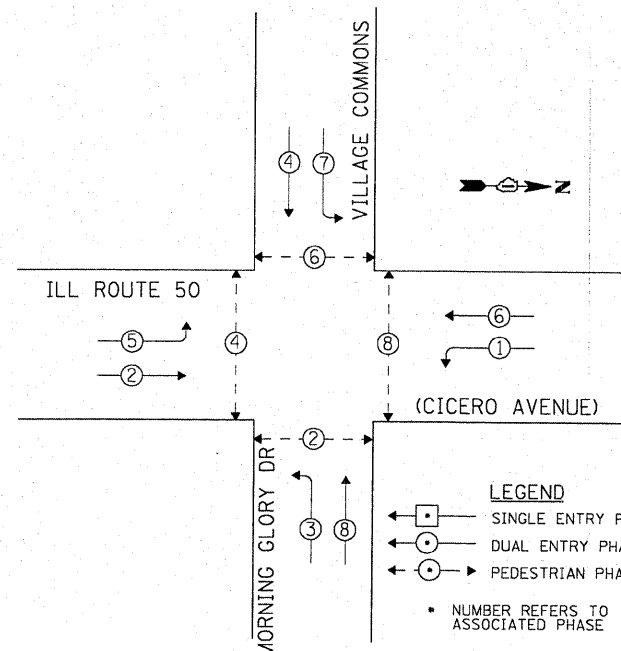
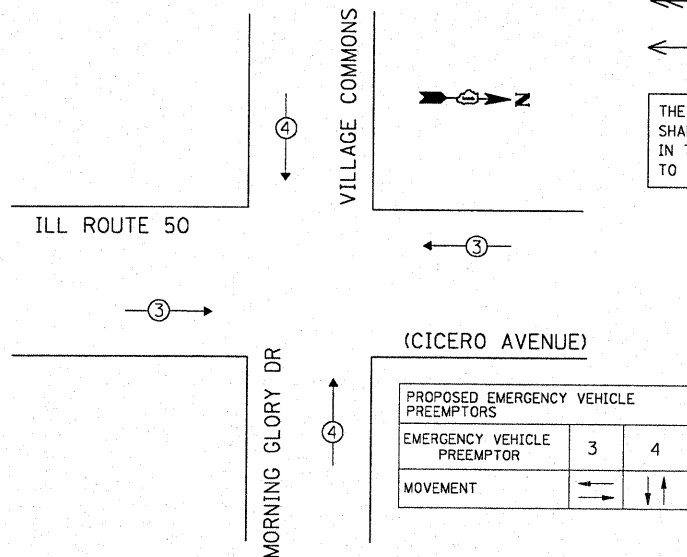


CONTROLLER SEQUENCE

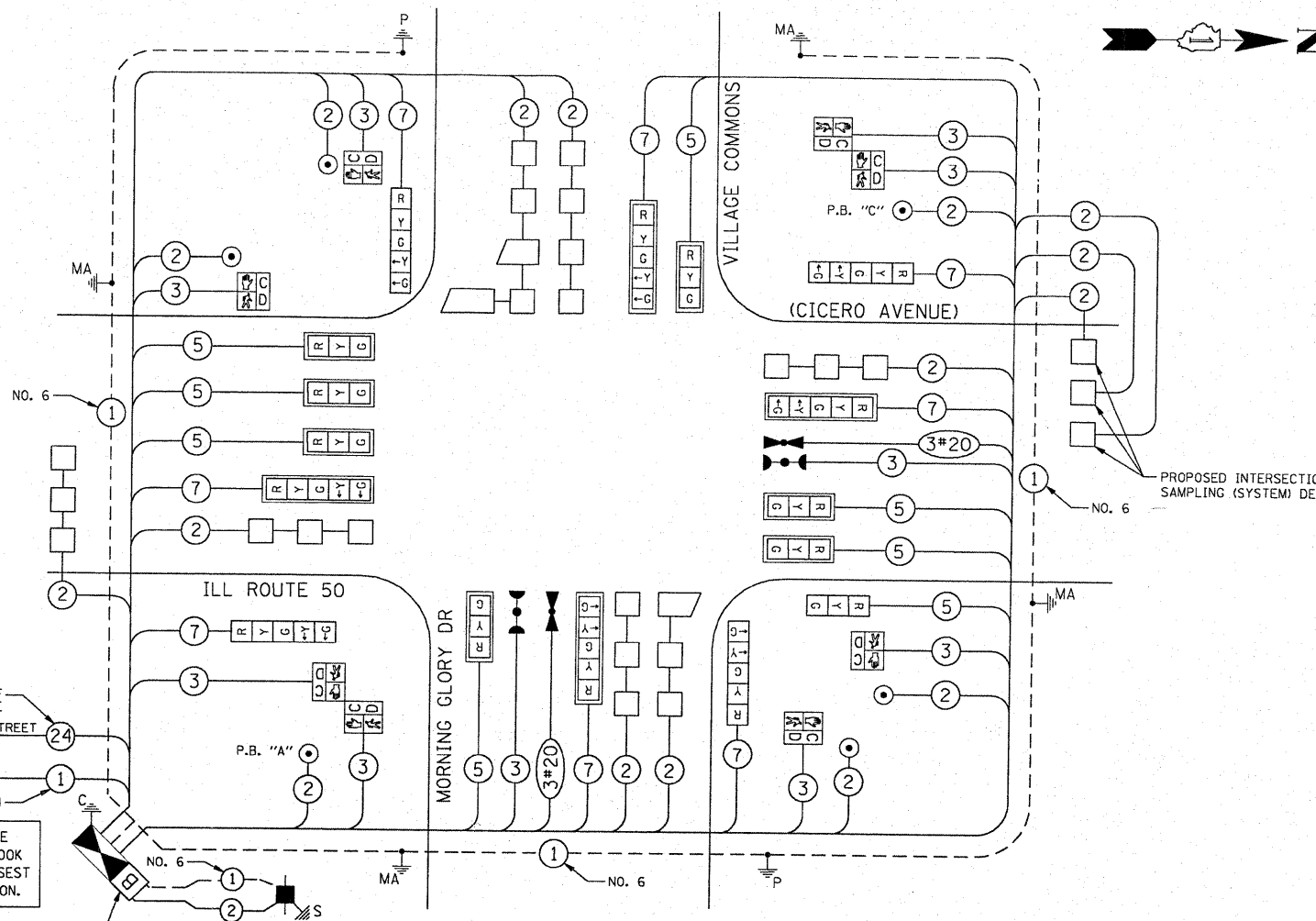


PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND
 SINGLE ENTRY PHASE
 DUAL ENTRY PHASE
 PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE



CABLE PLAN LEGEND

- | PROPOSED | EXISTING | |
|----------|----------|---|
| [Symbol] | [Symbol] | 8" (200mm) TRAFFIC SIGNAL SECTION |
| [Symbol] | [Symbol] | 12" (300mm) TRAFFIC SIGNAL SECTION |
| [Symbol] | [Symbol] | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| [Symbol] | [Symbol] | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| [Symbol] | [Symbol] | CONTROLLER CABINET |
| [Symbol] | [Symbol] | SERVICE INSTALLATION |
| [Symbol] | [Symbol] | TELEPHONE CONNECTION |
| [Symbol] | [Symbol] | MAGNETIC DETECTOR |
| [Symbol] | [Symbol] | PUSHBUTTON DETECTOR |
| [Symbol] | [Symbol] | VEHICLE DETECTOR, INDUCTION LOOP |
| [Symbol] | [Symbol] | VEHICLE DETECTOR, INDUCTION LOOP |
| [Symbol] | [Symbol] | 2 DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| [Symbol] | [Symbol] | SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD |
| [Symbol] | [Symbol] | RAILROAD CONTROL CABINET |
| [Symbol] | [Symbol] | ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN" |
| [Symbol] | [Symbol] | ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN" |
| [Symbol] | [Symbol] | GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER |
| [Symbol] | [Symbol] | GROUND ROD AT POST OR MAST ARM POLE |
| [Symbol] | [Symbol] | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| [Symbol] | [Symbol] | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| [Symbol] | [Symbol] | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F & SM12F |
| [Symbol] | [Symbol] | MICROWAVE VEHICLE SENSOR |
| [Symbol] | [Symbol] | VIDEO DETECTOR |
| [Symbol] | [Symbol] | CLOSED CIRCUIT TV |
| [Symbol] | [Symbol] | EMERGENCY VEHICLE LIGHT DETECTOR |
| [Symbol] | [Symbol] | CONFIRMATION BEACON |
| [Symbol] | [Symbol] | UNINTERRUPTIBLE POWER SUPPLY |
| [Symbol] | [Symbol] | PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER |

NO. 62.5/125 MM12F & SM12F FIBER OPTIC CABLE
 INTERCONNECT TO 207TH STREET
 TRACER CABLE
 NO. 14
 THE END OF THE TRACER CABLE SHALL BE TIED TO A CABLE HOOK IN THE DOUBLE HANDHOLE CLOSEST TO THE CONTROLLER FOUNDATION.

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM	QUANTITY	UNIT	ITEM
40	SQ FT	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	* 313	FOOT	ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED
53.75	SQ FT	SIGN PANEL - TYPE 2	2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
432	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	2	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.
12	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.
33	FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.
26	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	8	FOOT	CONCRETE FOUNDATION, TYPE A
20	FOOT	CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	4	FOOT	CONCRETE FOUNDATION, TYPE C
155	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	54	FOOT	CONCRETE FOUNDATION, TYPE E 36" DIAMETER
4	FOOT	CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	7	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
56	FOOT	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	1	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED
222	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	4	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED
75	FOOT	CONDUIT PUSHED, 5" DIA., GALVANIZED STEEL	4	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED
4	EACH	HANDHOLE	4	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4	EACH	HEAVY-DUTY HANDHOLE	2	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
2	EACH	DOUBLE HANDHOLE	11	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
630	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK	10	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	1057	FOOT	DETECTOR LOOP, TYPE I
1	EACH	UNINTERRUPTIBLE POWER SUPPLY	2	EACH	LIGHT DETECTOR
1	EACH	TRANSCEIVER - FIBER OPTIC	* 1	EACH	LIGHT DETECTOR AMPLIFIER
979	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	6	EACH	PEDESTRIAN PUSH-BUTTON
1690	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	1	EACH	SERVICE INSTALLATION, POLE MOUNT
1678	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C			
1582	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C			
2543	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1-PAIR			
35	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C			
478	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C			

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	17	0.50	0.50	136.00
(YELLOW)	16	25	0.25	0.25	100.00
(GREEN)	16	15	0.25	0.25	60.00
ARROW	16	12	0.10	0.10	19.20
PED. SIGNAL	8	25	1.00	1.00	200.00
CONTROLLER	1	100	1.00	1.00	100.00
ILLUM. SIGN				0.05	-
FLASHER					-
ENERGY COSTS TO:					TOTAL = 615.20

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=
E - M. ARM POLE		SIGNAL POST	2 (1.0)	BRACKET MOUNTED	6m+L-0.6m=
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

* 100% COST TO VILLAGE OF MATTESON

NOTE: PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8

NOTE: THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

FILE NAME =
 #FILE#
 USER NAME = #USER#
 DESIGNED - NB/TCM
 DRAWN - NB/TCM
 CHECKED - NB/TCM
 DATE - 03/13/2009

REVISOR -
 REVISION -
 REVISION -
 REVISION -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PROPOSED CABLE PLAN
 ILL RTE 50 (CICERO AVE) AT MORNING GLORY DR./VILLAGE COMMONS
 SCALE: NTS SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RFE. SECTION COUNTY TOTAL SHEETS SHEET NO.
 350 101W-EXT-R-1 COOK 40 21
 CONTRACT NO. 60F14
 FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT

