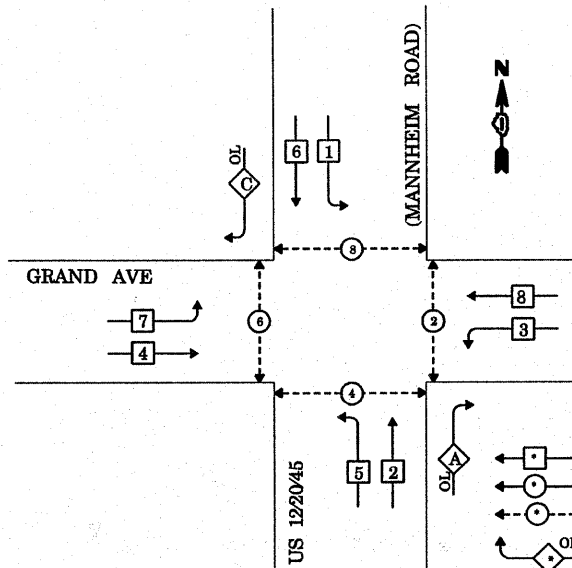


**CONTROLLER SEQUENCE**



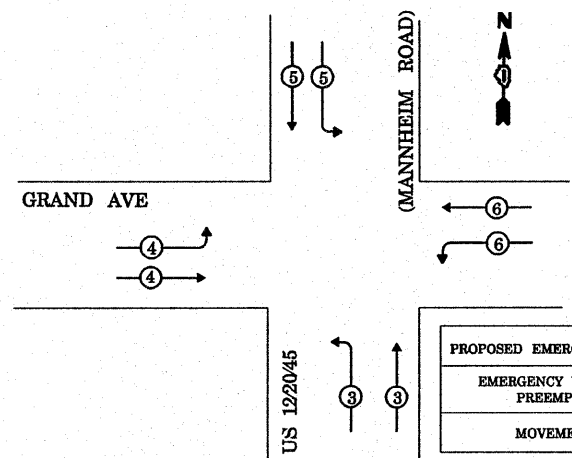
**LEGEND**  
 SINGLE ENTRY PHASE  
 DUAL ENTRY PHASE  
 PEDESTRIAN PHASE  
 OVERLAP  
 NUMBER REFERS TO ASSOCIATED PHASE

**PHASE DESIGNATION DIAGRAM**

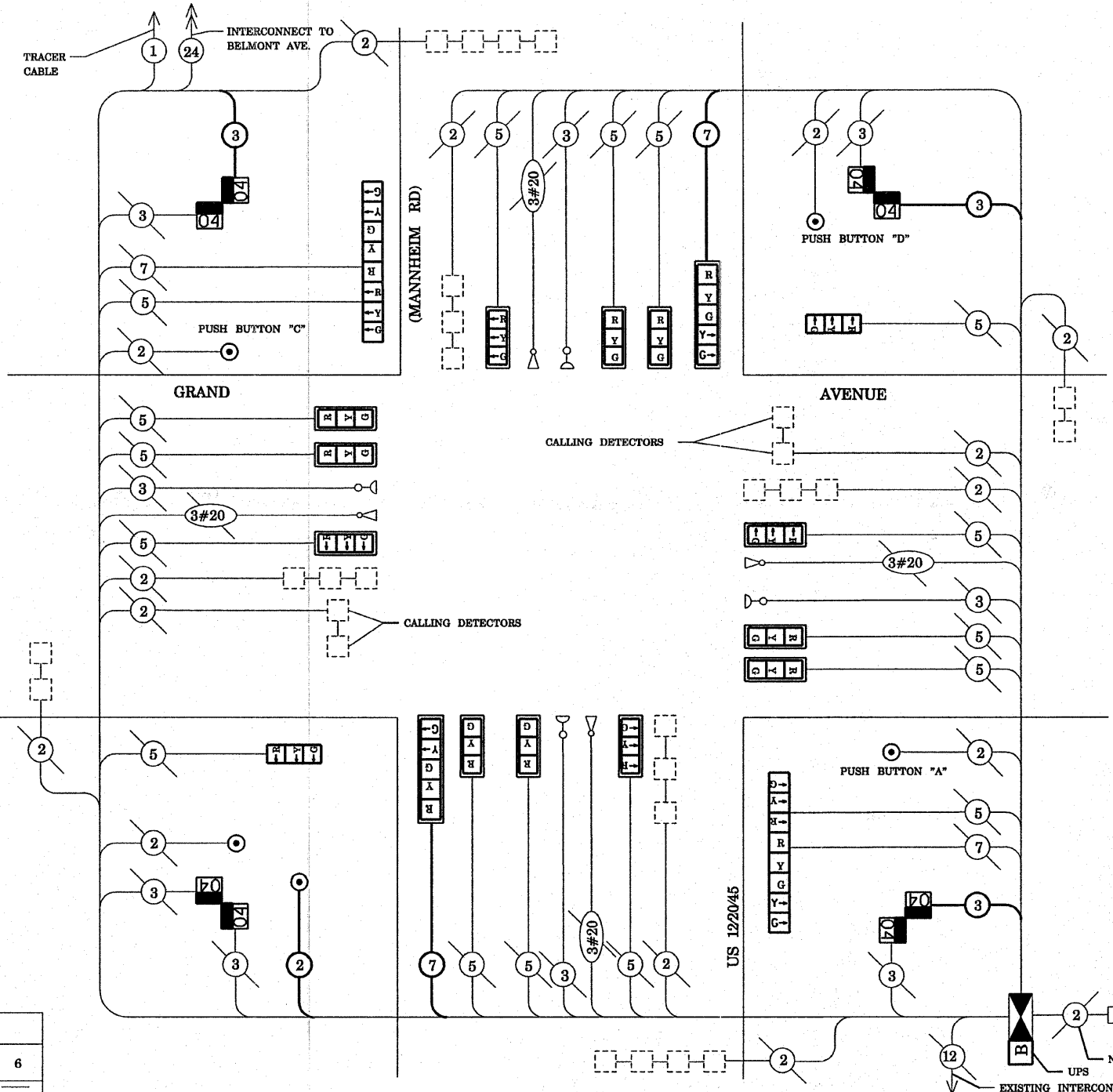
**RIGHT TURN OVERLAP PHASE DESIGNATION**

OVERLAP PHASE	PERMISSIVE PHASE	PROTECTED PHASE	DISPLAY
A =	2 +	3 -	2
C =	6 +	7 -	6

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



PROPOSED EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	↔	↔	↔	↔



**CABLE PLAN**

**CABLE PLAN LEGEND**

- | PROPOSED | EXISTING |   |
|----------|----------|---|
|          |          | 8" (200mm) TRAFFIC SIGNAL SECTION   |
|          |          | 12" (300mm) TRAFFIC SIGNAL SECTION  |
|          |          | 12" (300mm) PEDESTRIAN SIGNAL SECTION   |
|          |          | CONTROLLER CABINET  |
|          |          | SERVICE INSTALLATION  |
|          |          | TELEPHONE CONNECTION  |
|          |          | MAGNETIC DETECTOR   |
|          |          | PUSHBUTTON DETECTOR   |
|          |          | VEHICLE DETECTOR, INDUCTION LOOP  |
|          |          | DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
|          |          | SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD   |
|          |          | RAILROAD CONTROL CABINET  |
|          |          | ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"  |
|          |          | ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"   |
|          |          | GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER  |
|          |          | GROUND ROD AT POST OR MAST ARM POLE   |
|          |          | GROUND ROD AT ELECTRIC SERVICE INSTALLATION   |
|          |          | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)  |
|          |          | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F & SM12F   |
|          |          | MICROWAVE VEHICLE SENSOR  |
|          |          | VIDEO DETECTOR  |
|          |          | CLOSED CIRCUIT TV   |
|          |          | EMERGENCY VEHICLE LIGHT DETECTOR  |
|          |          | CONFIRMATION BEACON   |
|          |          | UNINTERRUPTIBLE POWER SUPPLY  |
|          |          | PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER   |

**SCHEDULE OF QUANTITIES**

QUANTITY	UNIT	ITEM	QUANTITY	UNIT	ITEM
27	FOOT	COMBINATION CURB AND GUTTER REMOVAL	10	EACH	INDUCTIVE LOOP DETECTOR
27	FOOT	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	5	EACH	PEDESTRIAN PUSH-BUTTON
0.1	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	1328	FOOT	REMOVE ELECTRIC CABLE FROM CONDUIT
0.1	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
0.1	L SUM	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	1	EACH	REMOVE EXISTING HANDHOLE
704	FOOT	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	12	EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
191	FOOT	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	2	EACH	SIGN/ HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED
1130	SQ FT	THERMOPLASTIC PAVEMENT MARKING REMOVAL	2	EACH	SIGNAL HEAD, L.E.D., 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	4	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	1	EACH	UNINTERRUPTIBLE POWER SUPPLY
1	EACH	TRANSCEIVER - FIBER OPTIC			
157	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C			
526	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C			
379	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C			
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.			
2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.			
14	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM			

THE END OF THE TRACER CABLE SHALL BE TIED TO A CABLE HOOK IN THE DOUBLE HANDHOLE CLOSEST TO THE CONTROLLER FOUNDATION.

NOTE: THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

NOTE: PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4  
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8  
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

TYPE	NO. LAMPS	WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	20	17	0.50	170.00
(YELLOW)	20	25	0.25	125.00
(GREEN)	20	15	0.25	75.00
ARROW	8	12	0.10	9.60
PED. SIGNAL	8	25	1.00	200.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN				
FLASHER				
ENERGY COSTS TO:				TOTAL = 679.60
VILLAGE OF FRANKLIN PARK 4500 BELMONT AVENUE FRANKLIN PARK, IL 60131				
ENERGY SUPPLY CONTACT: LINDA KLOC PHONE: (708)410-5313 COMPANY: COMMONWEALTH EDISON				