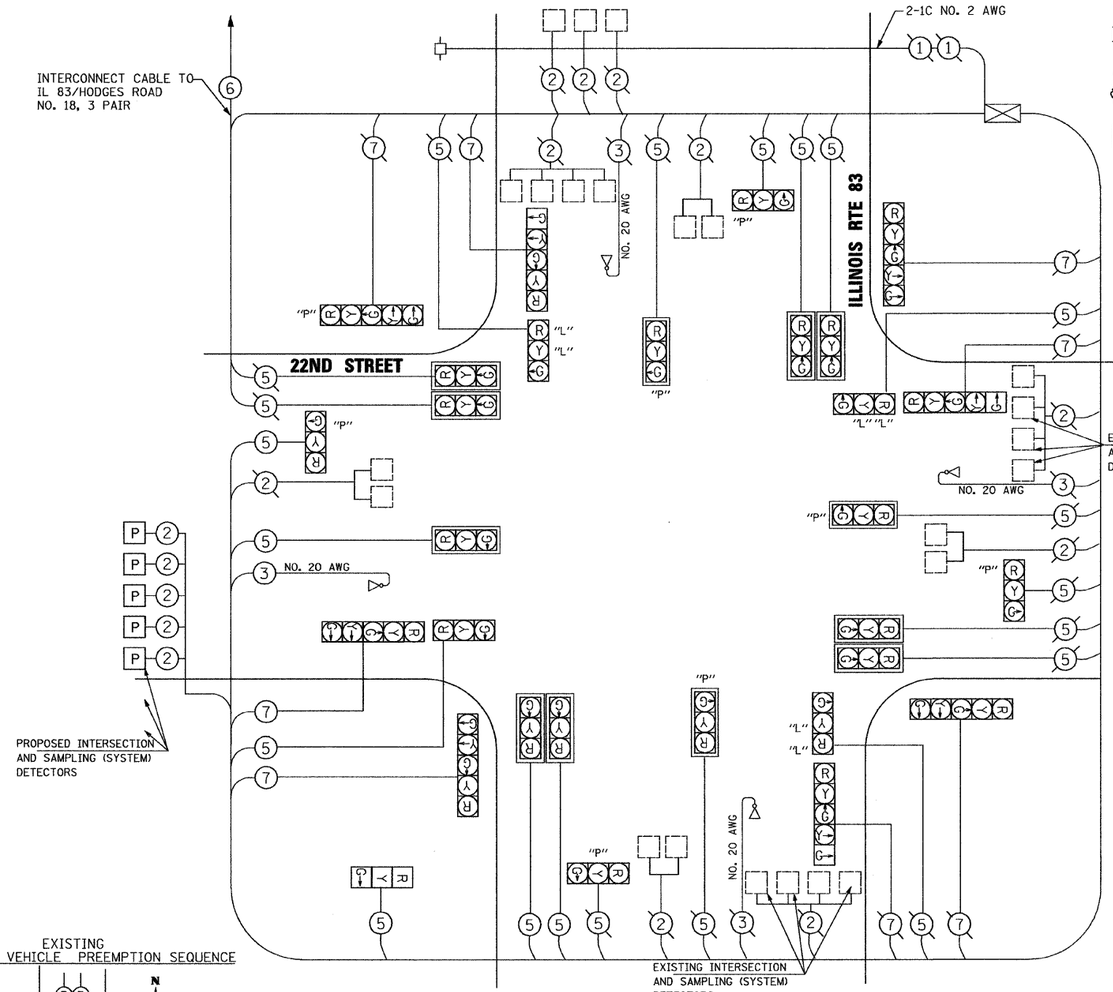
SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	220
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	25
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	39
CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	270
HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	284
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5C	FOOT	3371
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 7C	FOOT	1121
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	3440
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	5
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
PREFORMED DETECTOR LOOP	FOOT	255
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	1612
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	572
TEMPORARY TRAFFIC SIGNAL INTERCONNECT	EACH	1



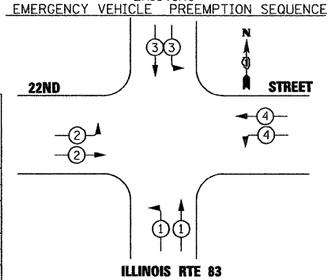
ILLINOIS RTE 83
CABLE PLAN

CABLE PLAN LEGEND

EXISTING	PROPOSED	
G	G	8" (200mm) TRAFFIC SIGNAL SECTION
R	R	12" (300mm) TRAFFIC SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
	04	12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER
		CONTROLLER CABINET
		SERVICE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
2	2	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
R Y G Y G "P"	R Y G Y G "P"	SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD. "L" INDICATES LOUVERED VISOR.
	"E"	RAILROAD CONTROL CABINET
	"E"	ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
	"E"	ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
H/C	H/C	GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER
P	P	GROUND ROD AT POST OR MAST ARM POLE
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
24	24	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F & SM12F
	UPS	UNINTERRUPTIBLE POWER SUPPLY (UPS)
P	P	PREFORMED LOOP DETECTION

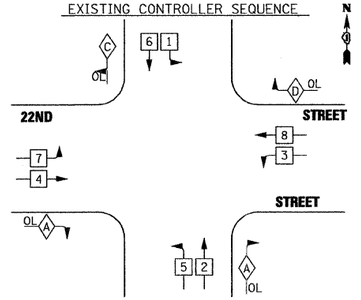
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS SIGNAL SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	1	2	3	4
MOVEMENT				

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

LEGEND

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

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
A	=	2	+	3
B	=	4	+	5
C	=	6	+	8
D	=	8	+	1

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

TYPE	NO. OF LAMPS	WATTAGE INCAND.	WATTAGE L.E.D.	OPERATION	TOTAL WATTAGE
SIGNAL (RED)	29	135	17	0.50	246.5
(YELLOW)	29	135	25	0.25	181.3
(GREEN)	29	135	15	0.25	108.8
ARROW	16	135	12	0.10	19.2
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
VIDEO VEH. SENSOR		15	15	1.00	
FLASHER				0.50	
				TOTAL	655.7

FOUNDATION (DEPTH)	(FEET) (m)
TYPE A - POST	4 , (1.2)
D - CONTROLLER	4 , (1.2)
E - M. ARM POLE	, ( )
24" (600mm)	10 , (3.0)
30" (600mm)	15 , (4.5)
42"	15 , (4.5)

CABLE SLACK	(FEET) (m)
HANDHOLE	6.5 , (2.0)
DOUBLE HANDHOLE	13 , (4.0)
SIGNAL POST	2 , (1.0)
CONTROLLER CAB.	1 , (0.5)
FIBER OPTIC	13 , (4.0)
ELECTRIC SERVICE	1 , (0.5)
GROUND CABLE	1 , (0.5)

VERTICAL	(FEET) (m)
ALL FOUNDATION	1.0 , (2.0)
MAST ARM (L) POLE	20'+L-2 = (6m+L-0.6m)=
BRACKET MOUTED	13 , (4.0)
PED. PUSHBOTTON	4 , (1.2)
ELECTRIC SERVICE	13.5 , (4.1)
SERVICE TO GROUND	13. , (4.1)
POST MOUNTED	6 , (1.8)

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

ENERGY SUPPLY - CONTACT: DEB RANKIN
PHONE: 630-691-4379
COMPANY: COMMONWEALTH EDISON

MILLENNIA ENGINEERING
200 22ND Street, Suite 216, Lombard, IL 60148
630.705.0110 voice, 630.839.2566 fax
www.millenniaeng.com

DESIGNED	TVN	REVISED	-
DRAWN	TVN	REVISED	-
CHECKED	RPD	REVISED	-
DATE	04/01/2010	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

22ND STREET AT ILLINOIS RTE 83
CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND SCHEDULE OF QUANTITIES

SCALE: N/A | SHEET NO.193B OF 362 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1453	55WRS	DUPAGE	362	214E
		CONTRACT NO. 60D12		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

TS62

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USER NAME = Millennia Engineering