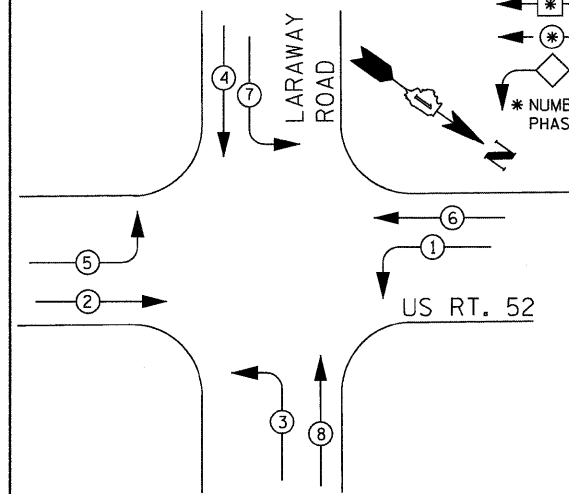
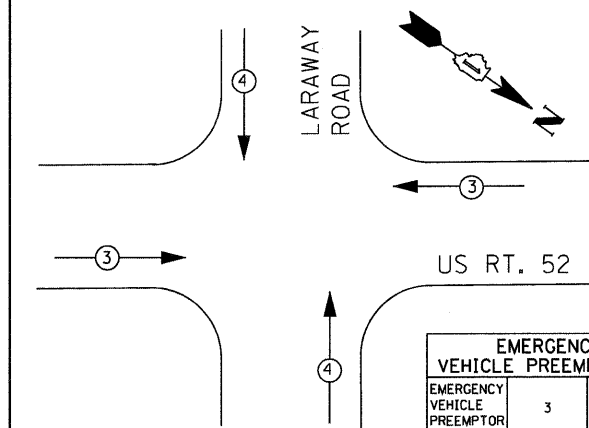


CONTROLLER SEQUENCE

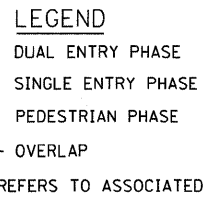
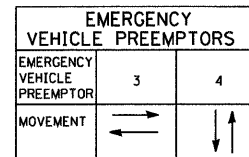


PHASE DESIGNATION DIAGRAM

NOT TO SCALE



EMERGENCY VEHICLE PREEMPTION SEQUENCE



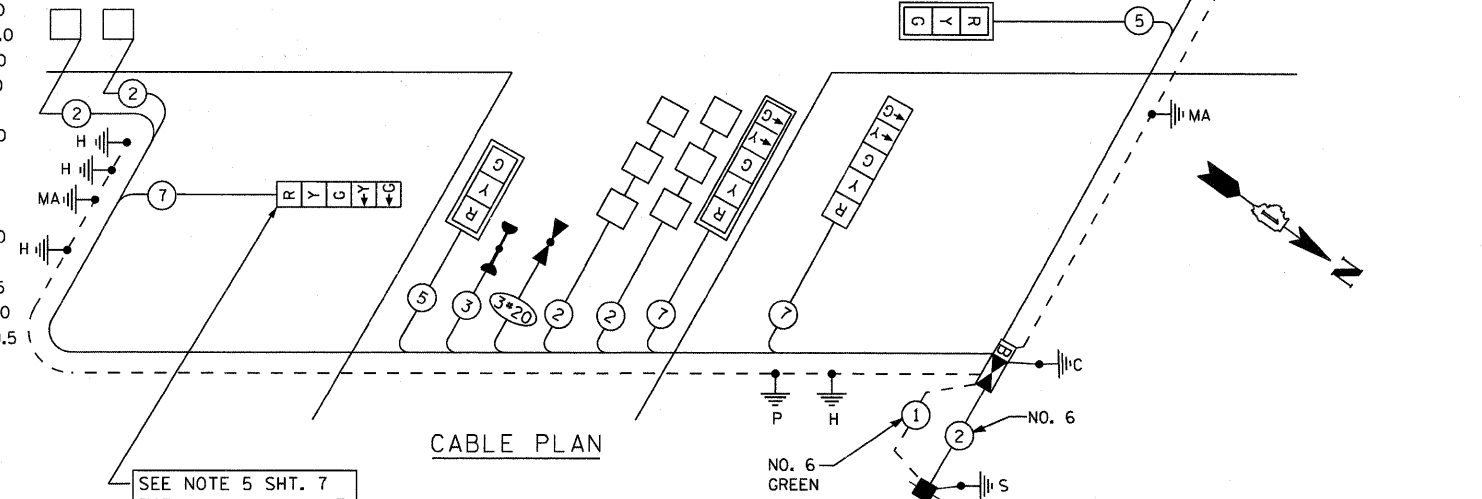
SCHEDULE OF QUANTITIES

ITEM	UNIT
ENGINEER'S FIELD OFFICE, TYPE A	CAL MO 6.0
MOBILIZATION	L SUM 1.0
TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM 1.0
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM 1.0
CHANGEABLE MESSAGE SIGN	CAL MO 2.0
SIGN PANEL - TYPE I	SQ FT 34.5
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT 2400.0
THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT 260.0
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT 150.0
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT 100.0
THERMOPLASTIC PAVEMENT MARKING REMOVAL	SQ FT 1724.0
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT 856.0
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT 138.0
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT 86.0
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT 364.0
HANDHOLE	EACH 7.0
HEAVY-DUTY HANDHOLE	EACH 4.0
DOUBLE HANDHOLE	EACH 1.0
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT 994.0
FULLY ACTUATED CONTROLLER AND TYPE IV CABINET	EACH 1.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT 972.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT 1831.0
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT 3080.5
ELECTRIC CABLE IN CONDUIT, NO. 6 2C	FOOT 59.5
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH 2.0
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH 1.0
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH 1.0
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH 1.0
STEEL MAST ARM ASSEMBLY AND POLE WITH	EACH 1.0
DUAL MAST ARMS, 14 FT. AND 55 FT.	

CONCRETE FOUNDATION, TYPE A	FOOT 8.0
CONCRETE FOUNDATION, TYPE C	FOOT 4.0
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT 30.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT 32.0
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH 4.0
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH 3.0
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH 5.0
INDUCTIVE LOOP DETECTOR	EACH 10.0
DETECTOR LOOP, TYPE I	FOOT 837.0
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH 9.0
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH 1.0
TEMPORARY INFORMATION SIGNING	SQ FT 102.8
SERVICE INSTALLATION, POLE MOUNT	EACH 1.0
UNINTERRUPTABLE POWER SUPPLY (UPS)	EACH 1.0
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO.6 1C	FOOT 700.0
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	L SUM 1.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT 343.5 *
LIGHT DETECTOR	EACH 4 *
LIGHT DETECTOR AMPLIFIER	EACH 1 *
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT 343.5 *

FOUNDATION	DEPTH	DEPTH (FT.)	CABLE SLACK	(FT.)	VERTICAL	(FT.)
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5	
D - CONTROLLER	4	DOUBLE HANDHOLE	13	MAST ARM (L) POLE	=20' +L-2	
E - MAST ARM POLE		SIGNAL POST	2	BRACKET MOUNTED	13	
30"	15	CONTROLLER CAB.	1	PED. PUSHBUTTON	4	
36"	15	FIBER OPTIC	13	ELECTRICAL SERVICE	13.5	
42"	25	ELECTRICAL SERVICE	1	SERVICE TO GROUND	13.5	
		GROUND CABLE	1	POSTMOUNTED	6	

US RTE. 52
(MANHATTAN RD.)



CABLE PLAN

SEE NOTE 5 SHT. 7
FOR HEAD PLACEMENT

CABLE PLAN LEGEND

EXISTING	PROPOSED		EXISTING	PROPOSED	
		8" (200mm) TRAFFIC SIGNAL SECTION			SIGNAL FACE WITH BACKPLATE.
		12" (300mm) TRAFFIC SIGNAL SECTION			"P" INDICATES PROGRAMMED HEAD
		12" (300mm) PEDESTRIAN SIGNAL SECTION			
		12" (300mm) PEDESTRIAN SIGNAL SECTION			RAILROAD CONTROL CABINET
		12" (300mm) PEDESTRIAN SIGNAL SECTION			ILLUMINATED SIGN, FIBER OPTIC
		W/ COUNTDOWN TIMER			"NO LEFT TURN"
		CONTROLLER CABINET			ILLUMINATED SIGN, FIBER OPTIC
		SERVICE INSTALLATION			"NO RIGHT TURN"
		TELEPHONE CONNECTION			
		MAGNETIC DETECTOR			GROUND ROD AT HANDHOLE,
		EMERGENCY VEHICLE			DOUBLE HANDHOLE, OR CONTROLLER
		LIGHT DETECTOR			GROUND ROD AT POST (P)
		CONFIRMATION BEACON			OR MAST ARM POLE (MA)
		PUSHBUTTON DETECTOR			GROUND ROD AT ELECTRIC
					SERVICE INSTALLATION
					GROUND CABLE IN CONDUIT,
					NO.6 SOLID COPPER (GREEN)
					FIBER OPTIC CABLE IN CONDUIT,
					NO. 62.5/125 2-MM12F & SM12F
					UNINTERRUPTED POWER SUPPLY

I. D. O. T.					
TRAFFIC SIGNAL INSTALLATION					
ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE	% OPERATIONS	TOTAL WATTAGE	
		INCAND.		LED	
SIGNAL (RED)	12	135	0.50	17	102
(YELLOW)	12	135	0.25	25	75
(GREEN)	12	135	0.25	15	45
ARROW	16	135	0.10	12	19.2
PED. SIGNAL	0	90	1.00	25	0
CONTROLLER	1	100	1.00	100	100
ILLUM. SIGN	0	252	0.05	25	0
VIDEO SYSTEM	0	150	1.00	-	0
FLASHER LED					
TOTAL =				341.2	

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT MARK ANDERSON
PHONE 1-815-724-5988
COMPANY COMED

FILE NAME =	USER NAME = #USER#	DESIGNED - DW	REVISED -
#FILE#		DRAWN - DW	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - JS	REVISED -
	PLOT DATE = #DATE#	DATE - 09/01/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 52 (MANHATTAN RD.) AND LARAWAY RD. - SCHEDULE OF
QUANTITIES, CABLE PLAN & PHASE DESIGNATION DIAGRAM

SCALE: NONE SHEET NO. 9 OF 12 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2009-098 TS	WILL	12	9
CONTRACT NO. 60154				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				