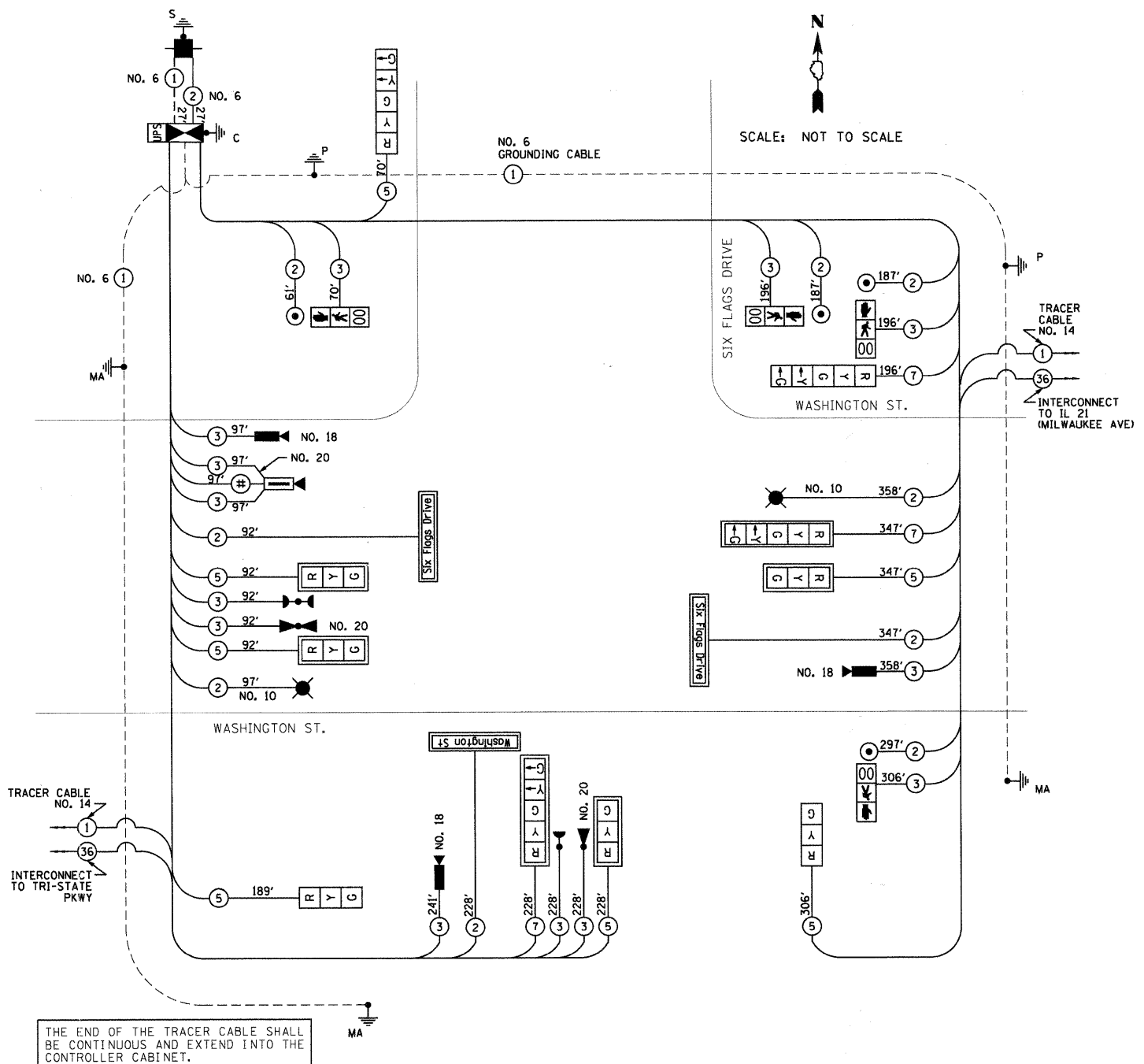


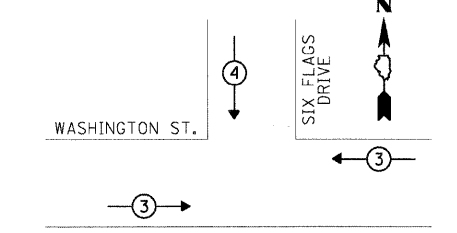
ITEM	UNIT	QUANTITY
HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 2-1/C NO. 10	FOOT	454
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	2
TRANSCIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,397
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,183
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,252
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	840
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	27
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT. (SPECIAL)	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE D	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	33
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	6
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	5
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	12
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	49
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	29
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	35
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	343
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	762
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	320
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	97
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 3C	FOOT	97
VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
TRAFFIC SIGNAL POST, 16 FOOT, (SPECIAL)	EACH	2
L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	3
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
UNINTERRUPTABLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, NO. 18 3C, VIDEO	FOOT	695
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1



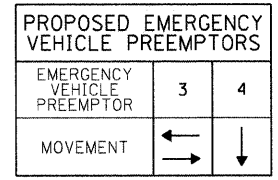
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

CABLE PLAN  
NOT TO SCALE

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

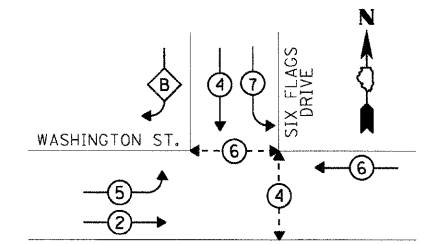


EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS

CABLE PLAN LEGEND		
EXISTING	PROPOSED	
		8" TRAFFIC SIGNAL SECTION
		12" TRAFFIC SIGNAL SECTION
		12" PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
		TELEPHONE CONNECTION
		MAGNETIC DETECTOR
		VEHICLE DETECTOR, INDUCTION LOOP
		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 MM12F SM24F
		STREET LIGHT LUMINAIRE
		SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD
		GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER
		GROUND ROD AT POST OR MAST ARM POLE
		GROUND ROD AT ELECTRIC SERVICE INSTALLATION
		DOMED PAN/TILT/ZOOM (PTZ) CAMERA
		PROPOSED IMAGE SENSOR
		UNINTERRUPTIBLE POWER SUPPLY
		L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN
		COAXIAL CABLE (BELDEN 8281) NO. 20



OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	4	5

PHASE DESIGNATION DIAGRAM

PHASE DESIGNATION DIAGRAM LEGEND	
	VEHICULAR MOVEMENT - DUAL ENTRY PHASE
	VEHICULAR MOVEMENT - SINGLE ENTRY PHASE
	PEDESTRIAN MOVEMENT
	OVERLAP MOVEMENT
	NUMBER REFERS TO ASSOCIATED PHASE

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	10	—	10	0.50	50
(YELLOW)	10	—	19	0.10	19
(GREEN)	10	—	11	0.40	44
ARROW	8	—	9	0.10	8
PED SIGNAL	4	—	9	1.00	36
CONTROLLER	1	—	100	1.00	100
VIDEO SYSTEM	1	—	150	1.00	150
LUMINAIRE	2	—	250	0.50	250
L.E.D. ST. SIGNS	3	—	64	0.50	96
BATTERY BACKUP	1	—	25	1.00	25
TOTAL =					778

ENERGY COSTS TO: LAKE COUNTY DIVISION OF TRANSPORTATION  
600 WINCHESTER ROAD  
LIBERTYVILLE, IL 60048

ENERGY SUPPLY: CONTACT: MS. TERRI BLECK  
PHONE: (847) 816-5234  
COMPANY: COMED

FOUNDATION (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	20H-2=
E - MAST ARM POLE	15	SIGNAL POST	2	BRACKET MOUNTED	13
		CONTROLLER CABINET	1	PEDESTRIAN PUSHBUTTON	4
		FIBER OPTIC	13	ELECTRIC SERVICE	13.5
		ELECTRIC SERVICE	1	SERVICE TO GROUND	13.5
		GROUND CABLE	1	POST MOUNTED	