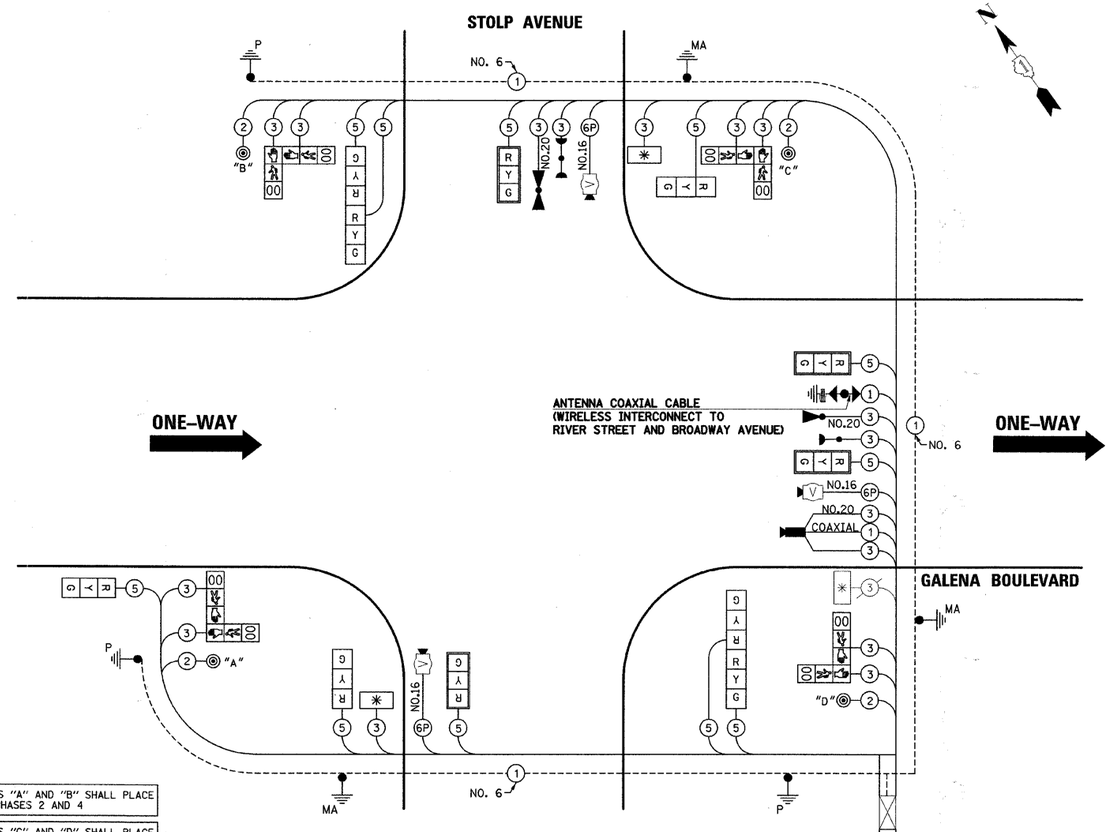
CABLE PLAN LEGEND

EXISTING	PROPOSED	
G	G	8" (200mm) TRAFFIC SIGNAL SECTION
R	R	12" (300mm) TRAFFIC SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
		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 "E" "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
B	B	UNINTERRUPTABLE POWER SUPPLY
*	*	LED STREET NAME SIGN
V	V	VIDEO DETECTION CAMERA
		PAN/TILT/ZOOM CAMERA

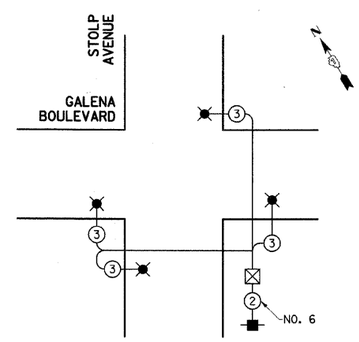


PUSHBUTTONS "A" AND "B" SHALL PLACE A CALL IN PHASES 2 AND 4

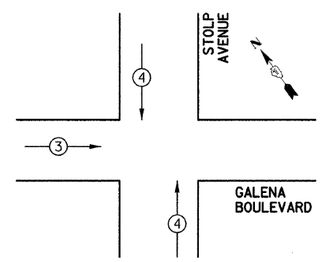
PUSHBUTTONS "C" AND "D" SHALL PLACE A CALL IN PHASES 2 AND 8

SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	STOLP AVENUE
SIGN PANEL - TYPE 1	SQ FT	26.25
ELECTRICAL SERVICE INSTALLATION	EACH	1
CONDUIT IN TRENCH, 2 1/2" DIA.,GALVANIZED STEEL	FOOT	81
CONDUIT IN TRENCH, 4" DIA.,GALVANIZED STEEL	FOOT	51
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	41
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	123
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	468.5
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	132
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	425
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1518.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1203.5
ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16 6 PAIR	FOOT	349
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	48
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	3
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 20 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 26 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 28 FT. (SPECIAL)	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30
DRILL EXISTING HANDHOLE	EACH	15
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2474
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	5
REMOVE EXISTING LIGHT POLE	EACH	2
WIRELESS ETHERNET RADIO	EACH	1
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
PAINT TRAFFIC SIGNAL POST	EACH	3
UNINTERRUPTABLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	348.5
LIGHT POLE, SPECIAL	EACH	1
VIDEO BELDEN 8281 COAXIAL CABLE IN CONDUIT	FOOT	64
VIDEO DETECTION SYSTEM	EACH	1
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C TWISTED SHIELDED	FOOT	283.5
L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	2
GROUND EXISTING HANDHOLE FRAME AND COVER	EACH	4
RELOCATE INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	1
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT (SPECIAL)	EACH	3



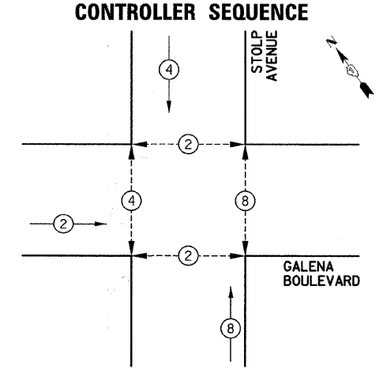
LIGHTING CABLE PLAN



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

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.

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	11		17	0.50	93.5
(YELLOW)	11		25	0.25	68.8
(GREEN)	11		15	0.25	41.3
ARROW			12	0.10	
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
VIDEO SYSTEM	1		15	1.00	15
LUMINAIRE	3		250	0.50	375
				TOTAL =	1008.6

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'+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 = ...\fin_dwg\698_5_sig03c_stolp.dgn	USER NAME = _USER_	DESIGNED -	REVISED -
		DRAWN BAH	REVISED -
	PLOT SCALE = $SCALE$	CHECKED APS	REVISED -
	PLOT DATE = 12/17/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND
PHASE DESIGNATION DIAGRAM
STOLP AVENUE

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00270-00-TL	KANE	44	17
		CONTRACT NO. 63300		

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