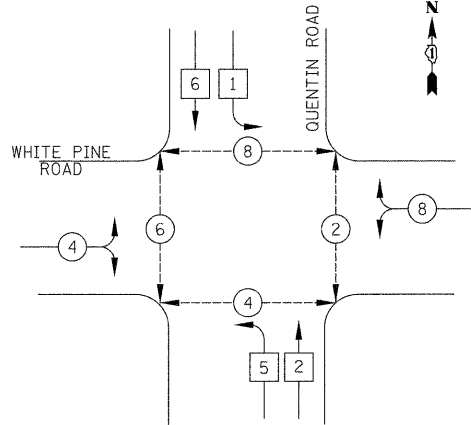
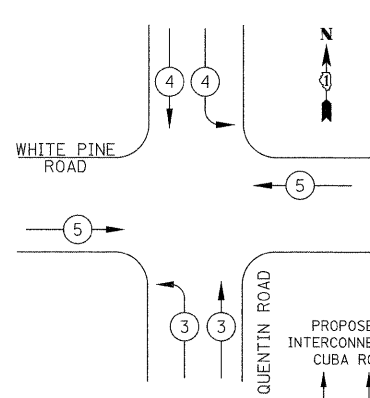


PROPOSED CONTROLLER SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

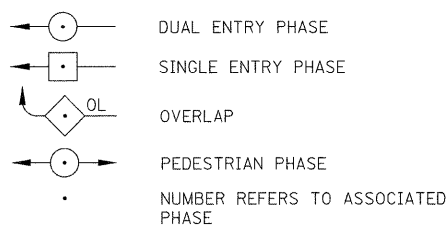


PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

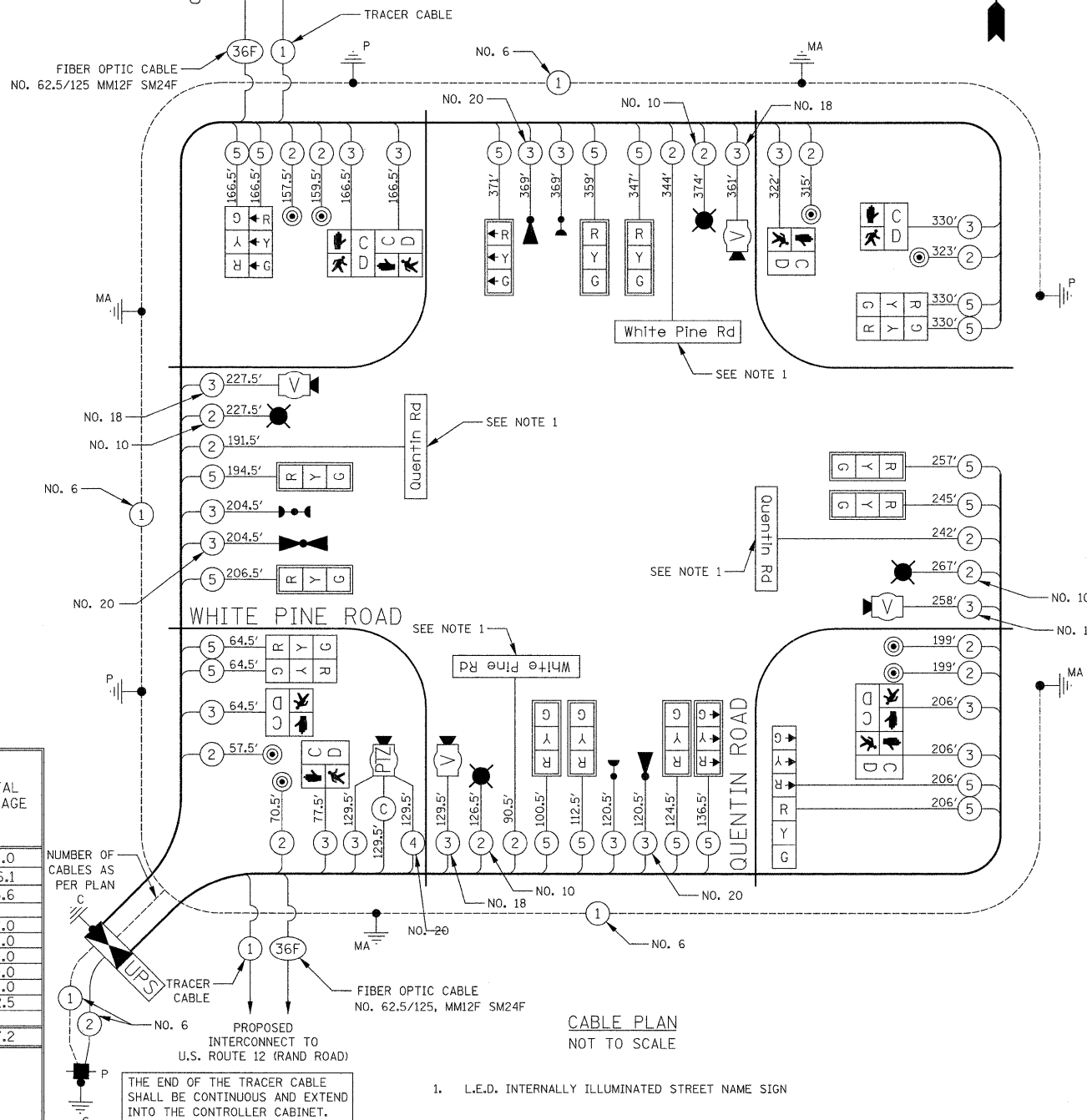
SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QNTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	20
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2.5" DIA.	FOOT	59
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3.5" DIA.	FOOT	46
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	554
HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, 600 V (EPR-TYPE RHW) 2-1/C NO. 10	FOOT	995
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	4
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2358
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2363
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3988
ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 2C	FOOT	44
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	857
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 26 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 44 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 46 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 58 FT. (SPECIAL)	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	40
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	11
SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	11
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING HANDHOLE	EACH	2
REMOVE TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	694
RELOCATE EXISTING SWITCH (SPECIAL)	EACH	1
VIDEO DETECTION SYSTEM	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4 C	FOOT	130
TRAFFIC SIGNAL POST, 16 FOOT, (SPECIAL)	EACH	3
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
LAYER II (DATALINK) SWITCH	EACH	1
RELOCATE EXISTING VIDEO DETECTION SYSTEM (COMPLETE INTERSECTION)	EACH	1
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 18 3C	FOOT	981
RELOCATE EXISTING REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
VIDEO ENCODER	EACH	1
COAXIAL CABLE IN CONDUIT	FOOT	130
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
RELOCATE EXISTING ENCODER	EACH	2

LEGEND



PHASE DESIGNATION DIAGRAM

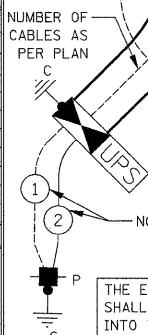


CABLE PLAN  
NOT TO SCALE

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	19		10	0.50	95.0
(YELLOW)	19		19	0.10	36.1
(GREEN)	19		11	0.40	83.6
ARROW			9	0.10	
PED. SIGNAL	8		9	1.00	72.0
CONTROLLER	1		100	1.00	100.0
VIDEO SYSTEM	1		150	1.00	150.0
LUMINAIRES	4	250		0.50	500.0
L.E.D. STREET NAME SIGNS	4		64	0.50	128.0
BATTERY BACKUP	1		25	0.50	12.5
FLASHER				0.50	
TOTAL =					1177.2

ENERGY COSTS TO: LAKE COUNTY DIVISION OF TRANSPORTATION  
600 W. WINCHESTER ROAD  
LIBERTYVILLE, IL 60048  
CONTACT: DONALD PESCE  
PHONE: (847) 870-2057  
COMPANY: COM ED

ENERGY SUPPLY:



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

1. L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN

DATE	
BY	
FINAL SURVEY	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	

**CIVILTECH**  
450 E Devon Ave, Suite 300  
Itasca, Illinois 60143  
Tel: 630.773.3900 Fax: 630.773.3975  
www.civiltechinc.com

DESIGNED - BRD	REVISED - 11/14/2011
DRAWN - BRD	REVISED - 5/16/2012
CHECKED - JJE	REVISED -
DATE - 10/24/2011	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

NO SCALE

CABLE PLAN, SEQUENCE OF OPERATION, EMERGENCY  
VEHICLE PREEMPTION SEQUENCE & SCHEDULE OF QUANTITIES  
QUENTIN ROAD AT WHITE PINE ROAD/FIELD PARKWAY

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	106
CONTRACT NO. 63649				

NOTE:  
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" AND NTCIP COMPLIANT TO MATCH THE EXISTING ADJACENT SYSTEM.