

CONSTRUCTION NOTES:

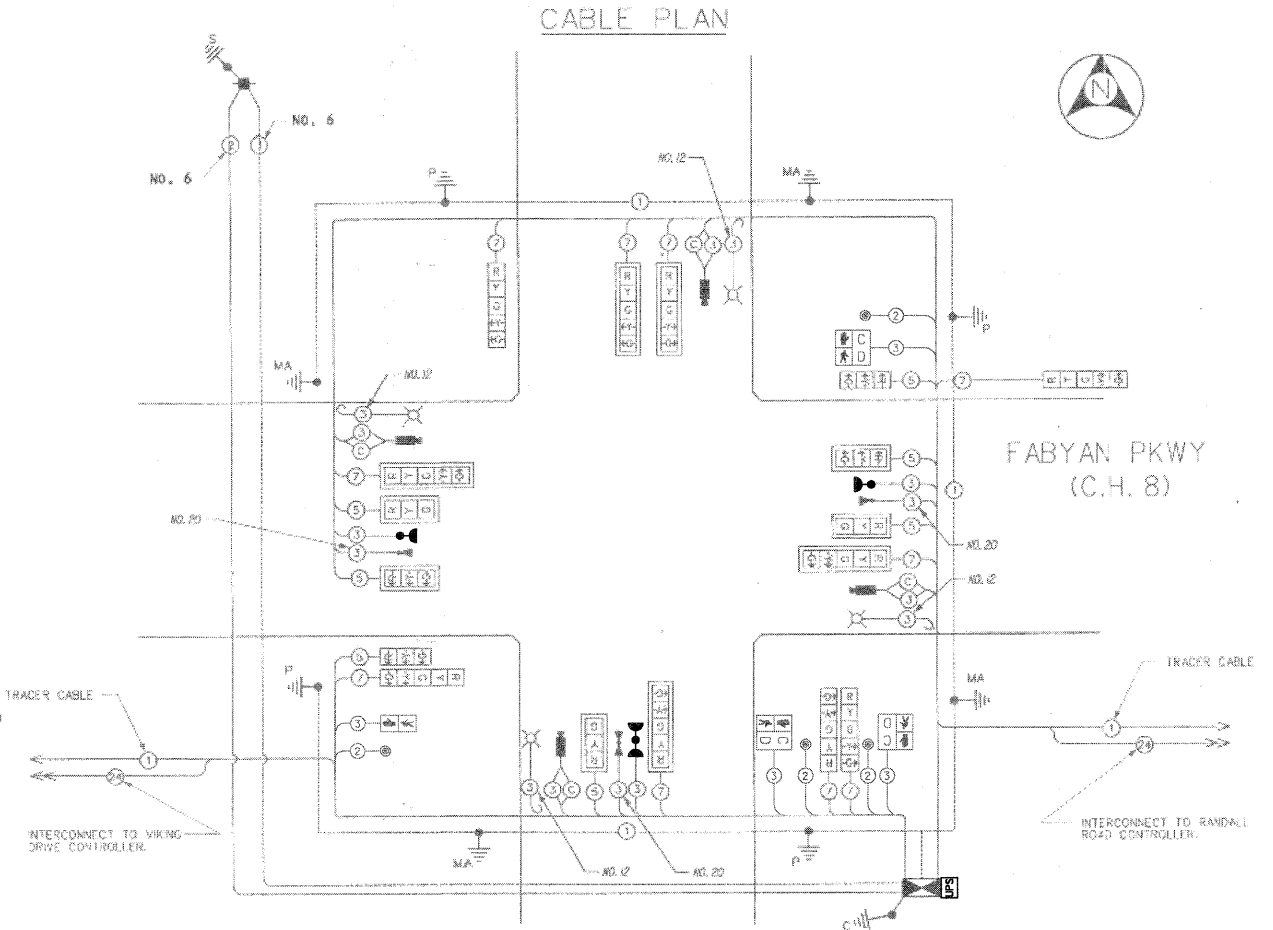
- ① REPLACE EXISTING CONTROLLER AND MALFUNCTION MANAGEMENT UNIT.
- ② ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D. INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- ③ REPLACE EXISTING FIBER OPTIC INTERCONNECT CENTER.
- ④ REPLACE EXISTING UNINTERRUPTIBLE POWER SUPPLY. NEW CABINET ENCLOSURE TO BE POWDER COATED BROWN TO MATCH EXISTING TRAFFIC SIGNAL CABINET. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- ⑤ UPGRADE EXISTING VIDEO DETECTION TO COMMUNICATE OVER ETHERNET.
- ⑥ INSTALL NEW 50"x67" PAD FOR UNINTERRUPTIBLE POWER SUPPLY.

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	24
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
MEDIA CONVERTER	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
TERMINATE FIBER IN CABINET	EACH	6
MODIFY VIDEO PROCESSING UNIT	EACH	1
FIBER OPTIC INTERCONNECT CENTER	EACH	1
SPLICE FIBER IN CABINET	EACH	6
UPS BATTERY BACK-UP CABINET	EACH	1
VIDEO ENCODER, VIDEO DETECTION SYSTEM	EACH	1
MALFUNCTION MANAGEMENT UNIT	EACH	1
ETHERNET MANAGED SWITCH, TYPE 1	EACH	1

CABLE PLAN LEGEND

- EXISTING**
- 1" (25mm) TRAFFIC SIGNAL SECTION
 - 2" (50mm) TRAFFIC SIGNAL SECTION
 - 12" (300mm) PEDESTRIAN SIGNAL SECTION
 - 12" (300mm) PEDESTRIAN SIGNAL SECTION
 - CONTROL CABINET
 - SERVICE INSTALLATION
 - TELEPHONE CONDUIT
 - MAGNETIC DETECTOR
 - EMERGENCY VEHICLE LIGHT DETECTOR
 - CONFIRMATION BEACON
 - PRECAUTION DETECTOR
 - VEHICLE DETECTOR, INDUCTIVE LOOP
 - VEHICLE DETECTOR, INDUCTIVE LOOP
 - VEHICLE DETECTOR, INDUCTIVE LOOP
 - VEHICLE DETECTOR, INDUCTIVE LOOP
- PROPOSED**
- SIGNAL FACE WITH BACKPLATE
 *INDICATES PROGRAMMED HEAD
 - 1000mm CONTROL CABINET
 - ILLUMINATED SIGN, FIBER OPTIC
 "NO RIGHT TURN"
 - ILLUMINATED SIGN, FIBER OPTIC
 "NO RIGHT TURN"
 - GROUND ROD AT HANDHOLE (6.10) (4.10) (4.10) (4.10)
 - GROUND ROD AT PEST (3.10) (4.10) (4.10) (4.10)
 - GROUND ROD AT ELECTRIC SERVICE INSTALLATION
 - GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER GREEN
 - NO. 6/25/25 MM 12F & 5M 12F, FIBER OPTIC CABLE
 - NO. 6/25 COAXIAL CABLE
 - VIDEO DETECTION CAMERA
 - TERMINATE, SOUTH, VIDEO, MOUNT
 (4.10) (4.10) (4.10) (4.10) (4.10) (4.10)
- NOTE: ALL NEW GROUND BARS SHALL BE 3/4" X 2" (19mm X 50mm) COPPER CLAD. THE COST SHALL BE INCURRED TO THE COST OF INSTALLATION.



THE LIGHT DETECTORS AND LIGHT DETECTOR AMPLIFIER FOR THIS PROJECT SHALL BE "3M OPTICOM" TO MEET LOCAL FIRE DEPARTMENT REQUIREMENTS.

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

NOTE: ALL TRAFFIC SIGNAL POSTS, POLES, MAST ARM ASSEMBLY, CONTROLLER CABINET, SHROUDS, LIGHTING MAST ARMS AND LUMINAIRES SHALL BE POWDER COATED "DARK BRONZE."

ALL INDICATIONS SHALL BE LED

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH, AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOVED LAWNS SHALL BE REPLACED WITH AN APPROVED SOB, AND ALL DAMAGE TO UNMOVED FIELDS SHALL BE SEEDER IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

I.B.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE	LED XX OPERATIONS	TOTAL WATTAGE	
SIGNAL (RED)	17	135	17	0.50	144.5
(YELLOW)	13	135	25	0.25	81.25
(GREEN)	13	135	15	0.25	65.75
ARROW	28	135	12	0.10	33.6
PED. SIGNAL	90	25	1.00		
CONTROLLER	1	100	1.00		100
ILLUM. SIGN	84		0.05		
LUMINAIRE	4	310		0.50	620
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	1025.1

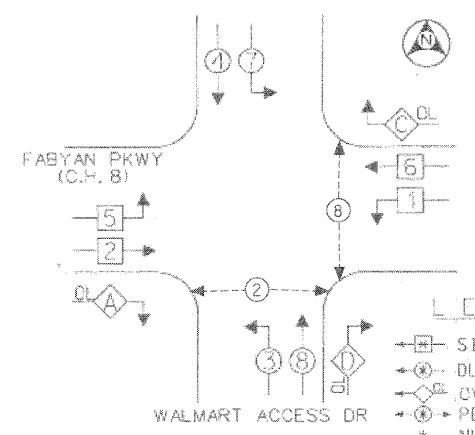
ENERGY SUPPLY - CONTACT: MS. JENNIFER HILKENANN
 PHONE: (630) 232-1503
 COMPANY: CITY OF GENEVA

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.1)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20 (6.1)
E - M ARM POLE		SIGNAL POST	2 (0.6)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.3)	PED. PUSHBUTTON	6 (1.8)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.3)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.3)	POST MOUNTED	6 (1.8)

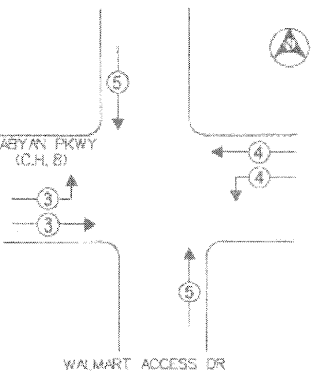
RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PROTECTED PHASE
A	3
B	1
C	7

CONTROLLER SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	→	←	↑

LEGEND

- SINGLE ENTRY PHASE
- ⊕ DUAL ENTRY PHASE
- ◊ OVERLAP
- ⊙ PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE.

PHASE DESIGNATION DIAGRAM



METRO TRANSPORTATION GROUP, INC.
 TRAFFIC ENGINEERING, TRANSPORTATION PLANNING AND SIGNAL SYSTEMS/DESIGN
 1300 GREENBROOK, HANOVER PARK, IL 60133 PH# 630 213-1000

REVISIONS

NO.	DATE	DESCRIPTION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES

FABYAN PKWY (C.H. 8) @ WALMART ACCESS DR
 BATAVIA/GENEVA, ILLINOIS

FILE NAME: 07...ca...dgn
 DATE: JAN. 30, 2004
 PROJECT NO.: #0307-26