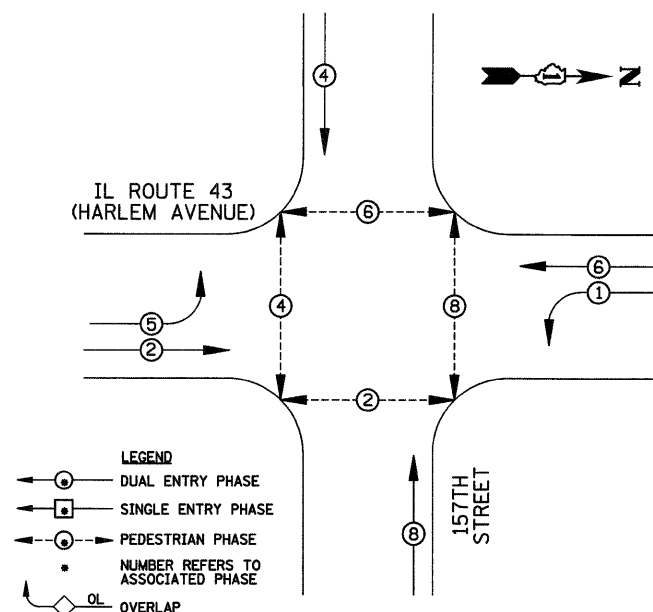


**CONTROLLER SEQUENCE**

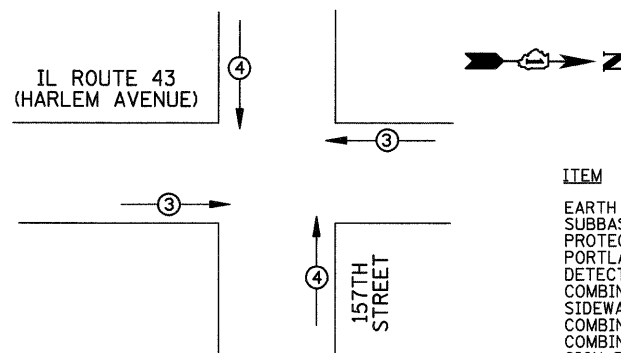


**PHASE DESIGNATION DIAGRAM**

**RESTORATION OF WORK AREA**

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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



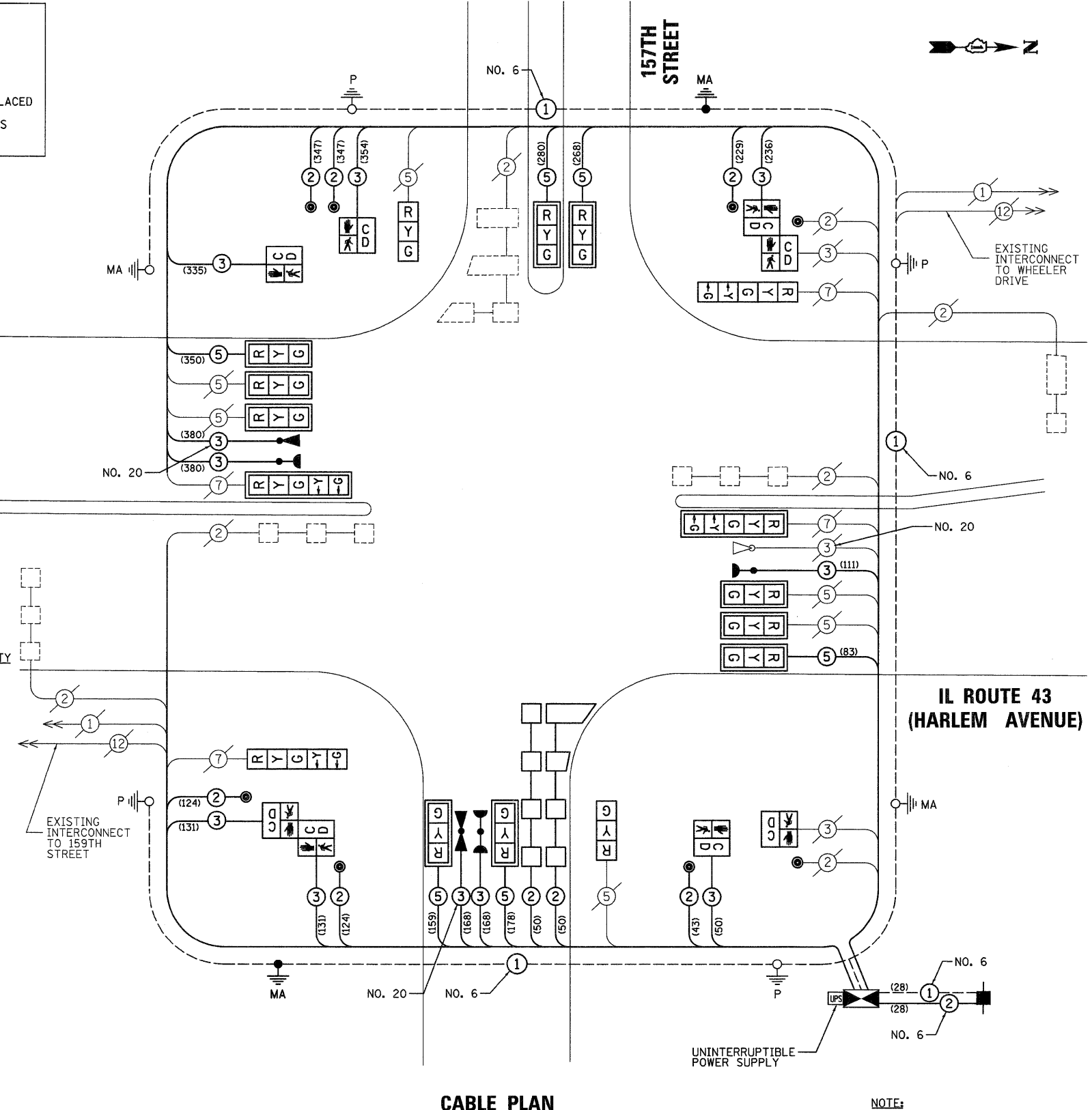
PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	→	↑	

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QUANTITY
EARTH EXCAVATION	CU YD	4.8
SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	19.0
PROTECTIVE COAT	SQ YD	50.1
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	404
DETECTABLE WARNINGS	SQ FT	80
COMBINATION CURB AND GUTTER REMOVAL	FOOT	31
SIDEWALK REMOVAL	SQ FT	60
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	FOOT	19
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	12
SIGN PANEL - TYPE 1	SQ FT	25.0
FLASHER	FOOT	443
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	FOOT	17
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1214
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1896
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1318
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	100
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	28
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	71
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	26
DRILL EXISTING HANDHOLE	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	10
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12
INDUCTIVE LOOP DETECTOR	EACH	7
DETECTOR LOOP, TYPE 1	FOOT	287
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH BUTTON	EACH	8
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	678
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
FULL-ACTUATED CONTROLLER AND CABINET, TYPE IV, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FOOT	548
TEMPORARY INFORMATION SIGNING	SQ FT	25.7
UNINTERRUPTIBLE POWER SUPPLY SPECIAL	EACH	1

\* 100% COST TO THE ORLAND FIRE PROTECTION DISTRICT



**CABLE PLAN**

NOTE:  
○ (XXX) DENOTES CABLE LENGTH TO CONTROLLER CABINET WITH SLACK CABLE.

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	1	84		0.05	

ENERGY COSTS TO:  
50% IDOT  
50% VILLAGE OF ORLAND PARK  
TOTAL = 605.6

ENERGY SUPPLY CONTACT: KATHRYN SUGRUE  
PHONE: (708) 235-2337  
COMPANY: COMED

FILE NAME = \MICROST\352100\ IL 43 @ 157TH CAB.DGN  
USER NAME = JGC  
DESIGNED - BPT  
DRAWN - JGC  
CHECKED - BPT  
PLOT SCALE = 1"=20'  
PLOT DATE = 10-21-11

REVISOR -  
REVISOR -  
REVISOR -  
REVISOR -  
DATE - 10-21-11

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN  
AND PHASE DESIGNATION DIAGRAM  
IL ROUTE 43 (HARLEM AVENUE) AT 157TH STREET

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

PREPARED BY:  
**CEMCON, Ltd.**  
Consulting Engineers, Land Surveyors & Planners  
2280 White Oak Circle, Suite 100  
Aurora, Illinois 60504-9675  
Ph: 630.862.2100 Fax: 630.862.2199  
E-Mail: cedd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	2011-039-TS	COOK	20	15

CONTRACT NO. 60P45  
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT