

**CABLE PLAN LEGEND**

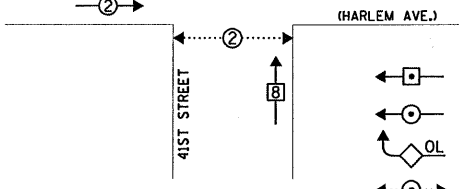
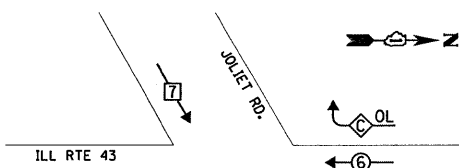
PROPOSED	EXISTING	DESCRIPTION
		8" (200mm) TRAFFIC SIGNAL SECTION
		12" (300mm) TRAFFIC SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
		TELEPHONE CONNECTION
		MAGNETIC DETECTOR
		PUSHBUTTON DETECTOR
		VEHICLE DETECTOR, INDUCTION LOOP
		2 DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
		SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD
		"E" RAILROAD CONTROL CABINET
		"E" ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
		"E" ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
		H/C GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER
		P GROUND ROD AT POST OR MAST ARM POLE
		S GROUND ROD AT ELECTRIC SERVICE INSTALLATION
		1 GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
		24 FIBER OPTIC CABLE IN CONDUIT NO.62.5/125 2-MM12F & SM12F
		MICROWAVE VEHICLE SENSOR
		VIDEO DETECTOR
		CLOSED CIRCUIT TV
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		UNINTERRUPTIBLE POWER SUPPLY
		PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER

NOTE: THE EXISTING INTERCONNECT CABLES SHALL BE REPLACED WITH NEW INTERCONNECT CABLES AND SHALL BE ROUTED THROUGH THE EXISTING CONDUITS TO THE NEW CONTROLLER AND ATTACHED TO THE NEW CONTROLLER.

NOTE: ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY

NOTE: THE END OF THE TRACER CABLE SHALL BE TIED TO A CABLE HOOK IN THE DOUBLE HANDHOLE CLOSEST TO THE CONTROLLER FOUNDATION.

**CONTROLLER SEQUENCE**



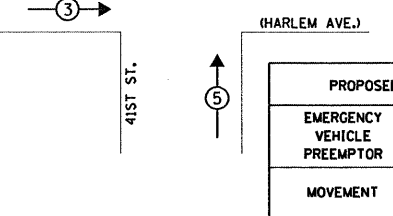
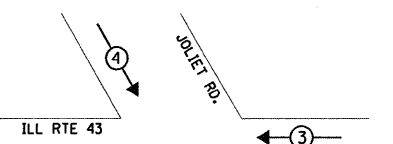
**LEGEND**

- SINGLE ENTRY PHASE
- DUAL ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

**PHASE DESIGNATION DIAGRAM**

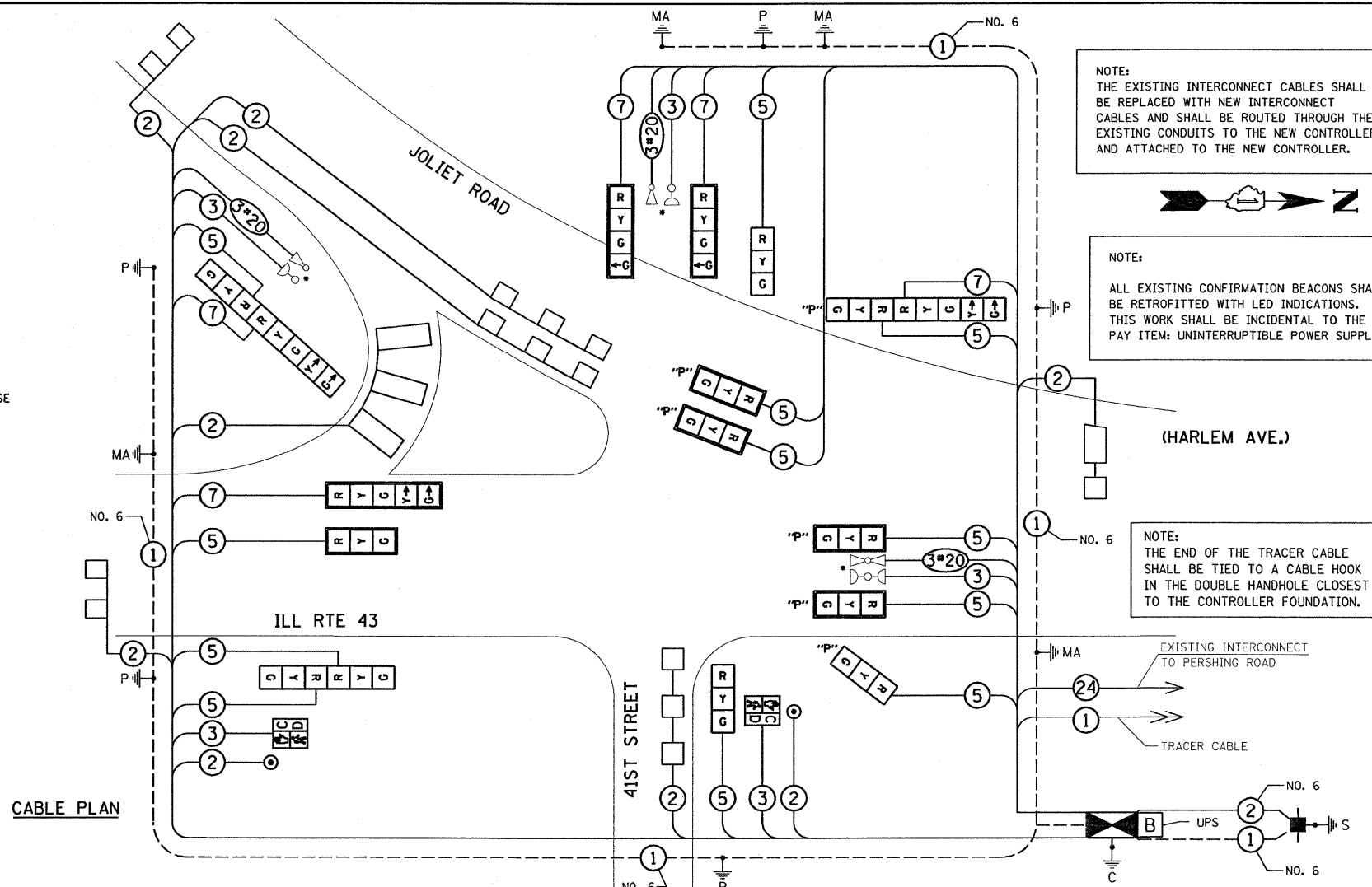
OVERLAP LETTER C = PERMISSIVE PHASE 6 + PROTECTED PHASE 4

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



PROPOSED EMERGENCY VEHICLE PREEMPTOR				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	
MOVEMENT				

**CABLE PLAN**



**SCHEDULE OF INTERSECTION QUANTITIES**

QUANTITY	UNIT	ITEM	QUANTITY	UNIT	ITEM
78	SO FT	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	618	FOOT	ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED
78	SO FT	SIDEWALK REMOVAL	3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
50	SO FT	DETECTABLE WARNINGS	2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.
26	FOOT	COMBINATION CURB AND GUTTER REMOVAL	1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 20 FT.
26	FOOT	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6. 24	1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.
24	SO FT	SIGN PANEL - TYPE 1	1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.
25	SO FT	SIGN PANEL - TYPE 2	1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.
56	FOOT	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	20	FOOT	CONCRETE FOUNDATION, TYPE A
120	FOOT	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	4	FOOT	CONCRETE FOUNDATION, TYPE C
672	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	40.5	FOOT	CONCRETE FOUNDATION, TYPE E 30" DIAMETER
237	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	13	FOOT	CONCRETE FOUNDATION, TYPE E 36" DIAMETER
32	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	2	EACH	DRILL EXISTING HANDHOLE
223	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	1	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
14	FOOT	CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	2	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED
326	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	2	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 4-SECTION, MAST ARM MOUNTED
8	EACH	HANDHOLE	1	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED
1	EACH	HEAVY-DUTY HANDHOLE	1	EACH	SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	DOUBLE HANDHOLE	1	EACH	SIGNAL HEAD, L.E.D., 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
1035	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK	4	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	1	EACH	OPTICALLY PROGRAMMED SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY	1	EACH	COMBINATION SIGNAL HEAD, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-5 SECTION, BRACKET MOUNTED
1	EACH	TRANSCEIVER - FIBER OPTIC	1	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
156	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	2	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
792	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	7	EACH	INDUCTIVE LOOP DETECTOR
2568	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	692	FOOT	DETECTOR LOOP, TYPE I
1328	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	2	EACH	PEDESTRIAN PUSH-BUTTON
2104	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	3	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
569	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
849	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMINGS	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH	SERVICE INSTALLATION, POLE MOUNT	11	EACH	REMOVE EXISTING HANDHOLE
			9	EACH	REMOVE EXISTING CONCRETE FOUNDATION

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)		6m+L-0.6m
		24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)
		30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)
				ELECTRIC SERVICE	1 (0.5)
				GROUND CABLE	1 (0.5)
				POST MOUNTED	6 (1.8)

\* PAID FOR BY MUNICIPALITY

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	17	17	0.50		144.50
(YELLOW)	17	25	0.25		106.25
(GREEN)	17	15	0.25		63.75
ARROW	8	12	0.10		9.60
PED. SIGNAL	2	25	1.00		50.00
CONTROLLER	1	100	1.00		100.00
ILLUM. SIGN			0.05		-
FLASHER			0.05		-
ENERGY COSTS TO:					TOTAL= 474.10
VILLAGE OF STICKNEY 6533 PERSHING ROAD STICKNEY, IL 60402					
ENERGY SUPPLY CONTACT:	JUANITA VEIGELT				
PHONE:	(815) 724-5657				
COMPANY:	COMMONWEALTH EDISON				