

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	991821 R-389-1HB-L-BR-2	WILL	303	117
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62253
CABLE PLAN LEGEND

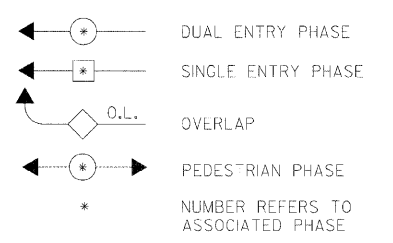
PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	←	→	↓

SCHEDULE OF QUANTITIES

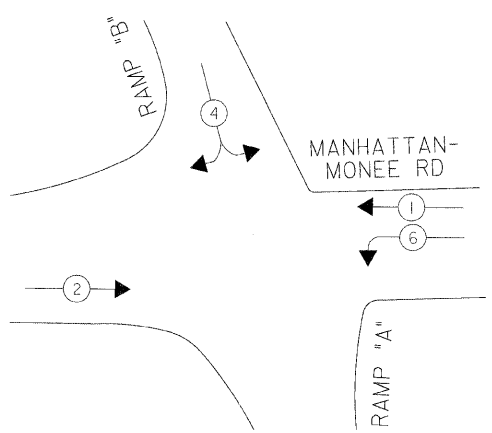
QUANTITY	UNIT	ITEM
15	SQ FT	SIGN PANEL - TYPE 2
1198	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
252	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
58	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
121	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
261	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
10	EACH	HANDHOLE
1	EACH	HEAVY-DUTY HANDHOLE
1	EACH	DOUBLE HANDHOLE
1487	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
1	EACH	TRANSCEIVER-FIBER OPTIC
654	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
2644	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
278	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
1756	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
332	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
5	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.
1	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 40 FT.
1	EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 44 FT.
24	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
10	FOOT	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER
30	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
5	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED
6	EACH	TRAFFIC SIGNAL BACKPLATE
7	EACH	INDUCTIVE LOOP DETECTOR
1	EACH	LIGHT DETECTOR
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
2	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT
1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
619	FOOT	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION, POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
1383	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
654	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

• 100% COST TO VILLAGE OF MONEE

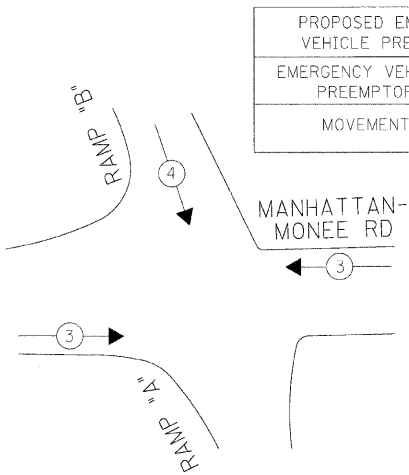
LEGEND



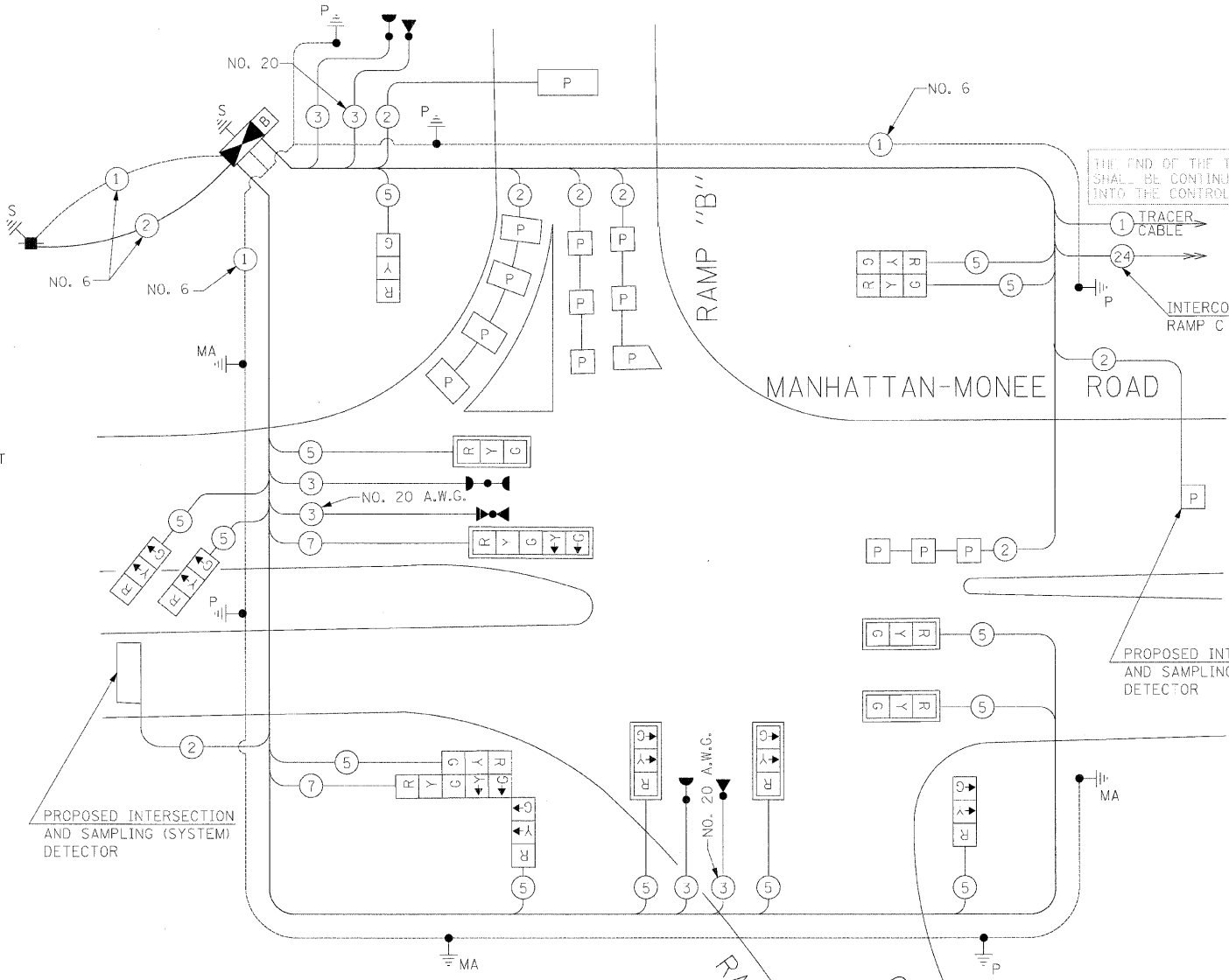
CONTROLLER SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE



PHASE DESIGNATION DIAGRAM



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE	% OPERATION		
SIGNAL (RED)	15	135	17	0.50	127.5
(YELLOW)	15	135	25	0.25	93.75
(GREEN)	15	135	15	0.25	56.25
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	0	90	25	1.00	0
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN				0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	382.3

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)	BRACKET MOUNTED	(6m+L-0.6m)=
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

ILLINOIS DEPARTMENT OF TRANSPORTATION
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COMPANY: COMED-EDISON

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN
MANHATTAN-MONEE ROAD
AT RAMP "A" AND "B"
SCALE: NONE
DATE: 04/09/2007
DRAWN BY: KGP/RDP
DESIGNED BY: PKG
CHECKED BY: PKG