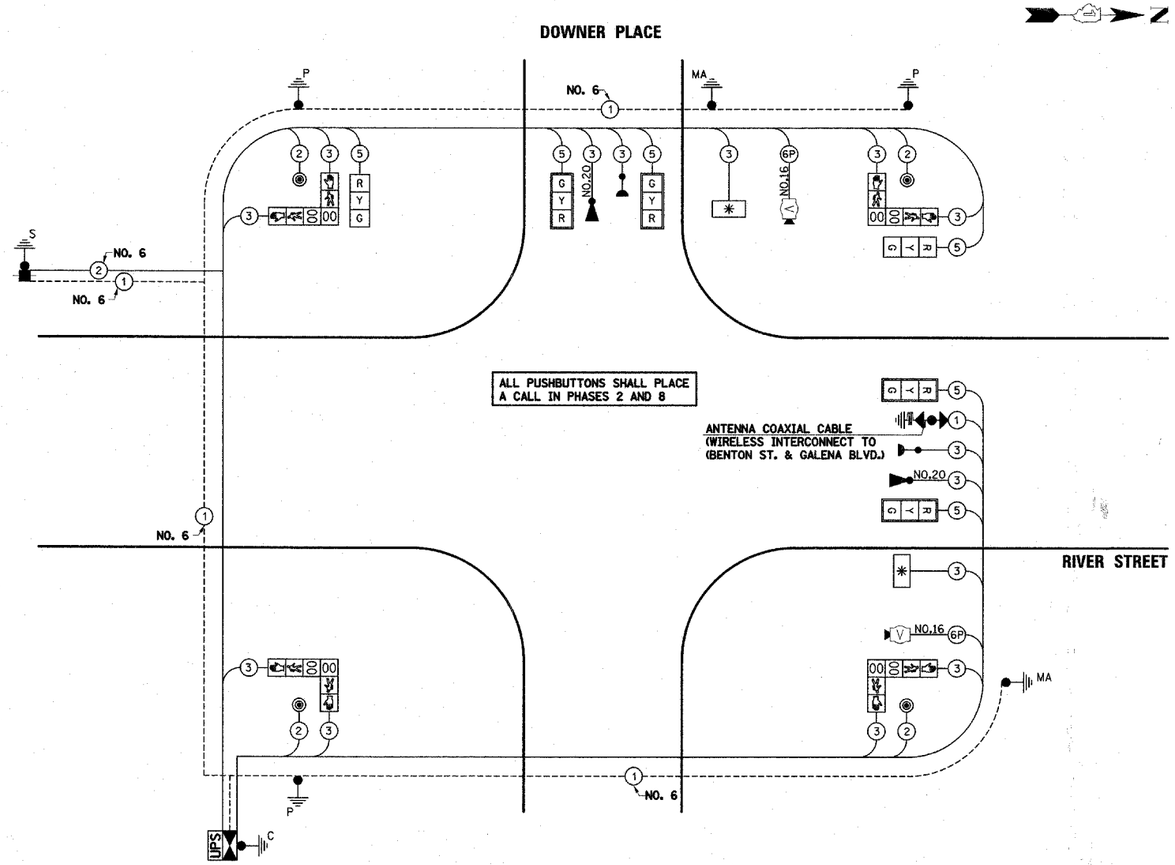
CABLE PLAN LEGEND

EXISTING	PROPOSED	
G	G	8" (200mm) TRAFFIC SIGNAL SECTION
R	R	12" (300mm) TRAFFIC SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
	00	12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
T	T	TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
		LUMINAIRE
2	2	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
24	24	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
R Y G Y G "P"	R Y G Y G "P"	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
"E"		RAILROAD CONTROL CABINET
"E"		ILLUMINATED SIGN "NO LEFT TURN"
		ILLUMINATED SIGN "NO RIGHT TURN"
		WIRELESS ANTENNA
H/C	H/C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
P/MA	P/MA	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
	UPS	UNINTERRUPTABLE POWER SUPPLY
	*	LED STREET NAME SIGN
V	V	VIDEO DETECTION CAMERA

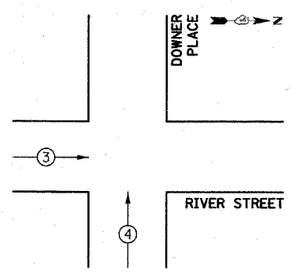


SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	DOWNNER PLACE
SIGN PANEL - TYPE 1	SQ FT	20
CONDUIT IN TRENCH, 2" DIA.,GALVANIZED STEEL	FOOT	105
CONDUIT IN TRENCH, 2 1/2" DIA.,GALVANIZED STEEL	FOOT	27
CONDUIT IN TRENCH, 3" DIA.,GALVANIZED STEEL	FOOT	24
CONDUIT IN TRENCH, 4" DIA.,GALVANIZED STEEL	FOOT	32
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	105
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	206
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	188
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	511
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1926
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1209
ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16 6 PAIR	FOOT	398
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	331
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 44 FT. (SPECIAL)	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
DRILL EXISTING HANDHOLE	EACH	16
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	4
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2221
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
PAINT TRAFFIC SIGNAL EQUIPMENT	EACH	1
PAINT TRAFFIC SIGNAL POST	EACH	3
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	549
VIDEO DETECTION SYSTEM	EACH	1
ELECTRIC CABLE IN CONDUIT, NO. 20 3C TWISTED SHIELDED	FOOT	436
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	2
UNINTERRUPTABLE POWER SUPPLY	EACH	1
GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	5

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

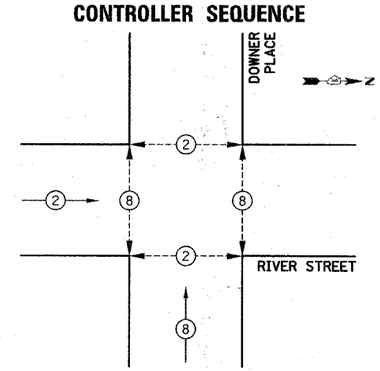
THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE OPTICOM AS REQUIRED BY THE CITY OF AURORA.



EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

CONTROLLER SEQUENCE LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OL — OVERLAP
- * — NUMBER REFERRING TO ASSOCIATED PHASE
- PEDESTRIAN PHASE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	6		17	0.50	51.0
(YELLOW)	6		25	0.25	37.5
(GREEN)	6		15	0.25	22.5
ARROW			12	0.10	
PED. SIGNAL	8		25	1.00	200.0
CONTROLLER	1		100	1.00	100.0
UPS	1		25	1.00	25.0
LED SIGN	2		60	0.50	60.0
VIDEO SYSTEM	1		15	1.00	15.0
				TOTAL =	511.0

ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

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'+L-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)	10 (3.0)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
<40'	30" (750mm)	13.5 (4.1)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
<40'	36" (900mm)	11 (3.4)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
<50'	36" (900mm)	13 (4.0)			POST MOUNTED	6 (1.8)
≥50'	36" (900mm)	15 (4.6)				

FILE NAME = ...\690_7_sig04c_downer.dgn	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN BAH	REVISED -
	PLOT SCALE = $SCALE$	CHECKED APS	REVISED -
	PLOT DATE = 6/4/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND PHASE DESIGNATION DIAGRAM DOWNER PLACE

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00273-00-TL	KANE	30	17
		CONTRACT NO. 63053		

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

PLAN: SURVEYED ___ PLOTTED ___ ALIGNMENT CHECKED ___ RT. OF WAY CHECKED ___ CADD FILE NAME ___ NOTE BOOK NO. ___ BY ___ DATE ___

PROFILE: SURVEYED ___ PLOTTED ___ GRADES CHECKED ___ B.M. NOTED ___ STRUCTURE NOTATIONS CHKD ___ NOTE BOOK NO. ___ BY ___ DATE ___