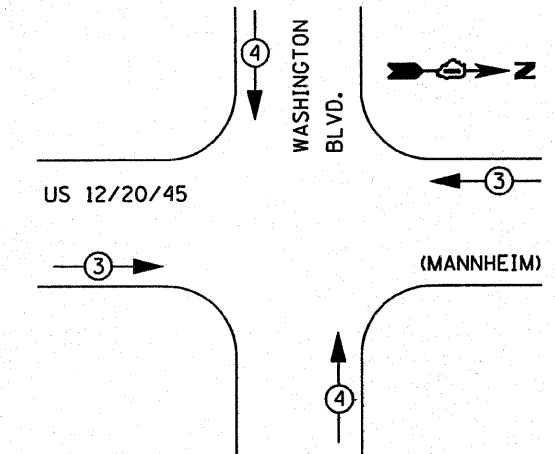


PHASE DESIGNATION DIAGRAM

PROPOSED SIGNAL INSTALLATION EMERGENCY VEHICLE PREEMPTION SEQUENCE



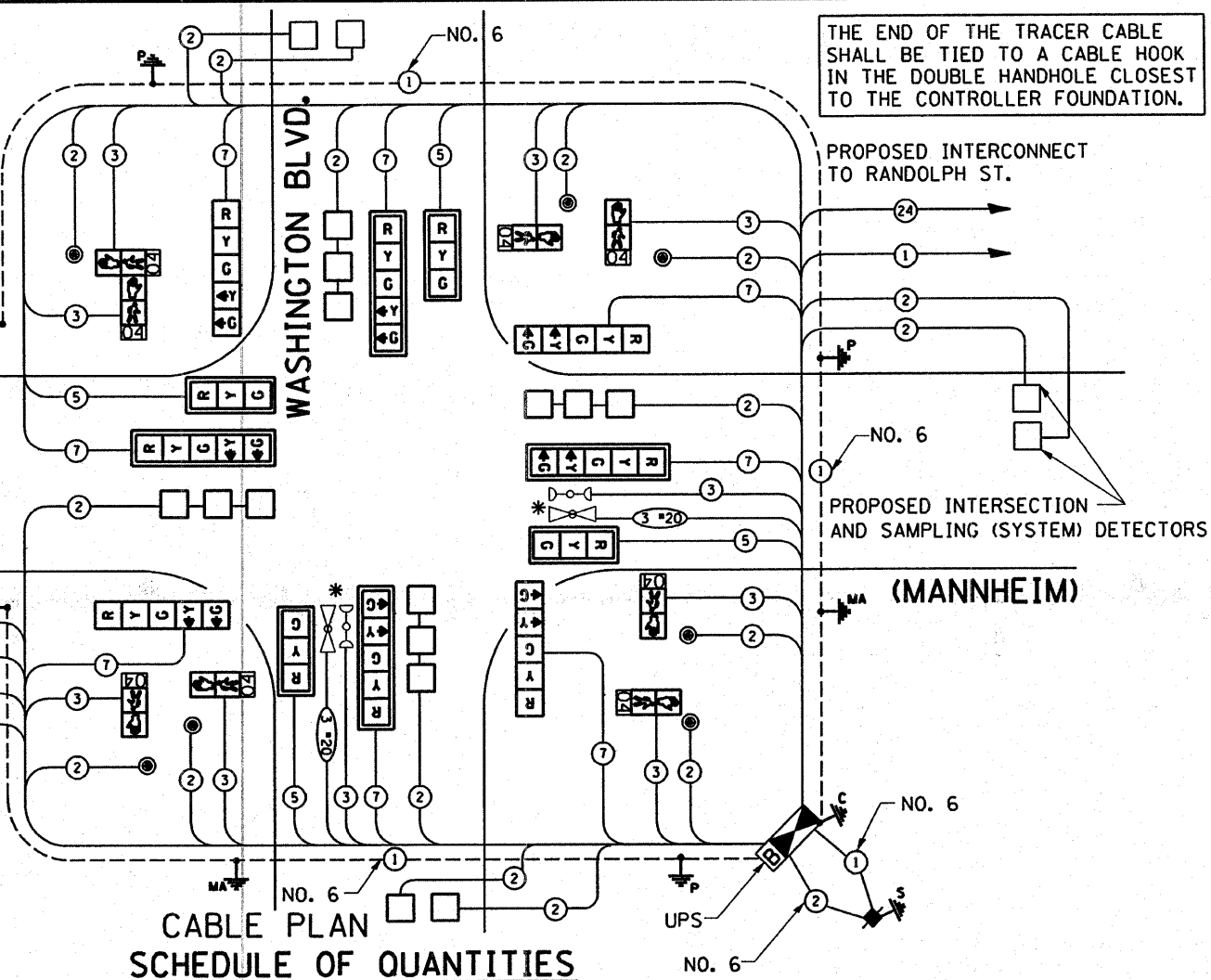
PROPOSED EMERGENCY VEHICLE PREEMPTOR			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	→	↑	↓

LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

PROPOSED INTERSECTION AND SAMPLING(SYSTEM) DETECTORS

THE END OF THE TRACER CABLE SHALL BE TIED TO A CABLE HOOK IN THE DOUBLE HANDHOLE CLOSEST TO THE CONTROLLER FOUNDATION.



CABLE PLAN SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY	ITEM	UNIT	QUANTITY
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO. FT	200	HANDHOLE	EACH	8
SIGN PANEL-TYPE II	SO. FT	57.50	SIDEWALK REMOVAL	SO FT	200
TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	0.1	HEAVY-DUTY HANDHOLE	EACH	4
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	0.1	DOUBLE HANDHOLE	EACH	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	0.1	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16FT.	EACH	4
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	720	CONCRETE FOUNDATION, TYPE A	FOOT	16
CONDUIT IN PUSH, 2" DIA., GALVANIZED STEEL	FOOT	401	CONCRETE FOUNDATION, TYPE C	FOOT	4
CONDUIT IN PUSH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	77	CONCRETE FOUNDATION, TYPE E 36-INCH DIA.	FOOT	60
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	18	UNINTERRUPTIBLE POWER SUPPLY	EACH	1
CONDUIT IN PUSH, 4" DIA., GALVANIZED STEEL	FOOT	385	SIGNAL HEAD, L.E.D. 1-FACE, 3 SECTION, MAST ARM MNTD.	EACH	4
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	11	SIGNAL HEAD, L.E.D. 1-FACE, 5 SECTION, MAST ARM MNTD.	EACH	4
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	741	SIGNAL HEAD, L.E.D. 1-FACE, 1-5 SECT BRKT MNTD.	EACH	4
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET(SPECIAL) TRANSCEIVER-FIBER OPTIC	EACH	1	PEDESTRIAN PUSH-BUTTON	EACH	7
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1984	PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRKT. MNTD. WITH COUNTDOWN TIMER	EACH	6
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1214	PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRKT. MNTD. WITH COUNTDOWN TIMER	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	875	INDUCTIVE LOOP DETECTOR	EACH	12
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1595	DETECTOR LOOP TYPE I	FOOT	665
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2277	TRAFFIC SIGNAL BACKPLATE, ALUMINUM	EACH	8
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	110	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	1334	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
*ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	320	REMOVE EXISTING CONCRETE FOUNDATION	EACH	25
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1	REMOVE EXISTING HANDHOLE	EACH	16
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	3	THERMOPLASTIC PAVEMENT MARKING LINE 12"	FOOT	528
			THERMOPLASTIC PAVEMENT MARKING LINE 24"	FOOT	151
			THERMOPLASTIC PAVEMENT MARKING REMOVAL	FOOT	781
			*RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
			*RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING	EACH	1
			TEMPORARY TRAFFIC SIGNAL TIMINGS	EACH	1

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'-H-2'
E - M. ARM POLE		SIGNAL POST	2 (1.0)	BRACKET MOUNTED	16m+H-0.6m
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PEDESTRIAN SIGNAL	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE (INCAND)	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	135	17	0.50	136.00
(YELLOW)	16	135	25	0.25	100.00
(GREEN)	16	135	15	0.25	60.00
ARROW	16	135	12	0.10	19.20
PED. SIGNAL	8	90	25	1.00	200.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN		84		0.05	

ENERGY COSTS TO: TOTAL = 689.20

ENERGY SUPPLY CONTACT: PHONE: 708-410-5069 COMPANY: COM. EDISON

CABLE PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER CABINET	[Symbol]	[Symbol]
RAILROAD CONTROL CABINET	[Symbol]	[Symbol]
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT	[Symbol]	[Symbol]
TELEPHONE CONNECTION	[Symbol]	[Symbol]
GROUND ROD AT (C) CONTROLLER, (H)HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE	[Symbol]	[Symbol]
FIBER OPTIC CABLE IN CONDUIT, NUMBER OF FIBERS AS NOTED	[Symbol]	[Symbol]
ELECTRIC CABLE IN CONDUIT, NO. 14, UNLESS OTHERWISE NOTED, NUMBER OF CONDUCTORS AS NOTED	[Symbol]	[Symbol]
GROUND CABLE IN CONDUIT NO. 6 COPPER (GREEN)	[Symbol]	[Symbol]
SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD	[Symbol]	[Symbol]
12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE	[Symbol]	[Symbol]
12" (300mm) TRAFFIC SIGNAL SECTION	[Symbol]	[Symbol]
12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER	[Symbol]	[Symbol]
ILLUMINATED SIGN "NO LEFT TURN"	[Symbol]	[Symbol]
ILLUMINATED SIGN "NO RIGHT TURN"	[Symbol]	[Symbol]
PUSHBUTTON DETECTOR	[Symbol]	[Symbol]
DETECTOR LOOP	[Symbol]	[Symbol]
PERFORMED DETECTOR LOOP	[Symbol]	[Symbol]
MICROWAVE VEHICLE SENSOR	[Symbol]	[Symbol]
VIDEO DETECTOR	[Symbol]	[Symbol]
CLOSED CIRCUIT TV	[Symbol]	[Symbol]
EMERGENCY VEHICLE SYSTEM DETECTOR	[Symbol]	[Symbol]
CONFIRMATION BEACON	[Symbol]	[Symbol]
UNINTERRUPTIBLE POWER SUPPLY	[Symbol]	[Symbol]

* 100% COST TO VILLAGE OF BELLWOOD

NOTE: THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE ADJACENT SYSTEM.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.