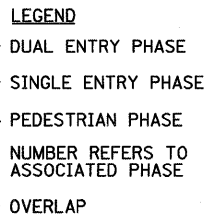
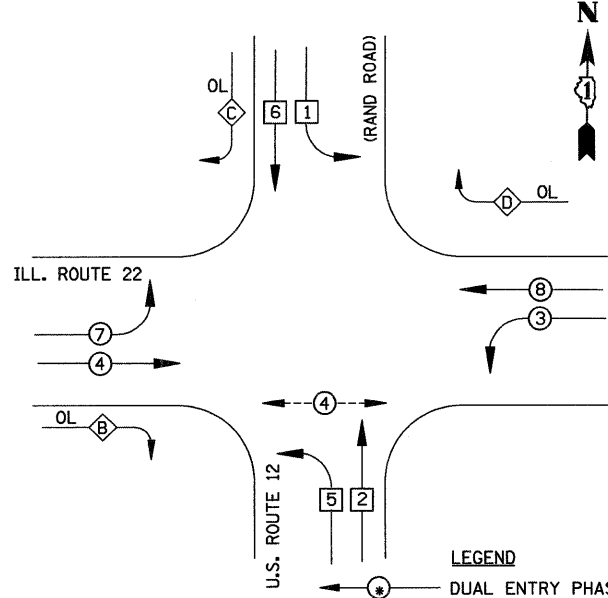


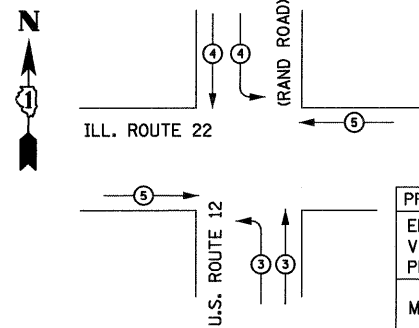
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	4	5
C	6	7
D	8	1

EMERGENCY VEHICLE PREEMPTION SEQUENCE

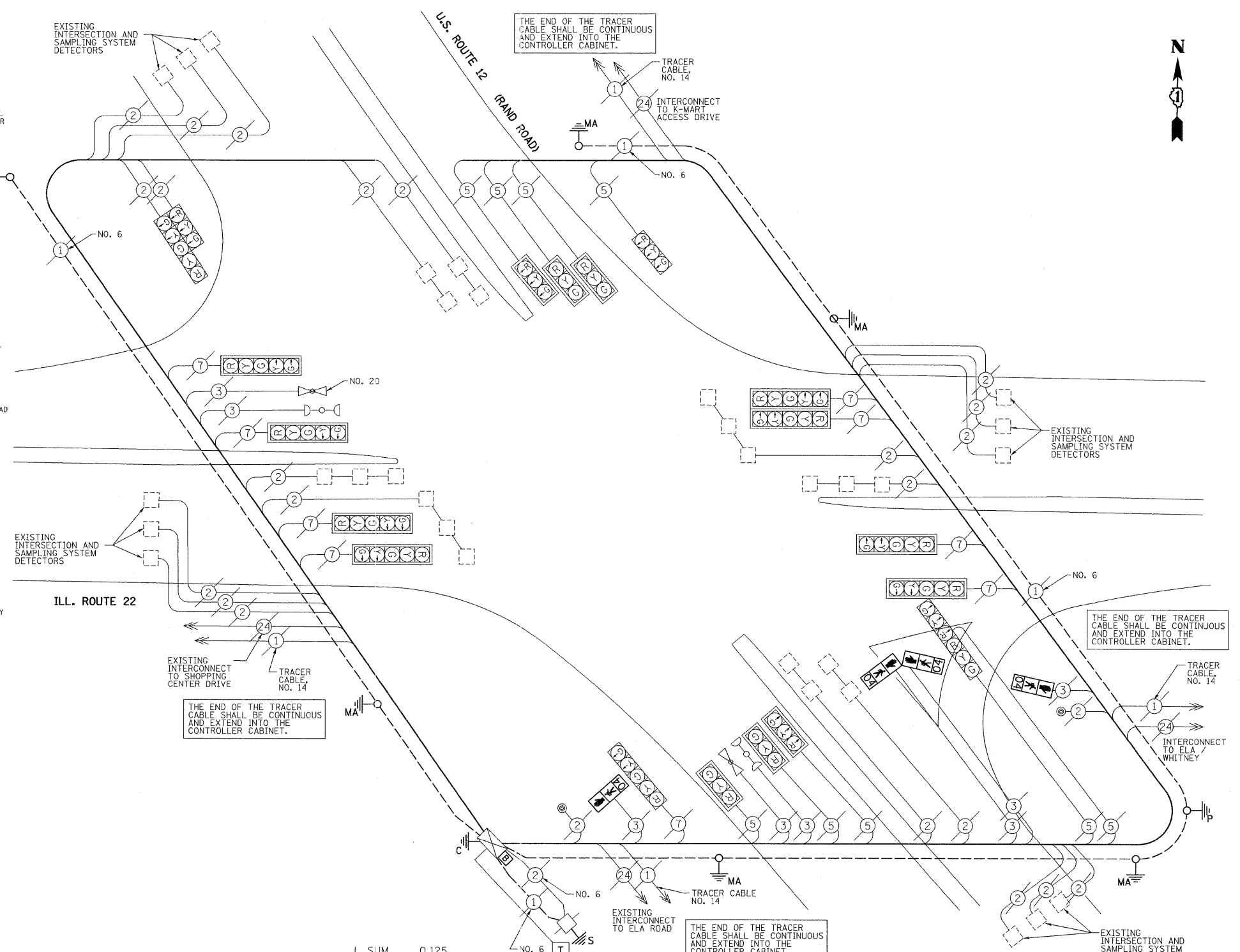


PROPOSED EMERGENCY VEHICLE PREEMPTOR

EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	↕	↔	↔

CABLE PLAN LEGEND

- | | | |
|---|---|--|
| EXISTING | PROPOSED | |
| 8" (200mm) TRAFFIC SIGNAL SECTION | 12" (300mm) TRAFFIC SIGNAL SECTION | |
| 12" (300mm) TRAFFIC SIGNAL SECTION | 12" (300mm) PEDESTRIAN SIGNAL SECTION | |
| 12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER | CONTROLLER CABINET | |
| SERVICE INSTALLATION | TELEPHONE CONNECTION | |
| MAGNETIC DETECTOR | EMERGENCY VEHICLE LIGHT DETECTOR | |
| CONFIRMATION BEACON | PUSH-BUTTON DETECTOR | |
| VEHICLE DETECTOR, INDUCTION LOOP | 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-MM12F 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 (HH), OR CONTROLLER (C) | GROUND ROD AT POST (P), OR MAST ARM POLE (MA) | |
| GROUND ROD AT ELECTRIC SERVICE INSTALLATION | UNINTERRUPTIBLE POWER SUPPLY | |



L SUM	0.125
CAL MO	0.5
L SUM	0.125
EACH	1
EACH	2
EACH	1
EACH	1
SQ FT	12.85
EACH	1
EACH	1

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

SCHEDULE OF QUANTITIES

MOBILIZATION
 ENGINEERS FIELD OFFICE, TYPE A
 TRAFFIC CONTROL AND PROTECTION, STANDARD 701701
 MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
 PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
 PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
 REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
 TEMPORARY INFORMATION SIGNING
 RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM - LEVEL II
 UNINTERRUPTIBLE POWER SUPPLY

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	
E - M. ARM POLE		SIGNAL POST	2 (0.6)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSH-BUTTON	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 (1.6)

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND. LED	OPERATION	TOTAL WATTAGE
SIGNAL (RED)	20	135	0.50	170
(YELLOW)	20	135	0.25	125
(GREEN)	20	135	0.25	75
ARROW	20	135	0.10	24
PED. SIGNAL	4	90	1.00	100.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN		84	0.05	

FLASHER 0.50
 ENERGY COSTS TO: TOTAL = 594
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 201 W. CENTER COURT
 SCHAUMBURG, IL 60196
 ENERGY SUPPLY CONTACT: DOTTIE PROSEN
 PHONE: (847) 816-5323
 COMPANY: COMED

FILE NAME = J:\MICROST\352056\ 14A-IL RTE22 CAB.DGN	USER NAME = JLA	DESIGNED - KK	REVISED -
PLOT SCALE = 1"=20'	PLOT DATE = 12-10-08	DRAWN - JLA	REVISED -
		CHECKED - BPT	REVISED -
		DATE - 12-10-08	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM U.S. ROUTE 12 (RAND ROAD) AT ILLINOIS ROUTE 22

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

PREPARED BY:
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 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	2008-069 TS	LAKE	26	15
CONTRACT NO. 60F62				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			