

PREPARED BY:  
**CEMCON, Ltd.**  
 Consulting Engineers, Land Surveyors & Planners  
 2800 White Oak Circle, Suite 100  
 Naperville, IL 60563-9475  
 Ph: 630.862.2100 Fax: 630.862.2199  
 E-Mail: info@cemcon.com Website: www.cemcon.com

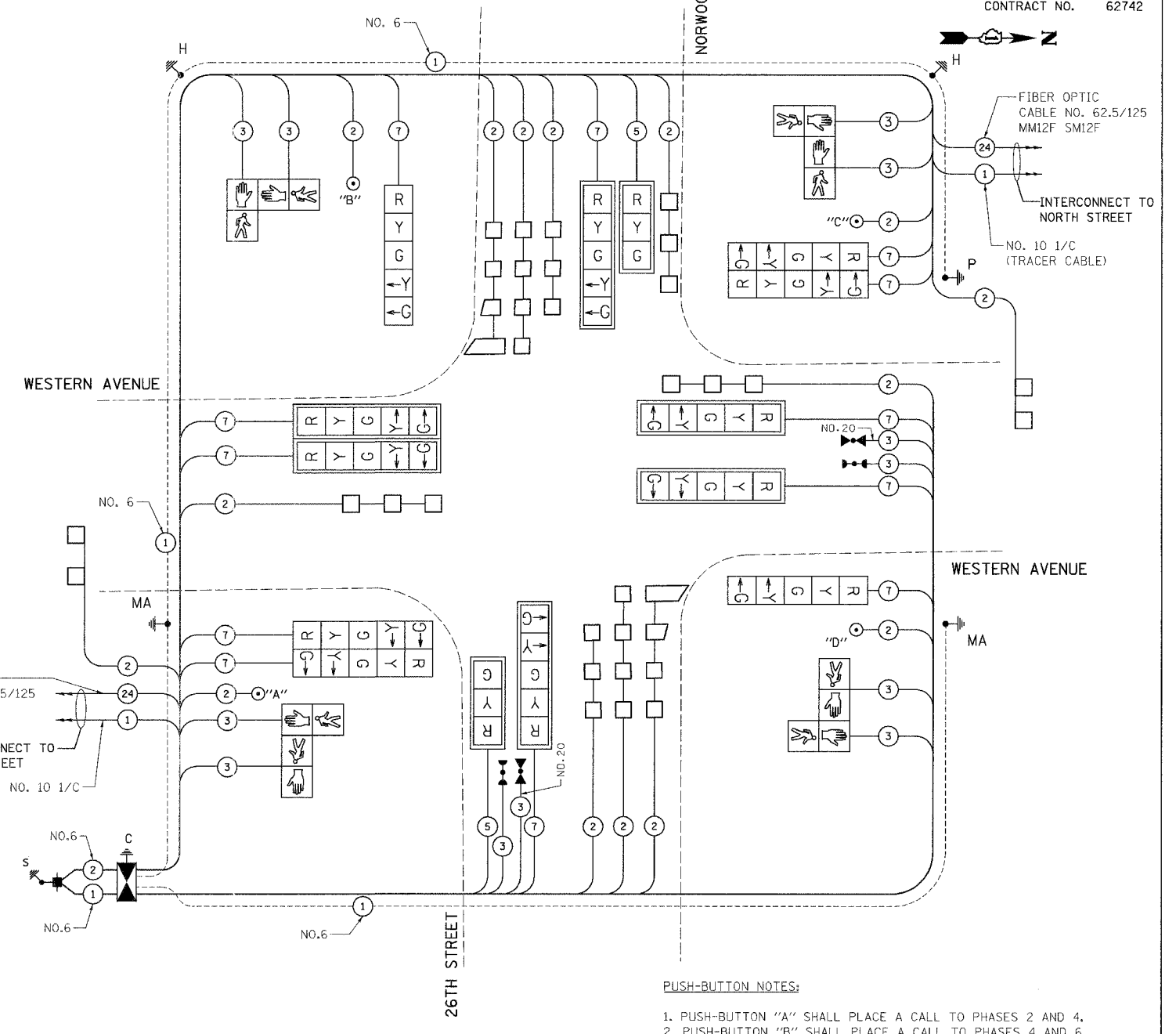
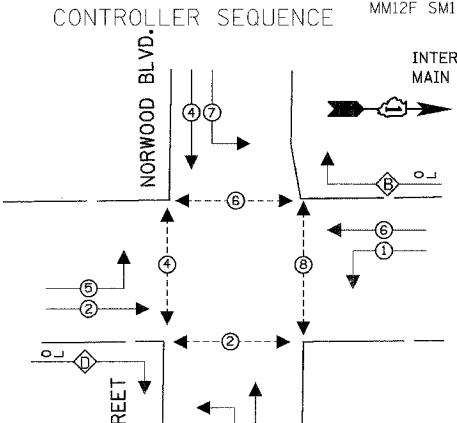
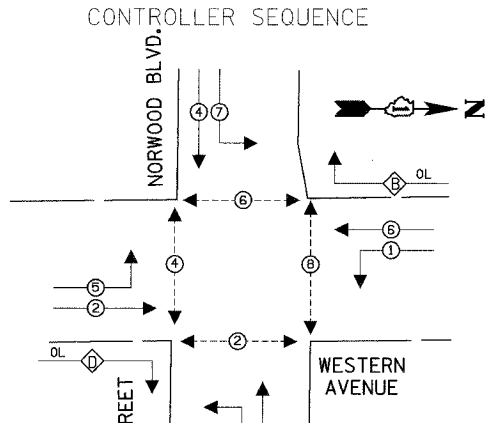
**CABLE PLAN LEGEND**

- |                 |                 |   |
|-----------------|-----------------|---|
| <b>EXISTING</b> | <b>PROPOSED</b> |   |
|                 |                 | 8" (200mm) TRAFFIC SIGNAL SECTION   |
|                 |                 | 12" (300mm) TRAFFIC SIGNAL SECTION  |
|                 |                 | 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 DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
|                 |                 | ① GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)  |
|                 |                 | ②④ FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F  |
|                 |                 |   |
|                 |                 | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD   |
|                 |                 |   |
|                 |                 |   |
|                 |                 | RAILROAD CONTROL CABINET  |
|                 |                 | ILLUMINATED SIGN "NO LEFT TURN"   |
|                 |                 | ILLUMINATED SIGN "NO RIGHT TURN"  |
|                 |                 | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (C), OR CONTROLLER (C)  |
|                 |                 | GROUND ROD AT POST (P), OR MAST ARM POLE (MA)   |
|                 |                 | GROUND ROD AT ELECTRIC SERVICE INSTALLATION   |

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QUANTITY
RELOCATE SIGN PANEL, TYPE 1	SQ FT	45
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	308
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	83
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	117
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	306
HANDHOLE	EACH	3
HEAVY-DUTY HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	493
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
TRANSCIEVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	842
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2004
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	666
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2618
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1863
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	62
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	2
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
DRILL EXISTING HANDHOLE	EACH	22
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	10
DETECTOR LOOP, TYPE I	FOOT	1102
RELOCATE LIGHT DETECTOR	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	7743
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	5
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6, 1C	FOOT	1088
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED & SHIELDED	FOOT	301
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
REBUILD EXISTING HANDHOLE TO HEAVY-DUTY HANDHOLE	EACH	1

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	101
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.			62742	



- PUSH-BUTTON NOTES:**
- PUSH-BUTTON "A" SHALL PLACE A CALL TO PHASES 2 AND 4.
  - PUSH-BUTTON "B" SHALL PLACE A CALL TO PHASES 4 AND 6.
  - PUSH-BUTTON "C" SHALL PLACE A CALL TO PHASES 6 AND 8.
  - PUSH-BUTTON "D" SHALL PLACE A CALL TO PHASES 2 AND 8.

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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. LED	%OPERATION		
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	17.5
ARROW	24	135	12	0.10	28.8
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	552.8
VILLAGE OF PARK FOREST 330 VICTORY DRIVE PARK FOREST, ILLINOIS 60466					
ENERGY SUPPLY CONTACT: Jlm Werner (708) 235-2694 PHONE: _____ COMPANY: Commonwealth Edison					

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)	PED. PUSH-BUTTON	6 (2.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	13 (4.0)

PROPOSED EMERGENCY VEHICLE PREEMPTOR	
EMERGENCY VEHICLE PREEMPTOR	MOVEMENT
3	4
⇐	⇐

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES**  
 WESTERN AVE AT NORWOOD BLVD/26TH ST  
 SCALE: VERT. NONE  
 HORIZ. 1"=20'  
 DATE 5/17/2007  
 DRAWN BY JLA  
 DESIGNED BY KK/BPT  
 CHECKED BY JTL/BPT

PLT DATE = 5/18/2007  
 FILE NAME = J:\Incoment\382086A\sign\shh\US\_C\_Nor26th.dgn  
 PLOT SCALE = 1"=20'  
 USER NAME = JLA