

ITEM	UNIT	QUANTITY
HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 2-1/C NO. 10	FOOT	617
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	3
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,058
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,132
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	663
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,471
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	35
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 50 FT. AND 24 FT. (SPECIAL)	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE D	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	28
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST-ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	9
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 CONCRETE FOUNDATION	EACH	1
CONDUIT IN TRENCH, 1 1/2" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	12
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	25
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	23
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	196
CONDUIT PUSHED, 5" DIA., GALVANIZED STEEL	FOOT	95
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	746
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	311
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	214
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 3C	FOOT	214
VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
TRAFFIC SIGNAL POST, 10 FOOT, (SPECIAL)	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	722
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1

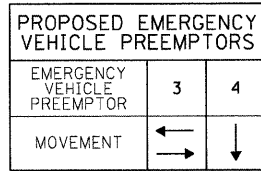
L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	11	—	10	0.50	55
(YELLOW)	11	—	19	0.10	21
(GREEN)	11	—	11	0.40	49
ARROW	16	—	9	0.10	15
PED SIGNAL	4	—	9	1.00	36
CONTROLLER	1	—	100	1.00	100
VIDEO SYSTEM	1	—	150	1.00	150
LUMINAIRE	4	—	250	0.50	500
L.E.D. ST. SIGNS	4	—	64	0.50	128
BATTERY BACKUP	1	—	25	1.00	25
TOTAL =					1079

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

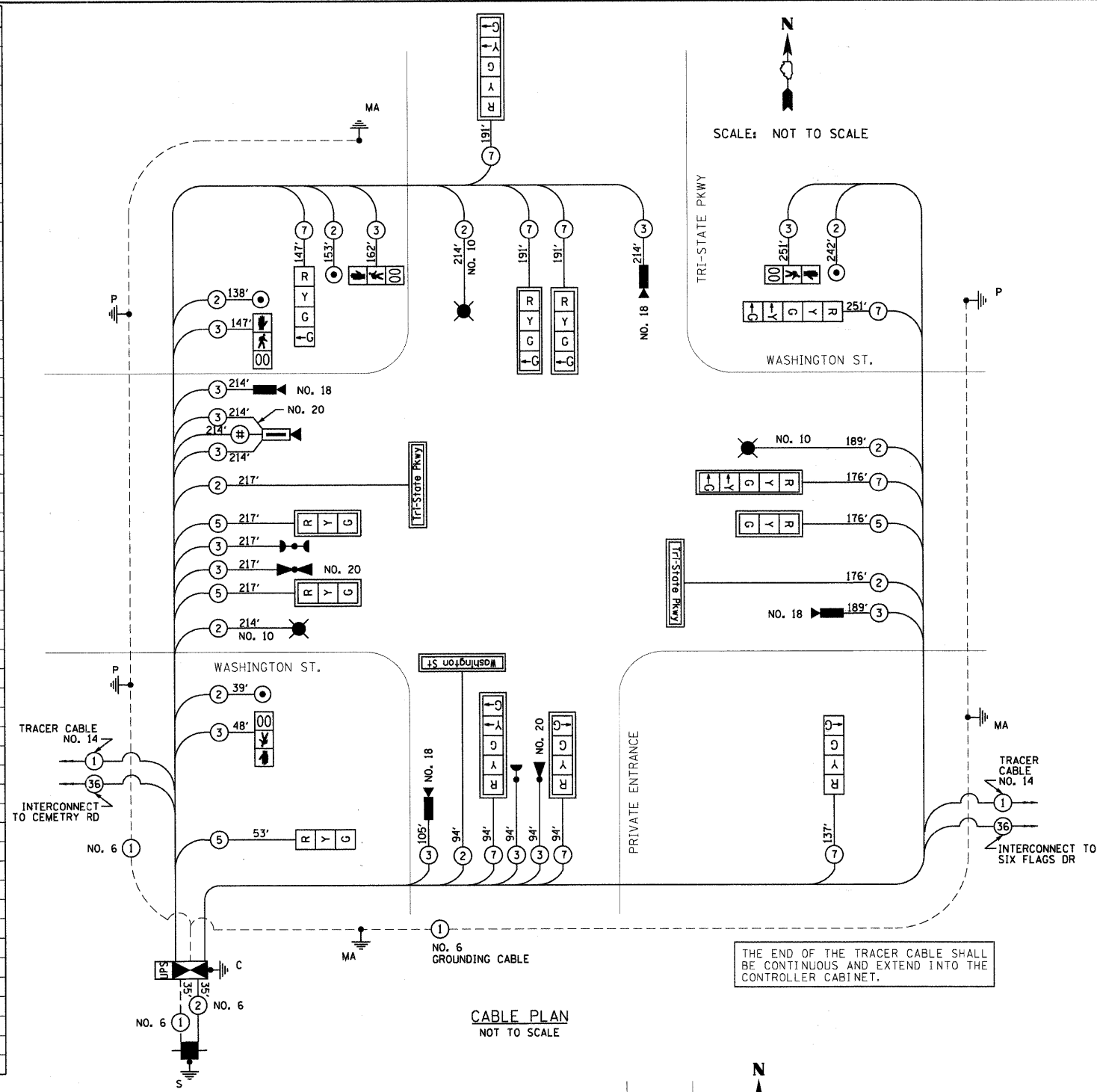
FOUNDATION (DEPTH)	FT.	CABLE SLACK	FT.	VERTICAL	FT.
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5
D - CONTROLLER	4	DOUBLE HANDHOLE	13	MAST ARM (L) POLE	20+L-2=
E - MAST ARM POLE		SIGNAL POST	2		
30"	10	CONTROLLER CABINET	1	BRACKET MOUNTED	13
36"	11	FIBER OPTIC	13	PEDESTRIAN PUSHBUTTON	4
E - DUAL MAST ARM		ELECTRIC SERVICE	1	ELECTRIC SERVICE	13.5
36"	17	GROUND CABLE	1	SERVICE TO GROUND	13.5
		POST MOUNTED			

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

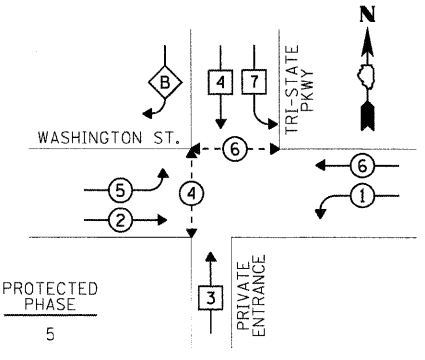


EMERGENCY VEHICLE PREEMPTION SEQUENCE

CABLE PLAN LEGEND		
EXISTING	PROPOSED	
		8" TRAFFIC SIGNAL SECTION
		12" TRAFFIC SIGNAL SECTION
		12" PEDESTRIAN 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



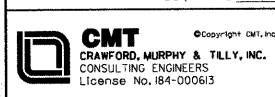
CABLE PLAN NOT TO SCALE



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



USER NAME = Steve Prange  
DESIGNED - CMC  
DRAWN - CMC  
CHECKED - KDN  
DATE - 05/29/09

REVISIONS  
REVISED -  
REVISED -  
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REVISIONS  
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WASHINGTON STREET - SIGNAL CABLE PLAN  
WASHINGTON STREET AT TRI-STATE PARKWAY

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1016	02-00110-12-WR	LAKE	206	97
				CONTRACT NO. 63209

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT