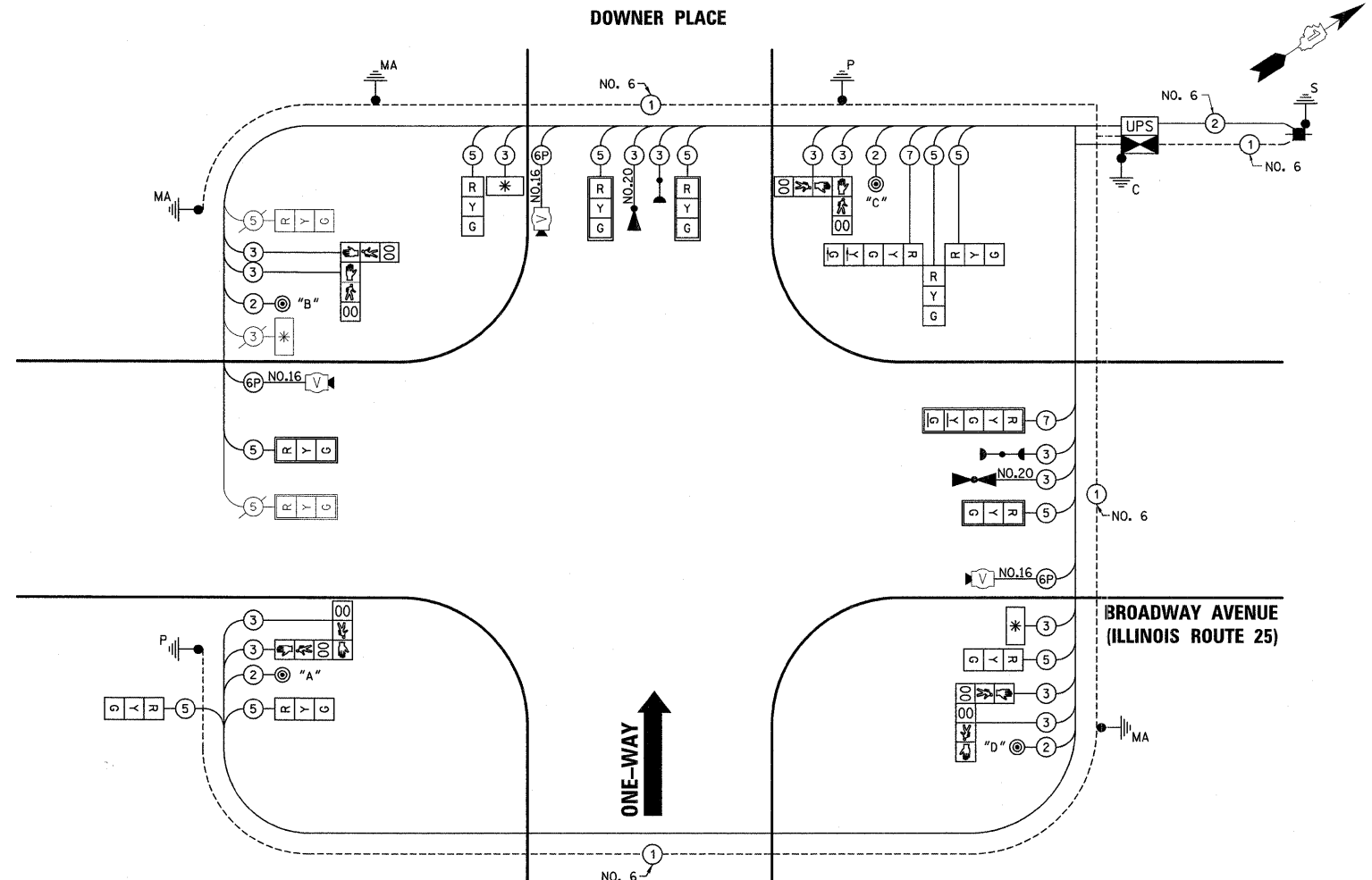


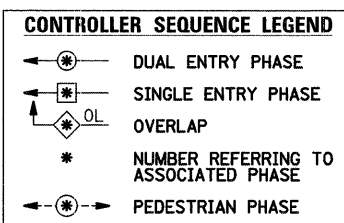
CABLE PLAN LEGEND

- | | | |
|-----------------|-----------------|---|
| EXISTING | PROPOSED | |
| | | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | SERVICE INSTALLATION |
| | | TELEPHONE INSTALLATION |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | MAGNETIC DETECTOR |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSHBUTTON DETECTOR |
| | | LUMINAIRE |
| | | DENOTES NUMBER OF CONDUCTORS.
ALL CABLE NO. 14 EXCEPT AS INDICATED.
ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | | GROUND CABLE IN CONDUIT
NO. 6 SOLID COPPER (GREEN) |
| | | FIBER OPTIC CABLE IN CONDUIT
NO. 62.5/125 2-MM12F SMI2F |
| | | SIGNAL FACE WITH BACKPLATE.
"P" INDICATES PROGRAMMED HEAD. |
| | | RAILROAD CONTROL CABINET |
| | | ILLUMINATED SIGN
"NO LEFT TURN" |
| | | ILLUMINATED SIGN
"NO RIGHT TURN" |
| | | WIRELESS ANTENNA |
| | | GROUND ROD AT HANDHOLE (H),
DOUBLE HANDHOLE (H), OR CONTROLLER (C) |
| | | GROUND ROD AT POST (P)
OR MAST ARM POLE (MA) |
| | | GROUND ROD AT ELECTRIC
SERVICE INSTALLATION |
| | | UNINTERRUPTIBLE POWER SUPPLY |
| | | LED STREET NAME SIGN |
| | | VIDEO DETECTION CAMERA |



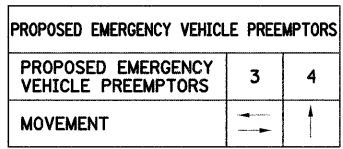
PUSHBUTTONS "A" AND "D" SHALL PLACE
A CALL IN PHASES 8 AND 2

PUSHBUTTONS "B" AND "C" SHALL PLACE
A CALL IN PHASES 6 AND 8



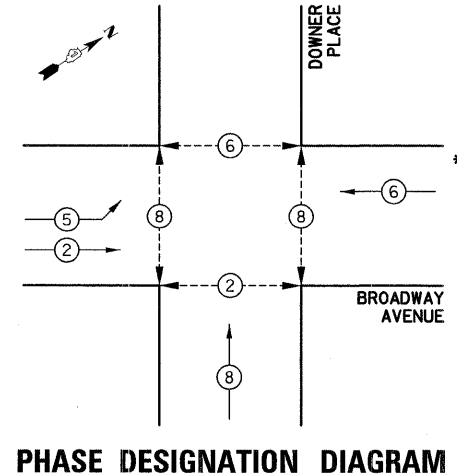
CONTROLLER SEQUENCE

EMERGENCY VEHICLE PREEMPTION SEQUENCE



LIGHTING CABLE PLAN

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)
C - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+HL-2=
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)	(6m+L-0.6m)	
E - M.A. LENGTH		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
<30'	30" (900mm)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
<40'	30" (750mm)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
<40'	36" (900mm)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
<50'	36" (900mm)			POST MOUNTED	6 (1.8)
>50'	36" (900mm)				



SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	DOWNER PLACE
TRENCH BACKFILL	CU YD	4.4
PORTLAND CEMENT CONCRETE SIDEWALK, SPECIAL	SQ FT	80
SIDEWALK REMOVAL	SQ FT	80
CONTROLLED LOW STRENGTH MATERIAL	CU YD	21.1
SIGN PANEL - TYPE 1	SQ FT	26.2
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	522
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	100
PAVEMENT MARKING REMOVAL	SQ FT	354
** ELECTRICAL SERVICE INSTALLATION, SPECIAL	EACH	1
SERVICE INSTALLATION (SPECIAL)	EACH	1
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	63
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	51
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	177
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	145
HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
** ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	301
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	129
** LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 310 WATT	EACH	2
LIGHTING CONTROLLER TYPE CB-RCS 80 AMP - 240 VOLT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	455
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1720.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1427.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	204.5
ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16 6 PAIR	FOOT	414.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	229
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
** STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 24 FT. (SPECIAL)	EACH	1
** STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 26 FT. (SPECIAL)	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	20
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	5
* LIGHT DETECTOR	EACH	3
* LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1975
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	4
REMOVE EXISTING CONCRETE FOUNDATION	EACH	5
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
PAINT TRAFFIC SIGNAL POST	EACH	2
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	424.5
EXPLORATORY EXCAVATION	EACH	1
VIDEO DETECTION SYSTEM	EACH	1
* LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	2
MASONRY WALL CONSTRUCTION	SQ FT	42
REMOVE EXISTING CONCRETE FOUNDATIONS (SPECIAL)	EACH	1

* 100% COST TO THE CITY OF AURORA.
** PARTIAL COST TO CITY OF AURORA (SEE SUMMARY OF QUANTITIES).

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

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE COORDINATED BY THE CONTRACTOR WITH THE CITY OF AURORA.

DATE	
BY	
REVIEWED	
DESIGNED	
CHECKED	
PLANNED	
NOTED	
NO.	

DATE	
BY	
REVIEWED	
DESIGNED	
CHECKED	
PLANNED	
NOTED	
NO.	

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14		17	0.50	119
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	4		12	0.10	4.8
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
LED SIGN	3		60	0.50	90
LUMINAIRE	3		310	0.50	465
VIDEO SYSTEM	1		15	1.00	15
TOTAL =					1158.8

ENERGY COSTS TO: CITY OF AURORA
44 E. DOWNER PLACE
AURORA, ILLINOIS 60507-2067

ENERGY SUPPLY CONTACT: MARK SCHERIBEL
PHONE: (630) 723-2128
COMPANY: COMMONWEALTH EDISON