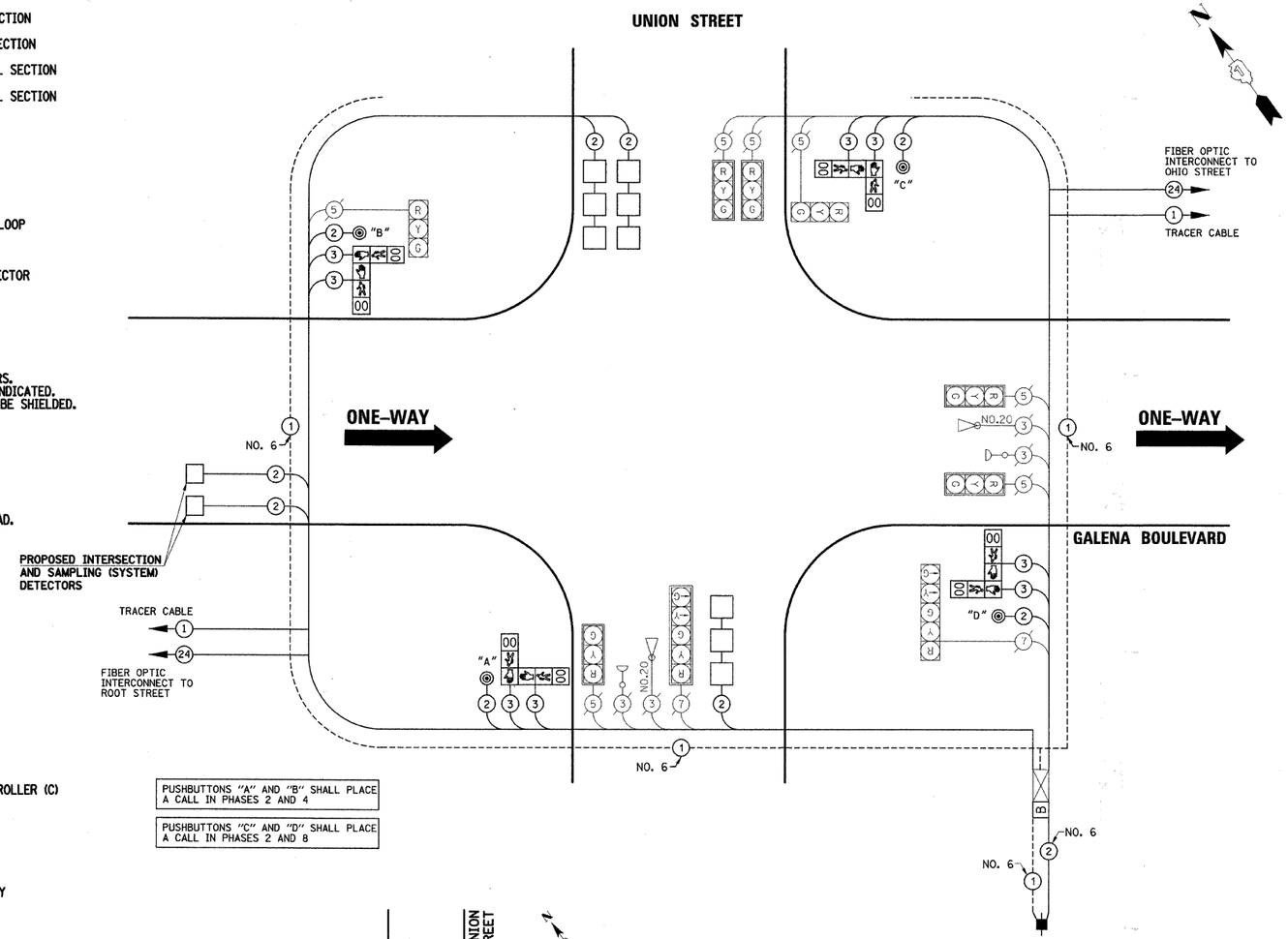
CABLE PLAN LEGEND

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 "E" "P"	R Y G Y G "P"	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
"E" R R	R R	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



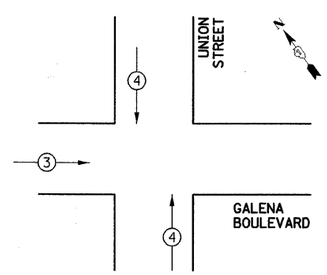
SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	UNION STREET
THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	200
CONDUIT IN TRENCH, 2" DIA.,GALVANIZED STEEL	FOOT	57
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	43
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	134
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	459
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	974
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1174
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	84.5
DRILL EXISTING HANDHOLE	EACH	10
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	5
DETECTOR LOOP, TYPE I	FOOT	365.8
PEDESTRIAN PUSH-BUTTON	EACH	4
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2290
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	390

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	9		17	0.50	76.5
(YELLOW)	9		25	0.25	56.3
(GREEN)	9		15	0.25	33.8
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
				TOTAL =	496.4

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

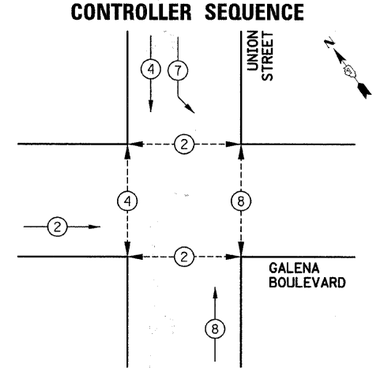


EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

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)				

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.

PLAN — SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED / PLAN FILE NAME / NOTE BOOK NO. / BY / DATE

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

FILE NAME = ...\fin_dwg\690_5_sig07c_union.dgn	USER NAME = _USER_	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABLE PLAN AND PHASE DESIGNATION DIAGRAM UNION STREET
		DRAWN BAH	REVISED -		
	PLOT SCALE = $SCALE$	CHECKED APS	REVISED -		
	PLOT DATE = 12/17/2009	DATE -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00270-00-TL	KANE	44	28
		CONTRACT NO. 63300		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		