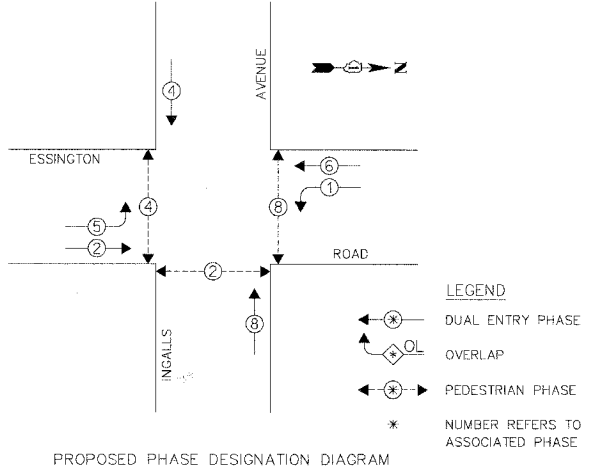


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326	05-00395-00-TL	WLL	31	14
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO: 83992				

**CABLE PLAN LEGEND**

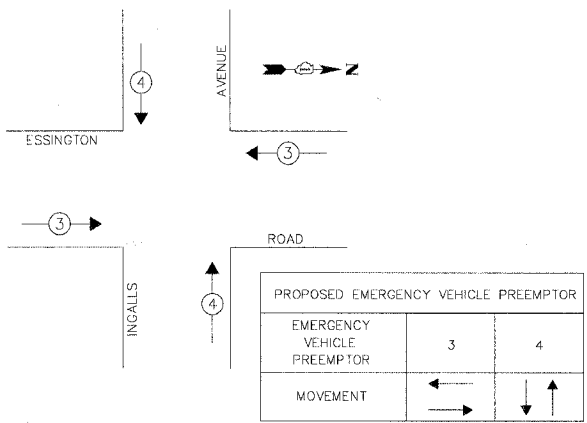
EXISTING	PROPOSED	DESCRIPTION
[Symbol]	[Symbol]	8" (200mm) TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	CONTROLLER CABINET
[Symbol]	[Symbol]	SERVICE INSTALLATION
[Symbol]	[Symbol]	TELEPHONE INSTALLATION
[Symbol]	[Symbol]	VEHICLE DETECTOR, INDUCTION LOOP
[Symbol]	[Symbol]	MAGNETIC DETECTOR
[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 NO. 62.5/125 2-MM12F SM12F
[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]	RADIO ANTENNA
[Symbol]	[Symbol]	COAXIAL CABLE

**PROPOSED CONTROLLER SEQUENCE**

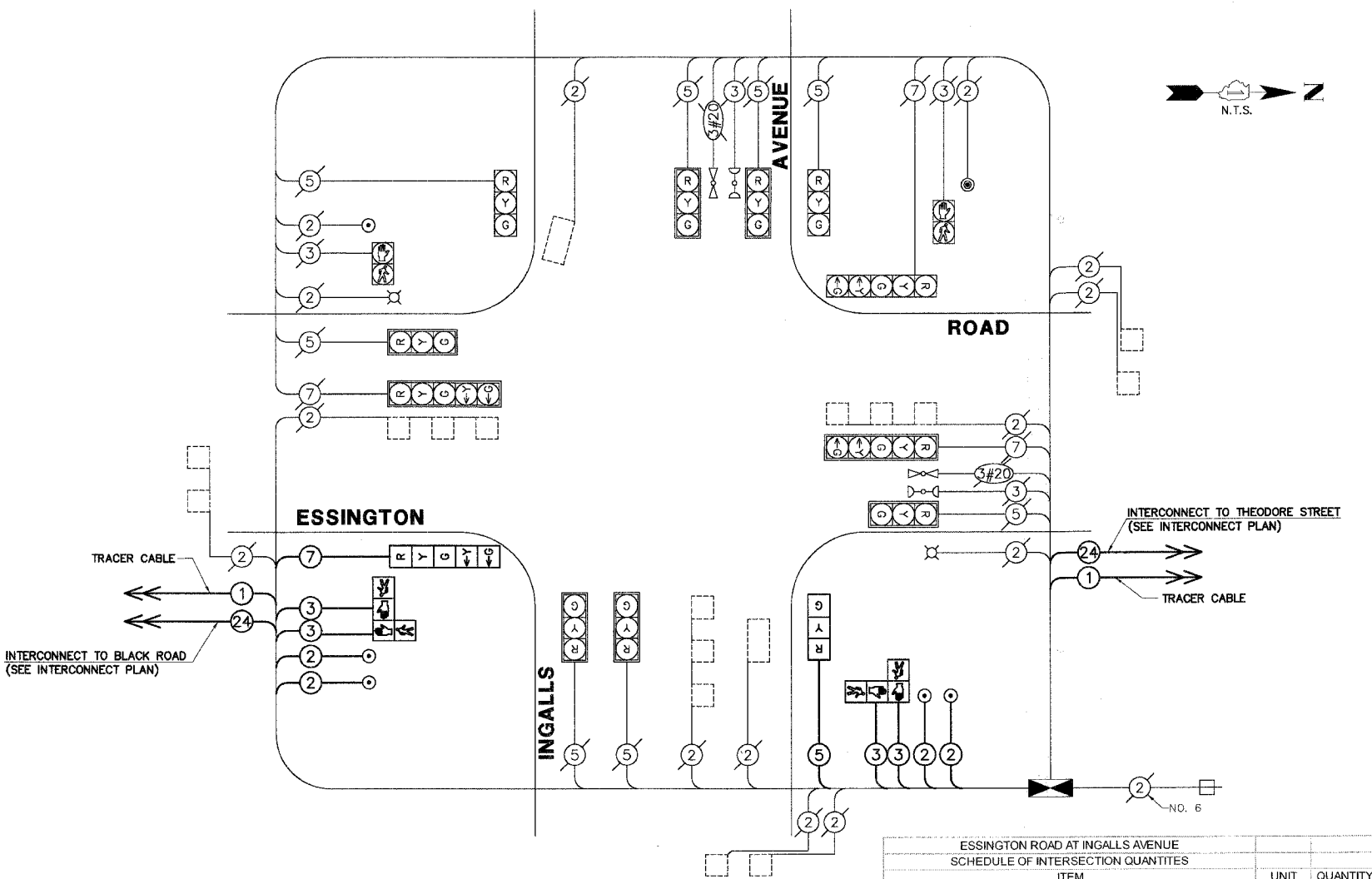


PROPOSED PHASE DESIGNATION DIAGRAM

**PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**CABLE PLAN**



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, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NEW CABINETS SHALL HAVE FRONT AND BACK DOORS AND A SEPARATE CIRCUIT BREAKER FOR STREET LIGHTING.

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

**ESSINGTON ROAD AT INGALLS AVENUE SCHEDULE OF INTERSECTION QUANTITIES**

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE I	SQ FT	1.46
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	9
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	9
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCIVER	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	389
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	425
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	61
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	152
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	1
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED	EACH	2
INDUCTIVE LOOP DETECTOR	EACH	8
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSHBUTTON	EACH	5
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1180
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1

**I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	11	135	0.50	742.5
(YELLOW)	11	135	0.25	371.25
(GREEN)	11	135	0.25	371.25
SIGNAL (RED)	2	17	0.50	17.0
(YELLOW)	2	25	0.25	12.5
(GREEN)	2	15	0.25	7.5
ARROW	6	135	0.10	81.0
ARROW	2	12	0.10	2.4
PED. SIGNAL	2	90	1.00	180.0
PED. SIGNAL	4	25	1.00	100.0
CONTROLLER	1	100	1.00	100.0
TOTAL =				1985.4

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 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20+L-2=
C - M. ARM POLE		SIGNAL POST	2 (1.0)		(6m+L-0.6m)=
	24" (600mm)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
	30" (750mm)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
	36" (900mm)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

PLANS PREPARED BY:  
**GEWALT HAMILTON ASSOCIATES, INC.**  
 Consulting Engineers & Surveyors  
 650 Forest Ridge Drive  
 Vernon Hills, IL 60061  
 (847) 476-9700  
 (847) 476-9701 Fax

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM**  
 ESSINGTON ROAD AT INGALLS AVENUE  
 JOLIET, ILLINOIS

SCALE: N.T.S.  
 DATE: DECEMBER 7, 2007

DRAWN BY: LB  
 DESIGNED BY: TCM  
 CHECKED BY: BLS

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT  
 SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: BETTY BRULC  
 PHONE: (815) 724-5052  
 COMPANY: COMED