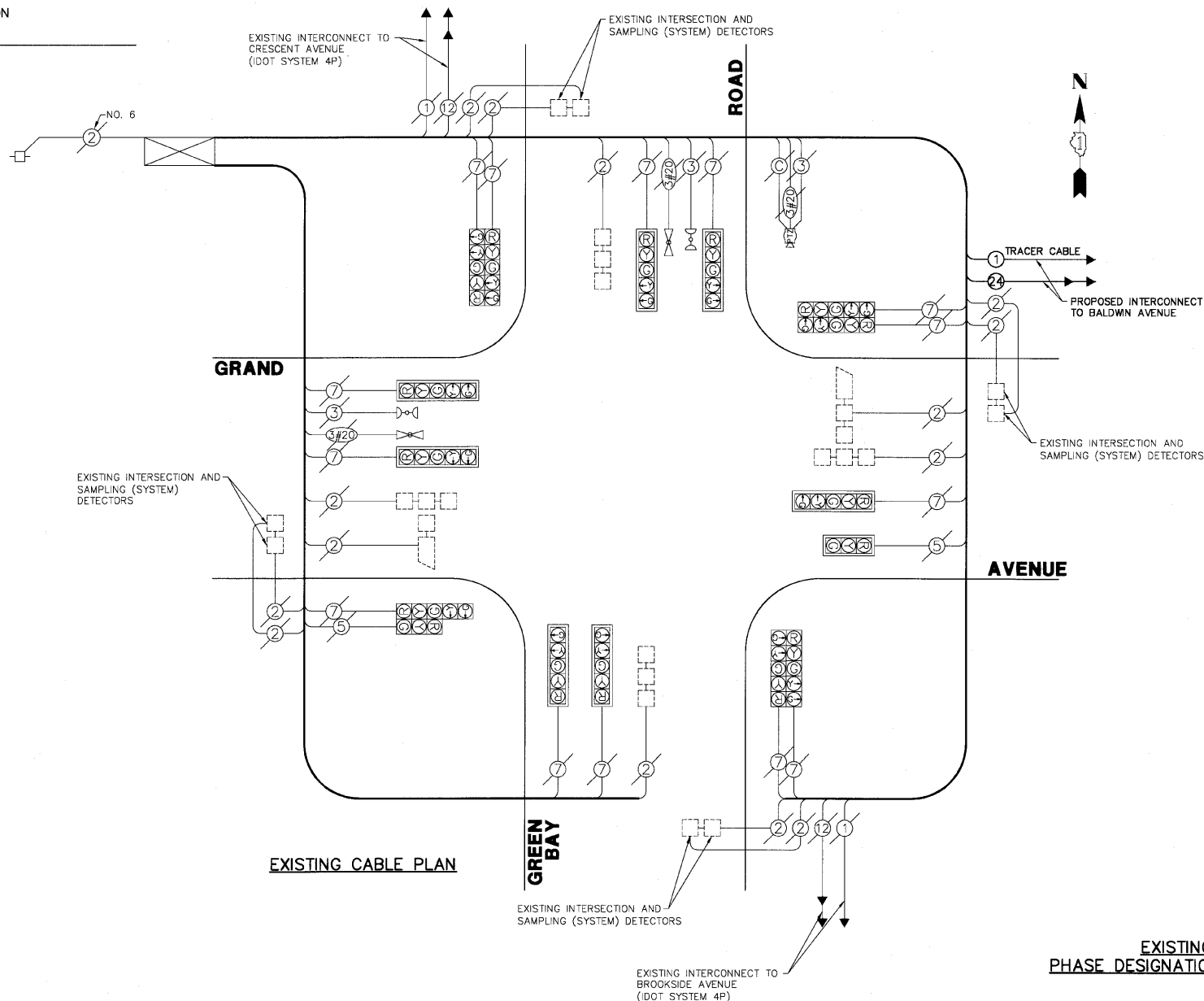


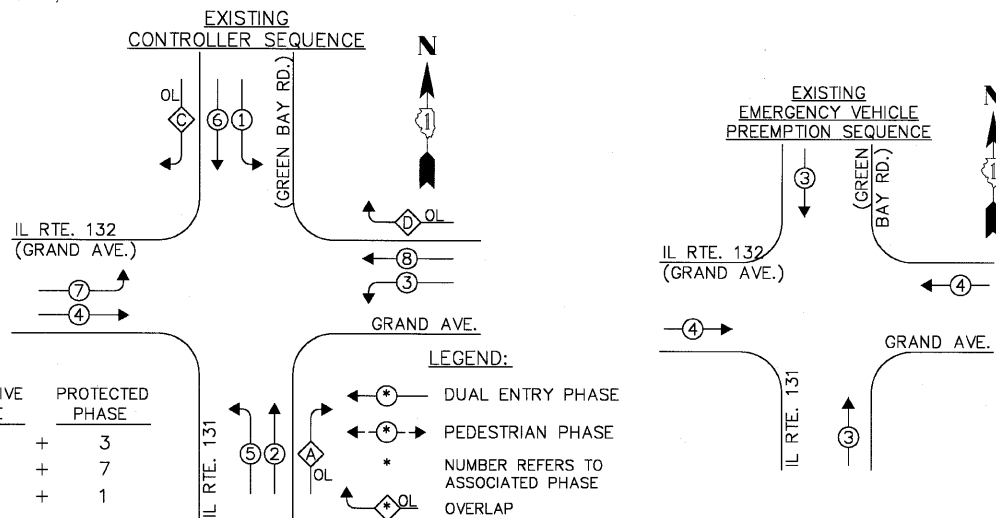
SCHEDULE OF QUANTITIES

GRAND AVENUE AT GREEN BAY ROAD TRAFFIC SIGNAL MODERNIZATION

NO.	QUANT.	UNIT
1.	1	EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH MODIFY EXISTING CONTROLLER



EXISTING PHASE DESIGNATION DIAGRAM



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		% OPERATION	
		INCAND.	L.E.D.		
SIGNAL (RED)	16	135	10	0.50	1090.0
SIGNAL (YELLOW)	16	135	19	0.10	216.0
SIGNAL (GREEN)	16	135	11	0.40	864.0
ARROW	28	135	9	0.10	378.0
PED. SIGNAL	-	90	9	1.00	-
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	-	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	1	150	1.00	150.0	-
BATTERY BACKUP	-	-	25	1.00	-
TOTAL =					2788.0

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "NTCIP" COMPLIANT.

FOUNDATION (DEPTH)	(FT.)	CABLE SLACK	(FT.)	VERTICAL	(FT.)
TYPE A - POST	4	HAND-HOLE	6.5	ALL FOUNDATIONS	3.5
TYPE D - CONTROLLER	4	DOUBLE HAND-HOLE	13	MAST ARM (L) POLE	20' H-2=
TYPE E - M.ARM POLE	15	SIGNAL POST	2	BRACKET MOUNTED	13
		CONTROLLER CAB.	1	PED. PUSHBUTTON	4
		FIBER OPTIC	13	ELECTRIC SERVICE	13.5
		ELECTRIC SERVICE	1	SERVICE TO GROUND	13.5
		GROUND CABLE	1	POST MOUNTED	6

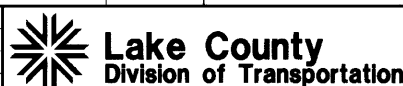
OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
C	= 6	+ 7
D	= 8	+ 1

ENERGY COSTS - BILLED TO: ILL. DEPT. OF TRANS.
 (ADDRESS) 201 W. CENTER CT.
 (ADDRESS) SCHAUMBURG, IL 60196
 ENERGY SUPPLY - CONTACT: GERRY GRANDBERRY
 PHONE: (847) 816-5463
 COMPANY: COM-ED, LIBERTYVILLE

FILE NAME = 4136.800-TR2.dwg
 USER NAME = GHA

DESIGNED - JRD
 DRAWN - ZCW
 CHECKED - DPB
 PLOT SCALE = 1" = .0833'
 PLOT DATE = 3/10/10

REVISED -
 REVISED -
 REVISED -
 DATE - 3/10/10



CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES
IL RTE 132 (GRAND AVENUE) AT IL RTE 131 (GREEN BAY ROAD)
 SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

FAP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	08-00279-00-TL	LAKE	64	12
CONTRACT #			63436	

GHA #4136.800

ILLINOIS FED. AID PROJECT