

SCHEDULE OF QUANTITIES		
ITEM	UNIT	TOTAL
PAVEMENT REPLACEMENT (SPECIAL)	SQ YD	4
SIGN PANEL TYPE 1	SQ FT	38
SIGN PANEL TYPE 2	SQ FT	27.5
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	545
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	75
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	86
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	16
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	156
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	497
HANDHOLE	EACH	3
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	850
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	546
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2057
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2569
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1494
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1-PAIR	FOOT	2342
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	35
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	724
ELECTRIC CABLE IN CONDUIT NO. 20 3C, TWISTED, SHIELDED	FOOT	1276
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 52 FT.	EACH	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE D	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12
INDUCTIVE LOOP DETECTOR	EACH	10
DETECTOR LOOP, TYPE I	FOOT	965
LIGHT DETECTOR	EACH	4
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	3
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	11
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	241
REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	7
SIGNAL HEAD, L.E.D., 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	3
SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, L.E.D., 2-FACE, 1-3-SECTION, 1-4 SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, L.E.D., 2-FACE, 1-4 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED	EACH	1
SERVICE INSTALLATION, POLE MOUNT	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1

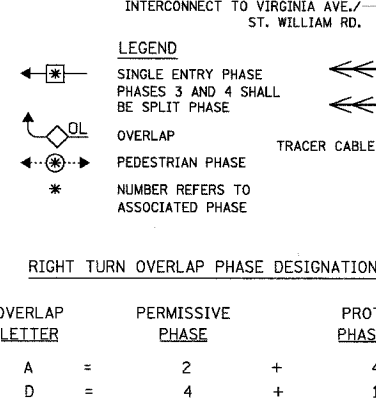
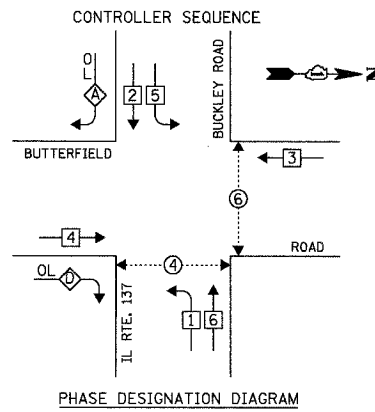
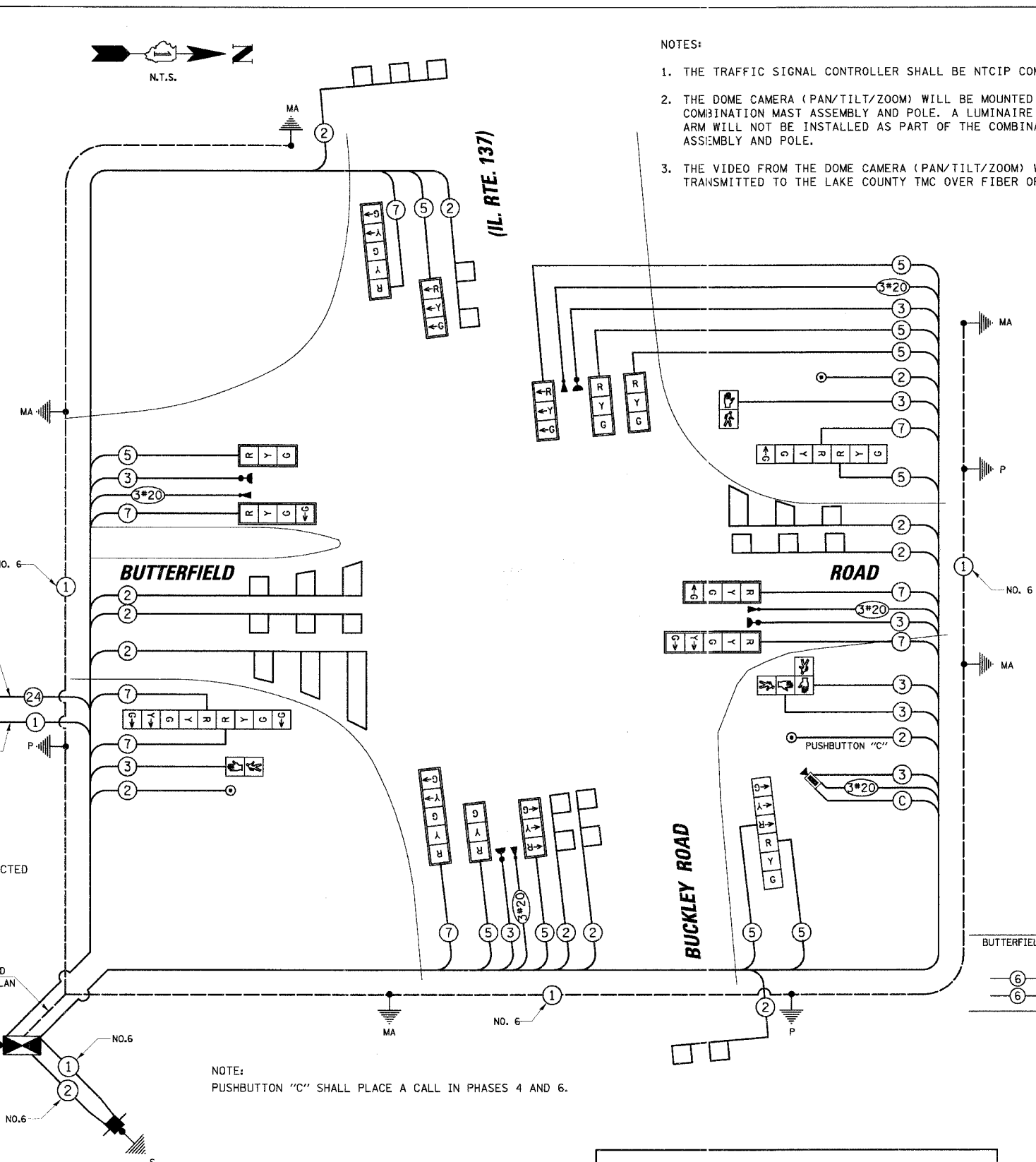
F.A.U.	SECTION	COUNTY	TOTAL SHEET NO.
2647	99-00142-07-WR	LAKE	256 102
CONTRACT NO. 83815			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			

NOTES:

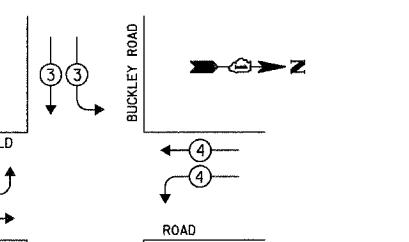
- THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
- THE DOME CAMERA (PAN/TILT/ZOOM) WILL BE MOUNTED TO THE COMBINATION MAST ASSEMBLY AND POLE. A LUMINAIRE AND TRUSS ARM WILL NOT BE INSTALLED AS PART OF THE COMBINATION MAST ARM ASSEMBLY AND POLE.
- THE VIDEO FROM THE DOME CAMERA (PAN/TILT/ZOOM) WILL BE TRANSMITTED TO THE LAKE COUNTY TMC OVER FIBER OPTIC CABLE.

CABLE PLAN LEGEND

- EXISTING PROPOSED
- 8" (200mm) TRAFFIC SIGNAL SECTION
 - 12" (300mm) TRAFFIC SIGNAL SECTION
 - 12" (300mm) PEDESTRIAN SIGNAL SECTION
 - 12" (300mm) PEDESTRIAN SIGNAL SECTION
 - CONTROLLER CABINET
 - SERVICE INSTALLATION
 - TELEPHONE INSTALLATION
 - VEHICLE DETECTOR, INDUCTION LOOP
 - MAGNETIC DETECTOR
 - EMERGENCY VEHICLE LIGHT DETECTOR
 - CONFIRMATION BEACON
 - PUSHBUTTON DETECTOR
 - DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
 - GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
 - FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
 - 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 (HH), OR CONTROLLER (C)
 - GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
 - GROUND ROD AT ELECTRIC SERVICE INSTALLATION
 - DOME CAMERA



EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	↓	←	↑	→

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	18	17	0.50		153.00
(YELLOW)	18	25	0.25		112.50
(GREEN)	22	15	0.25		82.50
ARROW	16	12	0.10		19.20
PED. SIGNAL	4	25	1.00		100.00
CONTROLLER	1	100	1.00		100.00
ILLUM. SIGN	-	25	0.05		-
FLASHER	-	-	0.50		-
TOTAL =					567.20

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)	(6m+L-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)

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.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM
 BUTTERFIELD ROAD AND (IL RTE. 137) BUCKLEY ROAD VILLAGE OF LIBERTYVILLE
 SCALE: N.T.S. DATE: 12/2/2005
 DRAWN BY: FBP/FCP
 DESIGNED BY: ABR
 CHECKED BY: GMZ

12/2/2005 N:\LIBERTYVILLE\99-389\T-Office\CAB.buckley.dgn