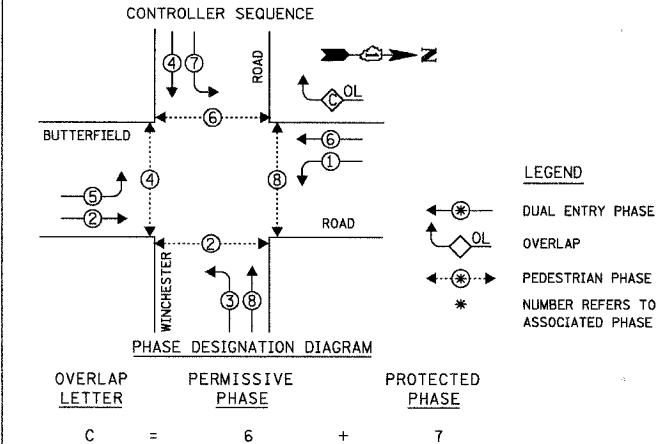


### SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	33
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	60
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	41
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	455
HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	146
ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 2-1/C NO. 10	FOOT	885
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	4
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2092
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1747
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	482
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2037
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	48
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	642
ELECTRIC CABLE IN CONDUIT NO. 20 3C, TWISTED, SHIELDED	FOOT	374
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE D	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	14
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	66
VIDEO DETECTION SYSTEM (COMPLETE INTERSECTION)	LSUM	1
REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16, 5 1/2 PAIR	FOOT	885
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	3
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	5
SIGNAL HEAD, L.E.D., 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SERVICE INSTALLATION, POLE MOUNT	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT. (SPECIAL)	EACH	4
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT. (SPECIAL)	EACH	3
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 46 FT. (SPECIAL)	EACH	1
L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNT DOWN TIMER	EACH	8
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
RELOCATE EXISTING VIDEO DETECTION SYSTEM (COMPLETE INTERSECTION)	EACH	1

F.A.U.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	94
CONTRACT NO. 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

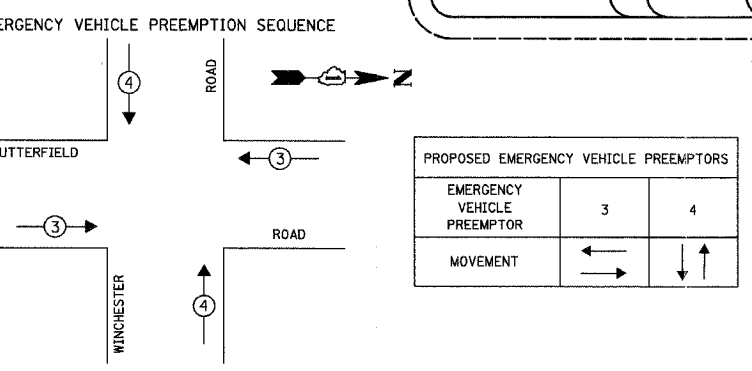


### L.C..D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS x INCAND. LED x % OPERATION	WATTAGE	TOTAL WATTAGE	
SIGNAL (RED)	13	10	0.50	65.00
(YELLOW)	13	19	0.25	61.75
(GREEN)	13	11	0.25	35.75
ARROW	20	9	0.10	18.00
PED. SIGNAL	8	9	1.00	72.00
CONTROLLER	1	100	1.00	100.00
ILLUM. ST. NAME SIGN	4	60	0.50	120.00
VIDEO SYSTEM	1	150	1.00	150.00
LUMINAIRE	4	250	0.50	500.00
FLASHER	-	-	0.50	-
BATTERY BACK UP SYSTEM	1	25	1.00	25.00

ENERGY COSTS TO: TOTAL = 1147.50

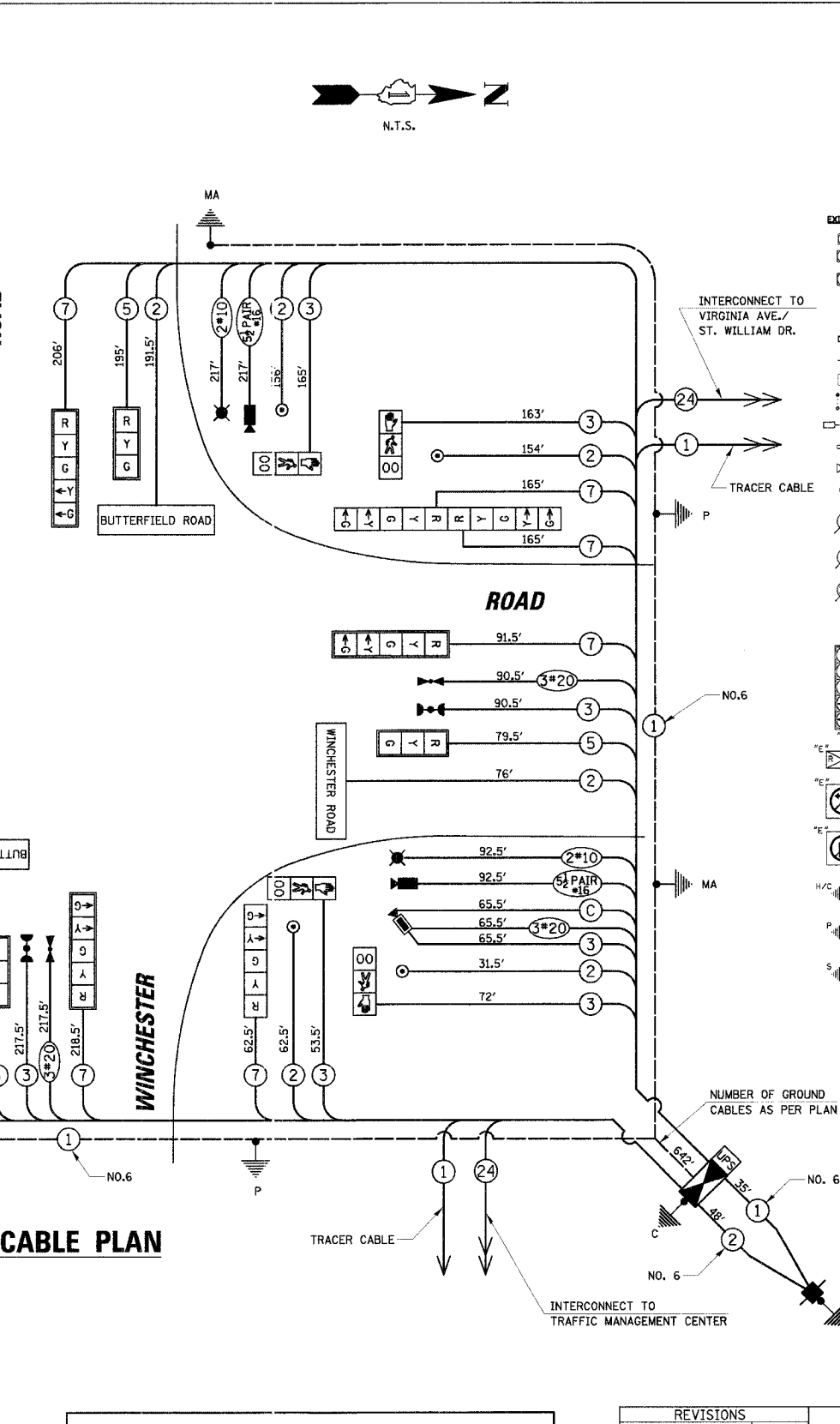
**LAKE COUNTY DIVISION OF TRANSPORTATION**  
600 WEST WINCHESTER ROAD  
LIBERTYVILLE, ILLINOIS 60048-1381  
ENERGY SUPPLY: CONTACT: MIKE TYSON  
PHONE: (847) 816-5500  
COMPANY: COMED



### PROPOSED EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↑

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'H-2"=
E - M. ARM POLE		SIGNAL POST	2 (1.0)	(6mH-0.6m)=	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
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)



- ### CABLE PLAN LEGEND
- EXISTING (circle with cross) PROPOSED (square with cross)
- 8" (200mm) 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 INSTALLATION
  - VEHICLE DETECTOR, INDUCTION LOOP
  - MAGNETIC DETECTOR
  - EMERGENCY VEHICLE LIGHT DETECTOR
  - CONFIRMATION BEACON
  - PUSHBUTTON DETECTOR
  - 2 (Circles) DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
  - 1 (Circle) GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
  - 24 (Circle) FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
  - 36 (Circle) FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM24F 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 (HD), OR CONTROLLER (C)
  - GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
  - GROUND ROD AT ELECTRIC SERVICE INSTALLATION
  - LUMINAIRE
  - MACHINE VISION PROCESSOR
  - DOMED CAMERA
  - UNINTERRUPTIBLE POWER SUPPLY

**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 SHOULDER'S, 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 21-0 RESPECTIVELY.

### REVISIONS

NAME	DATE

LAKE COUNTY DIVISION OF TRANSPORTATION  
**SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM**  
BUTTERFIELD ROAD AND WINCHESTER ROAD  
VILLAGE OF LIBERTYVILLE  
SCALE: N.T.S.  
DATE: 12/2/2005  
DRAWN BY: FPB/FCP  
DESIGNED BY: ABR  
CHECKED BY: GMZ

12/2/2005 N:\LIBERTYVILLE\99-389-VR-Traffic CAB. Winchester.dgn