

**CABLE PLAN LEGEND**

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

EXISTING INTERSECTION AND PROPOSED SAMPLING (SYSTEM) DETECTORS

ANTENNA COAXIAL CABLE (WIRELESS INTERCONNECT TO POST OFFICE)

PUSHBUTTONS "A" SHALL PLACE A CALL IN PHASES 2 AND 4

PUSHBUTTONS "B" SHALL PLACE A CALL IN PHASES 4 AND 6

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

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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	17		17	0.50	144.5
(YELLOW)	17		25	0.25	106.3
(GREEN)	17		15	0.25	63.8
ARROW	18		12	0.10	21.6
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
<b>TOTAL =</b>					<b>661.2</b>

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

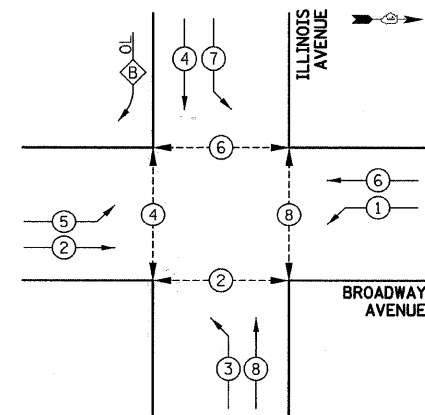
ENERGY SUPPLY CONTACT: MARK SCHERIBEL  
PHONE: (630) 723-2128  
COMPANY: COMMONWEALTH EDISON

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)				

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**

PROPOSED EMERGENCY VEHICLE PREEMPTORS		
PROPOSED EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	←	↑

**CONTROLLER SEQUENCE**



OVERLAP PHASE = PERMISSIVE PHASE + PROTECTED PHASE

CONTROLLER SEQUENCE LEGEND	
	DUAL ENTRY PHASE
	SINGLE ENTRY PHASE
	OVERLAP
	NUMBER REFERRING TO ASSOCIATED PHASE
	PEDESTRIAN PHASE

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 OPTICOM AS REQUIRED BY THE CITY OF AURORA.

**PHASE DESIGNATION DIAGRAM**

**SCHEDULE OF QUANTITIES**

PAY ITEM DESCRIPTION	UNIT	ILLINOIS AVENUE
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	572
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	130
PAVEMENT MARKING REMOVAL	SQ FT	470
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	558
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1741.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	344
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	656.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	43.5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	2
INDUCTIVE LOOP DETECTOR	EACH	2
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	43.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	447.5
MODIFY EXISTING TYPE "D" FOUNDATION	EACH	1
ELECTRIC CABLE IN CONDUIT, NO. 20 3C TWISTED SHIELDED	FOOT	569.5
GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	6
SIGNAL HEAD, LED, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 3-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	4
SIGNAL HEAD, LED, 5-SECTION, MAST ARM MOUNTED, RETROFIT	EACH	4

\* SIGNAL HEAD, LED RETROFIT

EXISTING INTERSECTION AND PROPOSED SAMPLING (SYSTEM) DETECTORS

BROADWAY AVENUE (ILLINOIS ROUTE 25)

ILLINOIS AVENUE

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_ PLOTTED: \_\_\_\_\_ CHECKED: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_ RT. OF WAY CHECKED: \_\_\_\_\_  
 NO. \_\_\_\_\_ CAD FILE NAME: \_\_\_\_\_

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_ PLOTTED: \_\_\_\_\_ CHECKED: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_ RT. OF WAY CHECKED: \_\_\_\_\_  
 NO. \_\_\_\_\_ STRUCTURE NOTATIONS: \_\_\_\_\_