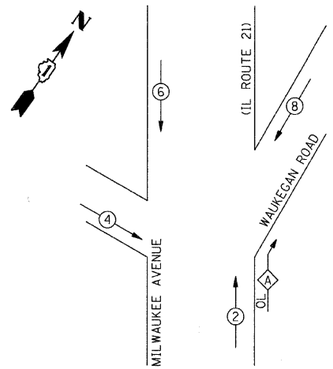
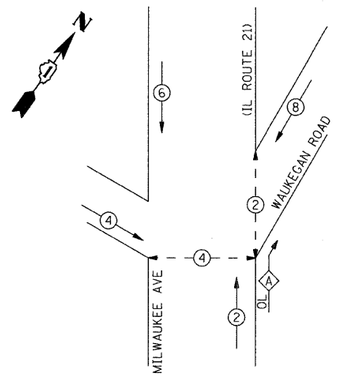
EXISTING CONTROLLER SEQUENCE



PROPOSED CONTROLLER SEQUENCE



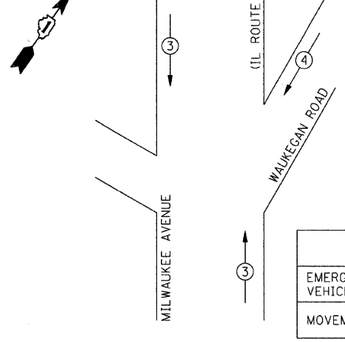
PHASE DESIGNATION DIAGRAM

OVERLAY PHASE		PERMISSIVE PHASE		PROTECTED PHASE
A	=	2	+	8

CONTROLLER SEQUENCE LEGEND

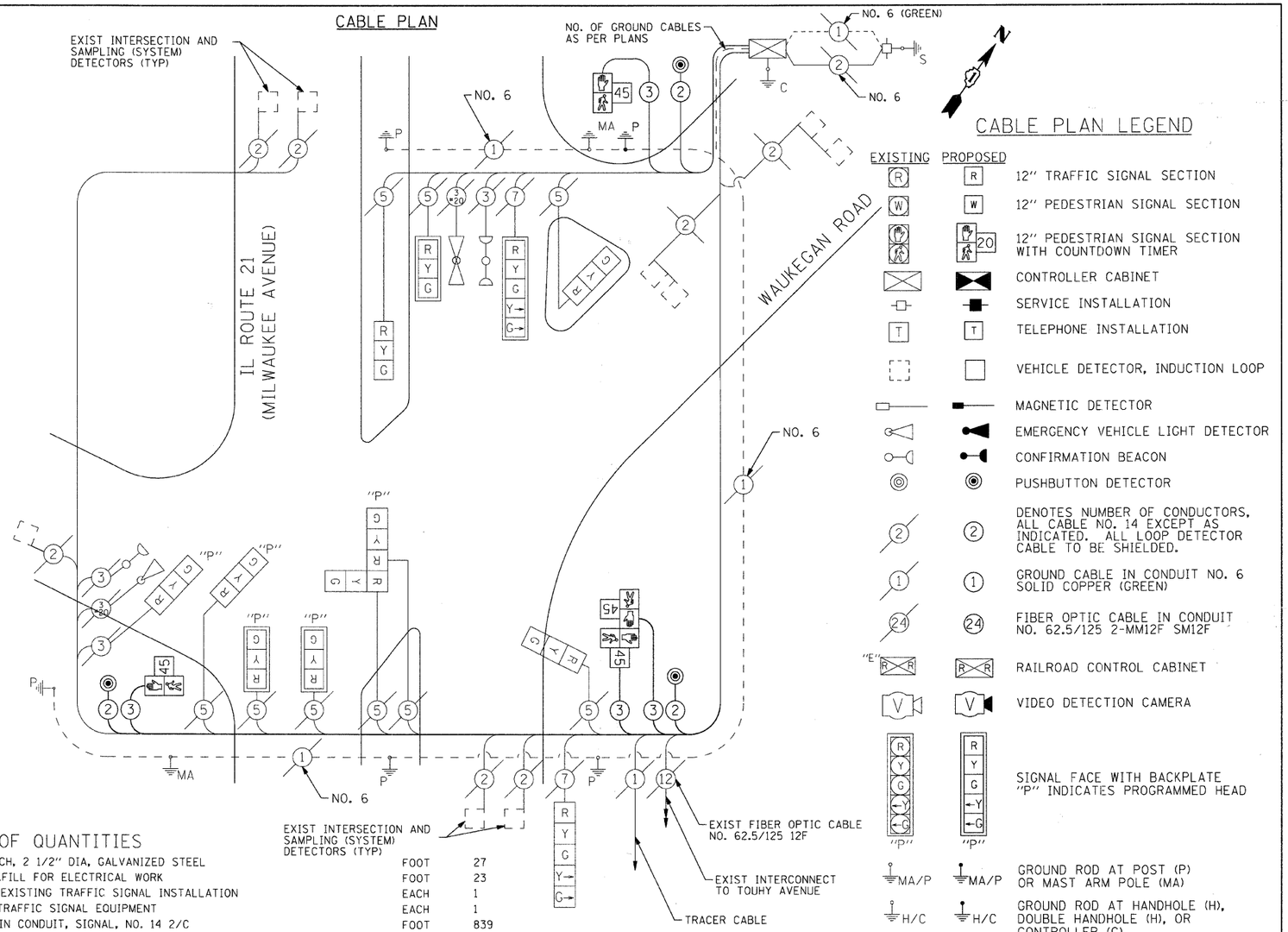
- DUAL ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERRING TO ASSOCIATED PHASE

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT		

CABLE PLAN



CABLE PLAN LEGEND

EXISTING	PROPOSED	
R	R	12" TRAFFIC SIGNAL SECTION
W	W	12" PEDESTRIAN SIGNAL SECTION
	20	12" PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER
		CONTROLLER CABINET
		SERVICE INSTALLATION
T	T	TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
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
"E" R R	R R	RAILROAD CONTROL CABINET
V	V	VIDEO DETECTION CAMERA
		SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD
MA/P	MA/P	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
H/C	H/C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
	UPS	UNINTERRUPTABLE POWER SUPPLY

SCHEDULE OF QUANTITIES

CONDUIT IN TRENCH, 2 1/2" DIA, GALVANIZED STEEL	FOOT	27
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	23
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PAINT EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2/C	FOOT	839
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3/C	FOOT	1,225
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 10 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
PEDESTRIAN PUSH BUTTON	EACH	3
MODIFY EXISTING CONTROLLER	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6, 1/C	FOOT	88
PAINT NEW TRAFFIC SIGNAL POST	EACH	1

NOTE:
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

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

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW (YELLOW)	2		12	0.10	2.4
ARROW (GREEN)	2		12	0.10	2.4
PED. SIGNAL	4		25	1.00	100
CONTROLLER	1		100	1.00	100
				TOTAL =	426.8

ENERGY COSTS TO: VILLAGE OF NILES
1000 CIVIC CENTER DRIVE
NILES IL 60714-3229

ENERGY SUPPLY CONTACT: MAUREEN RAYE
PHONE: (847) 816-5492
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)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2=
C - M.A. LENGTH		SIGNAL POST	2 (1.0)		(6m+L-0.6m)
<40' 30" (750mm)	15 (4.6)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
<50' 36" (900mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
≥50' 36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

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USER NAME = chartke	DESIGNED - JJS	REVISED -	
	DRAWN - JJS	REVISED -	
PLOT SCALE = NTS	CHECKED - APS	REVISED -	
PLOT DATE = 12/22/2008	DATE - 12/16/08	REVISED -	

VILLAGE OF NILES

CABLE PLAN AND PHASE DESIGNATION DIAGRAM
MILWAUKEE AVENUE AT WAUKEGAN ROAD

SCALE: NTS | SHEET NO. 13 OF 16 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3513	08-00107-00-PV	COOK	169	70
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	M -8003(723)	

MILWAUKEE AVENUE IMPROVEMENTS
060253
060253-607permitcab03.dgn