLER CAB.	1	BRACKET MOUNTED	13
30" (750mm)	15	FIBER OPTIC	13	PED. PUSHBUTTON	4
		ELECTRIC SERVICE		ELECTRIC SERVICE	13.5
		GROUND CABLE	1	SERVICE TO GROUND	13.5
				POST MOUNTED	6.

 DUAL ENTRY PHASE
 PEDESTRIAN PHASE
 X NUMBER REFERS TO