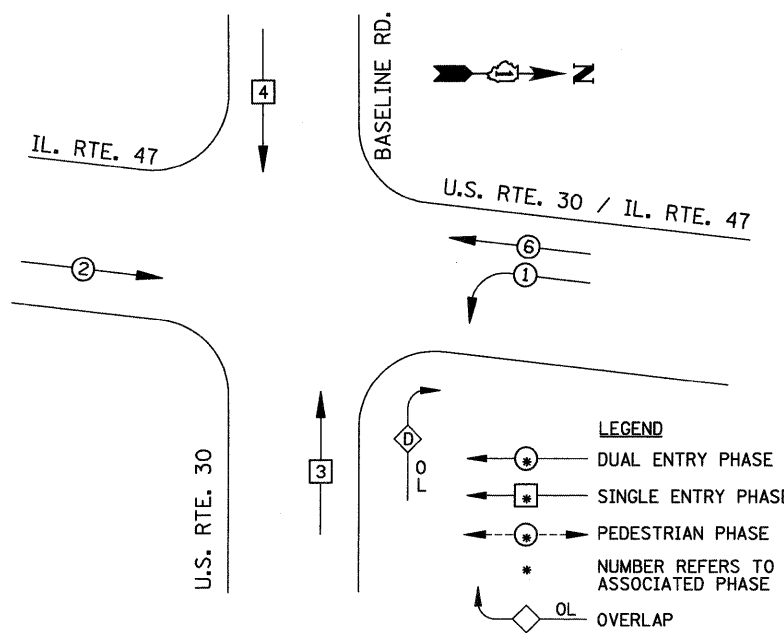


CONTROLLER SEQUENCE

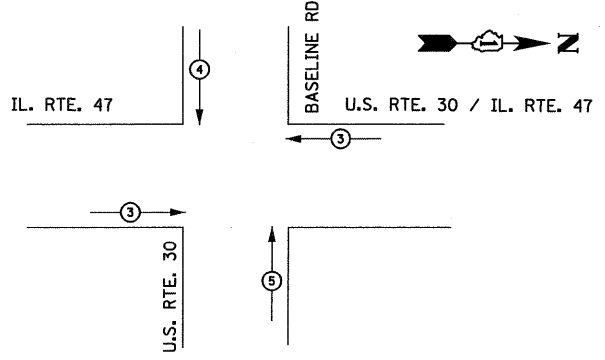


LEGEND
 DUAL ENTRY PHASE
 SINGLE ENTRY PHASE
 PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE
 OL OVERLAP

PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP DESIGNATION
 OVERLAP LETTER PERMISSIVE PHASE PROTECTED PHASE
 D = 8 + 1

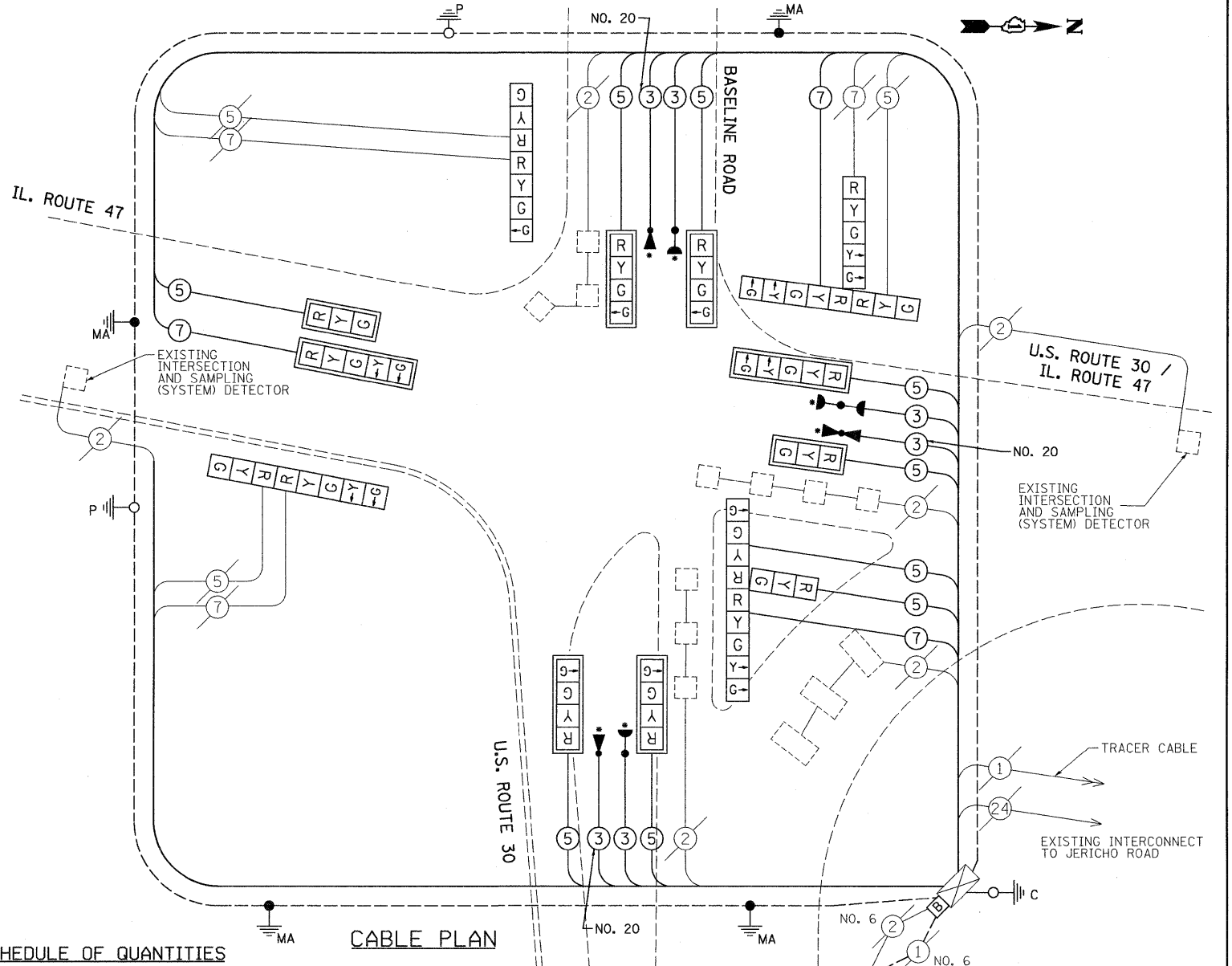
EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTOR			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	→	↑	↑

CABLE PLAN LEGEND

- | | | | | |
|--|-----------------|--|-----------------|---|
| | EXISTING | | PROPOSED | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | | | | 12" (300mm) TRAFFIC SIGNAL SECTION |
| | | | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | | | CONTROLLER CABINET |
| | | | | SERVICE INSTALLATION |
| | | | | TELEPHONE CONNECTION |
| | | | | MAGNETIC DETECTOR |
| | | | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | | | CONFIRMATION BEACON |
| | | | | PUSH-BUTTON DETECTOR |
| | | | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | | | ② DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | | | | ① GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | | | | ②④ FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MMI2F SM12F |
| | | | | |
| | | | | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD |
| | | | | |
| | | | | RAILROAD CONTROL CABINET |
| | | | | |
| | | | | ILLUMINATED SIGN "NO LEFT TURN" |
| | | | | |
| | | | | ILLUMINATED SIGN "NO RIGHT TURN" |
| | | | | |
| | | | | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C) |
| | | | | |
| | | | | GROUND ROD AT POST (P), OR MAST ARM POLE (MA) |
| | | | | |
| | | | | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | | | | |
| | | | | UNINTERMITTIBLE POWER SUPPLY |



SCHEDULE OF QUANTITIES

SIGN PANEL, TYPE 1	SQ FT	16.5
RELOCATE SIGN PANEL, TYPE 1	SQ FT	17
THERMOPLASTIC PAVEMENT MARKING, LINE-4"	FOOT	2190
THERMOPLASTIC PAVEMENT MARKING, LINE-6"	FOOT	100
THERMOPLASTIC PAVEMENT MARKING, LINE-12"	FOOT	73
THERMOPLASTIC PAVEMENT MARKING, LINE-24"	FOOT	50
THERMOPLASTIC PAVEMENT MARKING REMOVAL	SQ FT	844
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	60
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	60
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	647
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1211
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	441
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, L.E.D., 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, L.E.D., 3-FACE, 1-3 SECTION, 2-5 SECTION, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
* LIGHT DETECTOR	EACH	3
* LIGHT DETECTOR AMPLIFIER	EACH	1
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1291
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 1-4 SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	1
RELOCATE EXISTING VIDEO VEHICLE DETECTOR	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL II (per intersection)	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	423
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED & SHIELDED	FOOT	645
UNINTERMITTIBLE POWER SUPPLY	EACH	1

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. LED	%OPERATION		
SIGNAL (RED)	18	135	17	0.50	153
(YELLOW)	18	135	25	0.25	112.5
(GREEN)	18	135	15	0.25	67.5
ARROW	19	135	12	0.10	22.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	455.8

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.0 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20.0 (6.0)
E - M. ARM POLE		SIGNAL POST	0 (0.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	0 (0.0)	PED. PUSH-BUTTON	6 (2.0)
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	13 (4.0)

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
 201 WEST CENTER COURT
 SCHAUMBURG, IL 60196-1096
 ENERGY SUPPLY CONTACT: MARK SCHEIBEL
 PHONE: (630) 723-2128
 COMPANY: COMED

FILE NAME = \MICROST\352071\ US 30 @ IL 47 CAB.DGN
 USER NAME = JGC
 PLOT SCALE = 1"=20'
 PLOT DATE = 01-23-09

DESIGNED - KK
 DRAWN - JGC
 CHECKED - BPT
 DATE - 01-23-09
 REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM U.S. ROUTE 30 AT IL. ROUTE 47 (BASELINE ROAD)

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 PH: 630.982.2100 Fax: 630.982.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	2009-003 TS	KANE	28	20
FED. ROAD DIST. NO.				ILLINOIS FED. AID PROJECT
				CONTRACT NO. 60F98

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.