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
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
		TELEPHONE CONNECTION
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSH-BUTTON DETECTOR
		VEHICLE DETECTOR, INDUCTION LOOP
2	2	DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
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
		SIGNAL FACE W/BACKPLATE. "P" INDICATES PROGRAMMED HEAD
"E"	"E"	RAILROAD CONTROL CABINET
"E"	"E"	ILLUMINATED SIGN "NO LEFT TURN"
"E"	"E"	ILLUMINATED SIGN "NO RIGHT TURN"
H/C C		GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
P P		GROUND ROD AT POST (P), OR MAST ARM POLE (MA)
S S		GROUND ROD AT ELECTRIC SERVICE INSTALLATION

SCHEDULE OF QUANTITIES
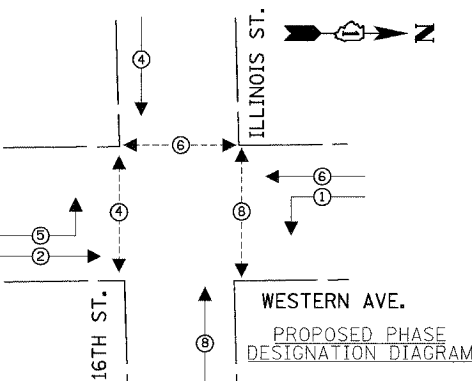
ITEM	UNIT	QUANTITY
RELOCATE SIGN PANEL, TYPE 1	SQ FT	27
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	53
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	69
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	125
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	111
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	618
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	911
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1548
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	675
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1914
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	63
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE. 30 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE D	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
DRILL EXISTING HANDHOLE	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	9
DETECTOR LOOP, TYPE I	FOOT	629
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	5
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	5159
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
SERVICE INSTALLATION, GROUND MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6, 1C	FOOT	460
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED & SHIELDED	FOOT	128
UNINTERRUPTIBLE POWER SUPPLY	EACH	1

ILLINOIS STREET

FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F

INTERCONNECT TO US ROUTE 30

NO. 14 1/C (TRACER CABLE)

INTERSECTION & SAMPLING (SYSTEM) DETECTORS

WESTERN AVENUE

16TH STREET

NO.6 (GREEN)

NO. 20

MA

INTERSECTION & SAMPLING (SYSTEM) DETECTORS

FIBER OPTIC CABLE NO. 62.5 125 MM 12F SM 12F

INTERCONNECT TO NORTH STREET

NO. 10 1/C (TRACER CABLE)

NO.6

CABLE PLAN

CONTROLLER SEQUENCE

ILLINOIS ST.

WESTERN AVE.

16TH ST.

EXISTING PHASE DESIGNATION DIAGRAM

CONTROLLER SEQUENCE

ILLINOIS ST.

WESTERN AVE.

16TH ST.

PROPOSED PHASE DESIGNATION DIAGRAM
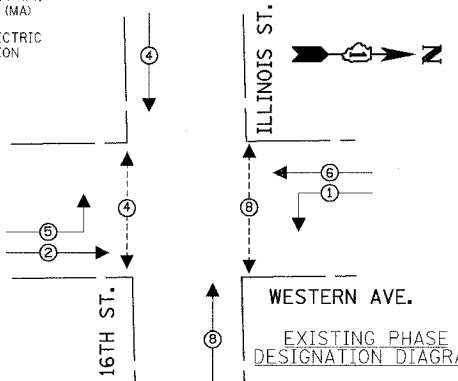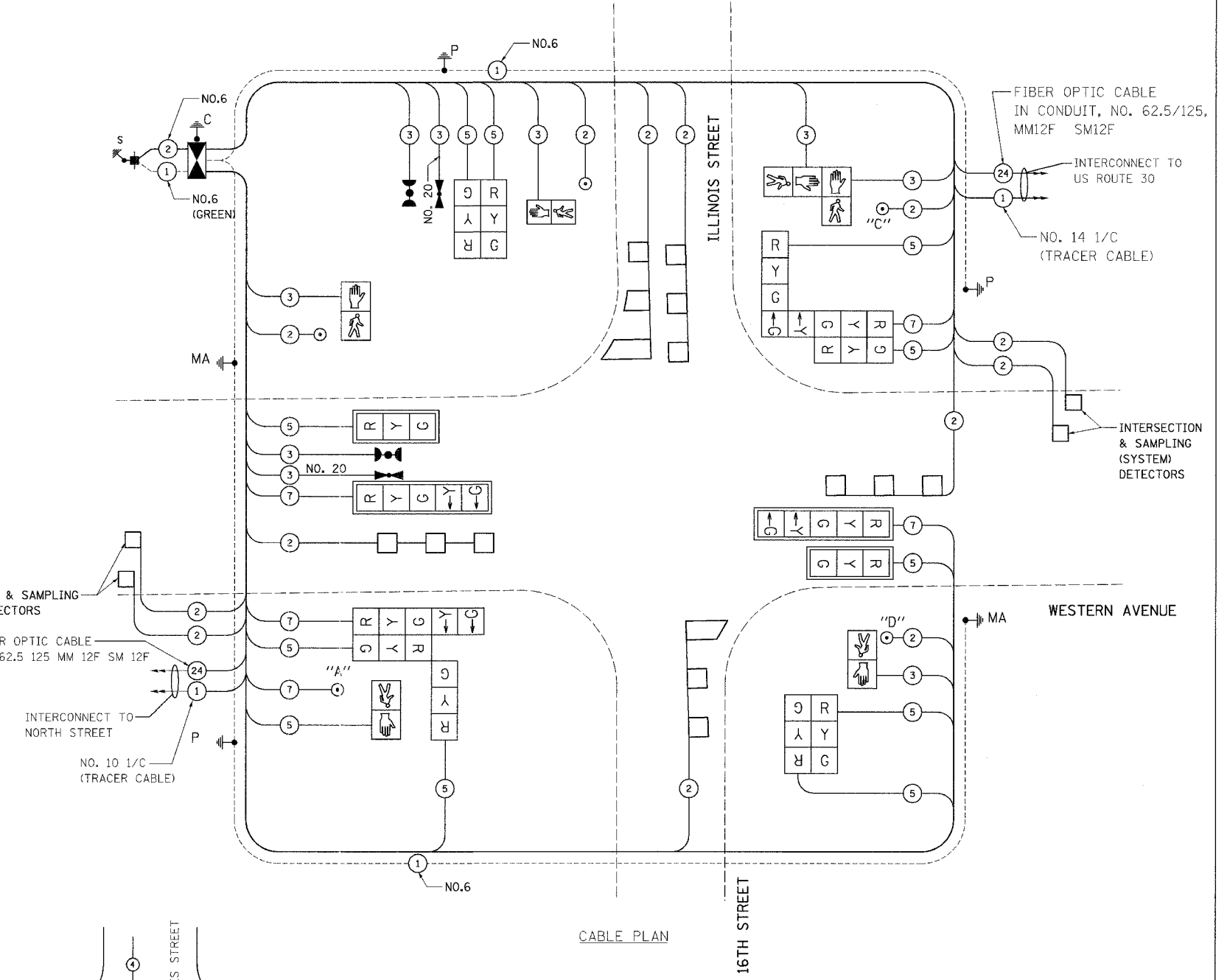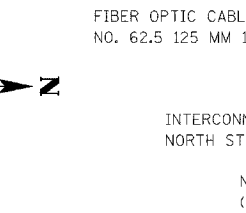
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	52.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	6	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
				TOTAL =	518.6

LEGEND

- DUAL ENTRY PHASE
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE
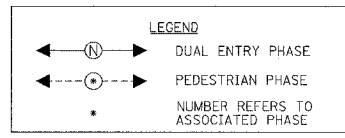
FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2,0)	ALL FOUNDATIONS	3.0 (1,0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4,0)	MAST ARM (L) POLE	20.0 (6,0)
E - M. ARM POLE		SIGNAL POST	0 (0,0)	BRACKET MOUNTED	13 (4,0)
24" (600mm)	10 (3,0)	CONTROLLER CAB.	0 (0,0)	SIGNAL POST	6 (2,0)
30" (750mm)	15 (4,6)	FIBER OPTIC	13 (4,0)	PED. PUSH-BUTTON	3 (1,0)
		ELECTRIC SERVICE	13 (4,0)	ELECTRIC SERVICE	13.5 (4,1)
		GROUND CABLE	1 (0,5)	SERVICE TO GROUND	13.5 (4,1)
				POST MOUNTED	13 (4,0)

WESTERN

ILLINOIS STREET

AVENUE

16TH STREET

EMERGENCY VEHICLE PREEMPTION SEQUENCE

PUSH-BUTTON NOTES:

1. PUSH-BUTTON "C" SHALL PLACE A CALL TO PHASES 6 AND 8.

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".
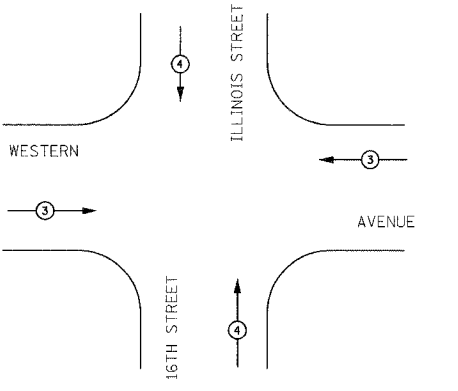
PROPOSED EMERGENCY VEHICLE PREEMPTOR		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	→	↑↓

REVISIONS	
NAME	DATE
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ILLINOIS DEPARTMENT OF TRANSPORTATION

**CABLE PLAN,
PHASE DESIGNATION DIAGRAM,
SCHEDULE OF QUANTITIES**

WESTERN AVE. AT ILLINOIS ST./16TH ST.

SCALE:	VERT. NONE	DRAWN BY JLA
	HORIZ.	DESIGNED BY KK/BPT
DATE 5/17/2007		CHECKED BY JTL/BPT