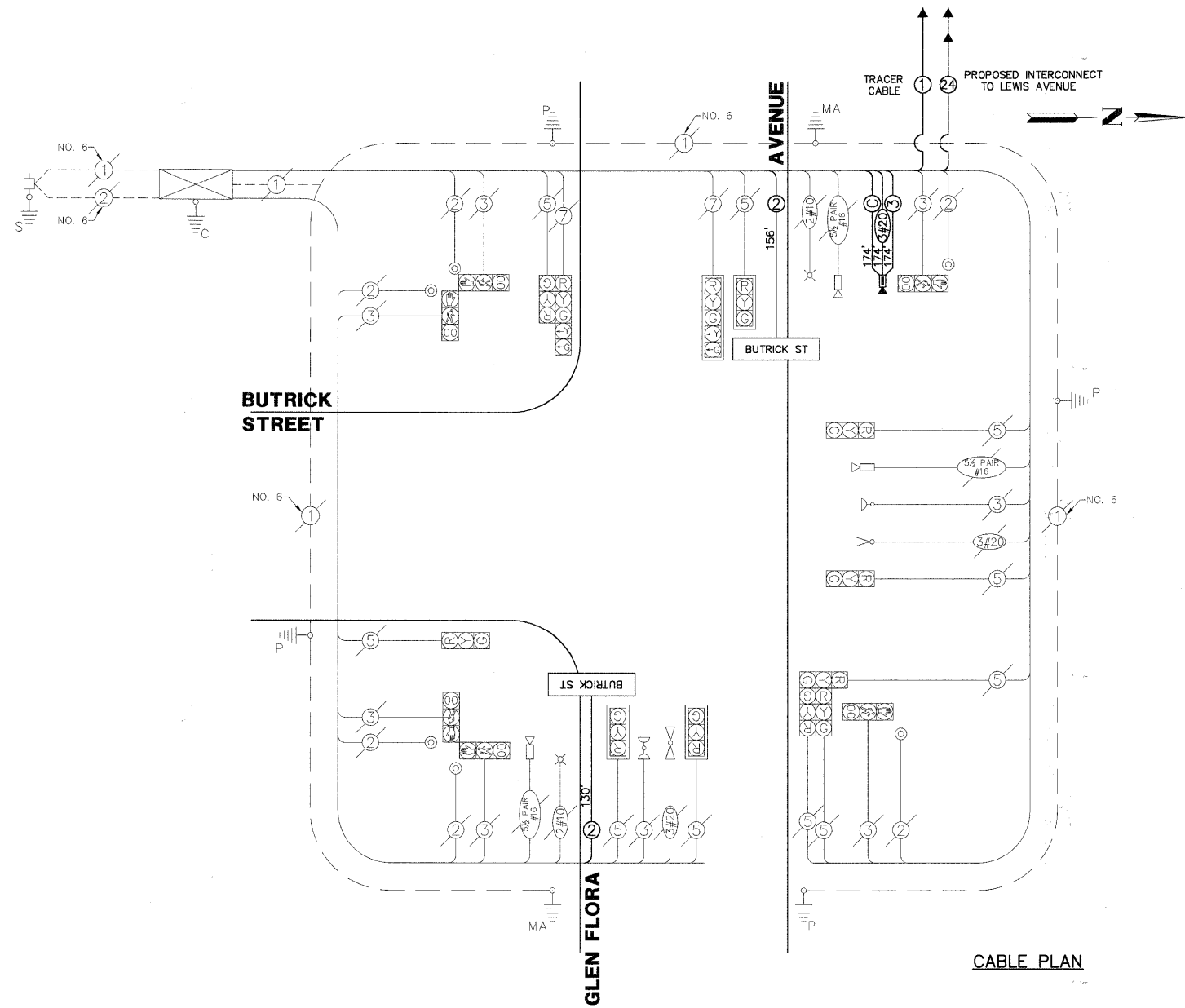


SCHEDULE OF QUANTITIES

GLEN FLORA AVENUE AT BUTRICK STREET TRAFFIC SIGNAL MODERNIZATION

NO.	QUANT.	UNIT
1.	1	EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION (SPECIAL)
2.	1	EACH FULL-ACTUATED CONTROLLER IN EXISTING CABINET (SPECIAL)
3.	1	EACH TRANSCEIVER - FIBER OPTIC
4.	286	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
5.	174	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
6.	1	EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
7.	174	FOOT ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, GROUNDED
8.	174	FOOT ELECTRIC CABLE IN CONDUIT, COAXIAL
9.	2	EACH L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN
10.	1	EACH REMOTE-CONTROLLED VIDEO SYSTEM
11.	1	EACH QUAD ENCODER
12.	1	EACH VIDEO ENCODER
13.	1	EACH LAYER II (DATA LINK) SWITCH

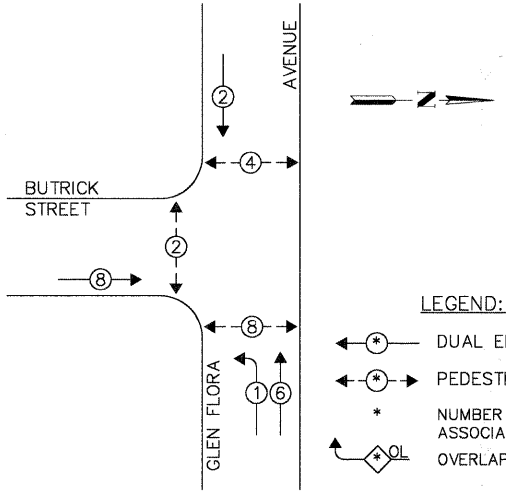


CABLE PLAN

CABLE PLAN LEGEND

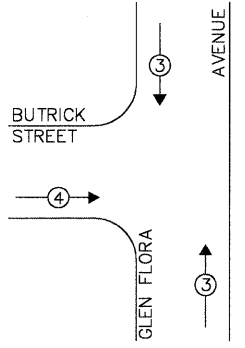
EXISTING	PROPOSED	DESCRIPTION
[Symbol]	[Symbol]	12" TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER
[Symbol]	[Symbol]	CONTROLLER CABINET
[Symbol]	[Symbol]	SERVICE INSTALLATION
[Symbol]	[Symbol]	TELEPHONE INSTALLATION
[Symbol]	[Symbol]	VEHICLE DETECTOR, INDUCTION LOOP
[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR
[Symbol]	[Symbol]	CONFIRMATION BEACON
[Symbol]	[Symbol]	PUSHBUTTON DETECTOR
[Symbol]	[Symbol]	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
[Symbol]	[Symbol]	GROUND CABLE IN CONDUIT, NO.6 SOLID COPPER (GREEN)
[Symbol]	[Symbol]	FIBER OPTIC CABLE IN CONDUIT, 24 SINGLEMODE
[Symbol]	[Symbol]	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD
[Symbol]	[Symbol]	RAILROAD CONTROL CABINET
[Symbol]	[Symbol]	ILLUMINATED SIGN "NO LEFT TURN"
[Symbol]	[Symbol]	ILLUMINATED SIGN "NO RIGHT TURN"
[Symbol]	[Symbol]	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H) OR CONTROLLER (C)
[Symbol]	[Symbol]	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
[Symbol]	[Symbol]	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
[Symbol]	[Symbol]	BELDEN 1694A RG-6/4 COAXIAL CABLE
[Symbol]	[Symbol]	ISDN LINE
[Symbol]	[Symbol]	LUMINAIRE
[Symbol]	[Symbol]	VIDEO DETECTION CAMERA
[Symbol]	[Symbol]	PTZ CAMERA
[Symbol]	[Symbol]	VIDEO COMMUNICATIONS CABINET
[Symbol]	[Symbol]	L.E.D. STREET NAME SIGN
[Symbol]	[Symbol]	UNINTERRUPTIBLE POWER SUPPLY

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		—

LEGEND:

- [Symbol] DUAL ENTRY PHASE
- [Symbol] PEDESTRIAN PHASE
- [Symbol] NUMBER REFERS TO ASSOCIATED PHASE
- [Symbol] OVERLAP

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	L.E.D.		
SIGNAL (RED)	12	135	10	0.50	60.0
SIGNAL (YELLOW)	12	135	19	0.10	22.8
SIGNAL (GREEN)	12	135	11	0.40	52.8
ARROW	4	135	9	0.10	3.6
PED.SIGNAL	6	90	9	1.00	54.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	2	-	250	0.50	250.0
L.E.D. ST. NAME SIGN	-	-	64	0.50	150.0
VIDEO SYSTEM	1	-	150	1.00	150.0
BATTERY BACKUP	-	-	25	1.00	-
TOTAL =					693.2

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

FOUNDATION (DEPTH)	(FT.)	CABLE SLACK	(FT.)	VERTICAL	(FT.)
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5
TYPE D - CONTROLLER	4	DOUBLE HANDHOLE	13	MAST ARM (L) POLE	20'+1-2'
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

ENERGY COSTS - BILLED TO: CITY OF WAUKEGAN
 (ADDRESS) 100 N. M.L.K. JR. AVENUE
 (ADDRESS) WAUKEGAN, IL
 ENERGY SUPPLY - CONTACT: NEW BUSINESS
 PHONE: (886) 639-3552
 COMPANY: COM-ED, LIBERTYVILLE

FILE NAME = 4135.315-TR1.dwg	USER NAME = GHA	DESIGNED - JRD	REVISED - 9/15/09 (LCDOT)
	PLOT SCALE = 1" = .08'	DRAWN - ZCW	REVISED - 9/25/09 (DDOT)
	PLOT DATE = 10/19/2009	CHECKED - DPB	REVISED - 10/19/09 (LCDOT)
		DATE - 10/19/09	REVISED -



CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES
GLEN FLORA AVENUE AT BUTRICK STREET

SCALE: NONE SHEET NO. 35 OF 86 SHEETS STA. TO STA.

F.A.P. RTE. 2730	SECTION 08-00259-00-TL	COUNTY LAKE	TOTAL SHEETS 86	SHEET NO. 35
				CONTRACT # 63344

GHA #4135.800

ILLINOIS FED. AID PROJECT