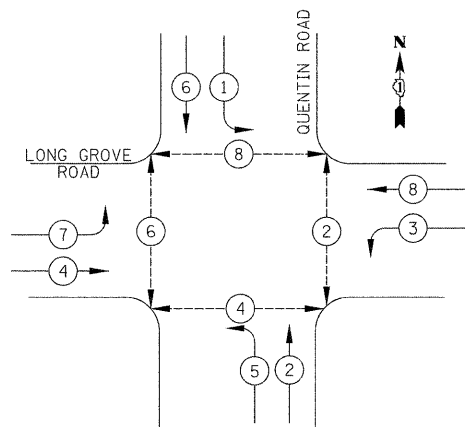
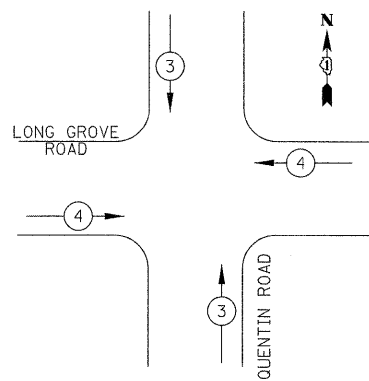


PROPOSED CONTROLLER SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↑	→

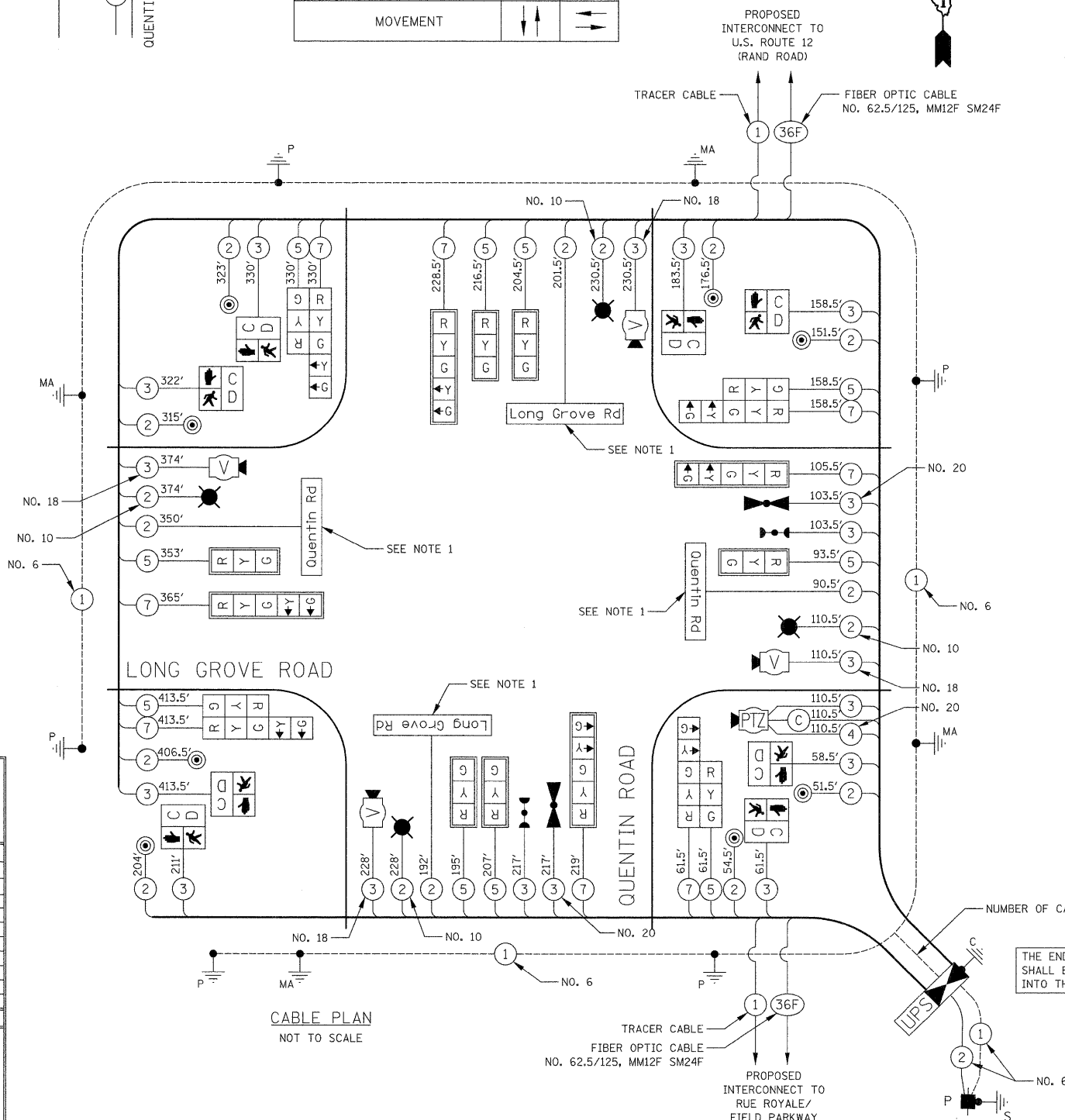
LEGEND

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

PHASE DESIGNATION DIAGRAM

CABLE PLAN NOTES

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



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)	18		10	0.50	90.0
(YELLOW)	18		19	0.25	85.5
(GREEN)	18		11	0.25	49.5
ARROW	16		9	0.10	14.4
PED. SIGNAL	8		9	1.00	72.0
CONTROLLER	1		100	1.00	100.0
VIDEO SYSTEM	1		150	1.00	150.0
LUMINAIRE	4	250		0.50	500.0
L.E.D. STREET NAME SIGNS	4		64	0.50	128.0
BATTERY BACKUP	1		25	1.00	25.0
FLASHER				0.50	
TOTAL =					1214.4

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

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

DESIGNED - BRD
DRAWN - BRD
CHECKED - JJE
DATE - 10/24/2011

REVISED - 11/14/2011
REVISED - 5/16/2012
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NO SCALE

CABLE PLAN, SEQUENCE OF OPERATION,
EMERGENCY VEHICLE PREEMPTION SEQUENCE & SCHEDULE OF QUANTITIES
QUENTIN ROAD AT LONG GROVE ROAD

SHEET NO. 1 OF 1 SHEETS

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

SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QNTY.
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	83
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2.5" DIA.	FOOT	112
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3.5" DIA.	FOOT	79
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	579
HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, 600 V (EPR-TYPE RHW) 2-1/C NO. 10	FOOT	948
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	4
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2517
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2170
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2233
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1882
ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 2C	FOOT	107
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	944
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT. (SPECIAL)	EACH	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT. (SPECIAL)	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	20
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	12
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	321
VIDEO DETECTION SYSTEM	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 4 C	FOOT	111
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT. (SPECIAL)	EACH	1
TRAFFIC SIGNAL POST, 10 FOOT, (SPECIAL)	EACH	1
TRAFFIC SIGNAL POST, 16 FOOT, (SPECIAL)	EACH	4
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
REMOTE CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 18 3C	FOOT	948
VIDEO ENCODER	EACH	1
COAXIAL CABLE IN CONDUIT	FOOT	111
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
364	02-00051-08-WR	LAKE	188	96
CONTRACT NO. 63649				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				