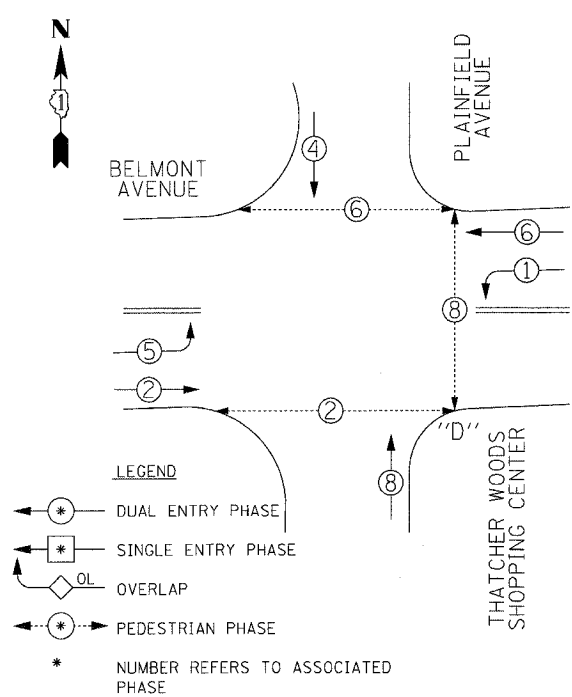


F.A.U. RT.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1374	0406 WRS	COOK	422	18
STA. _____ TO STA. _____		FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT		
D-91-106-07				

CONTROLLER SEQUENCE



LEGEND

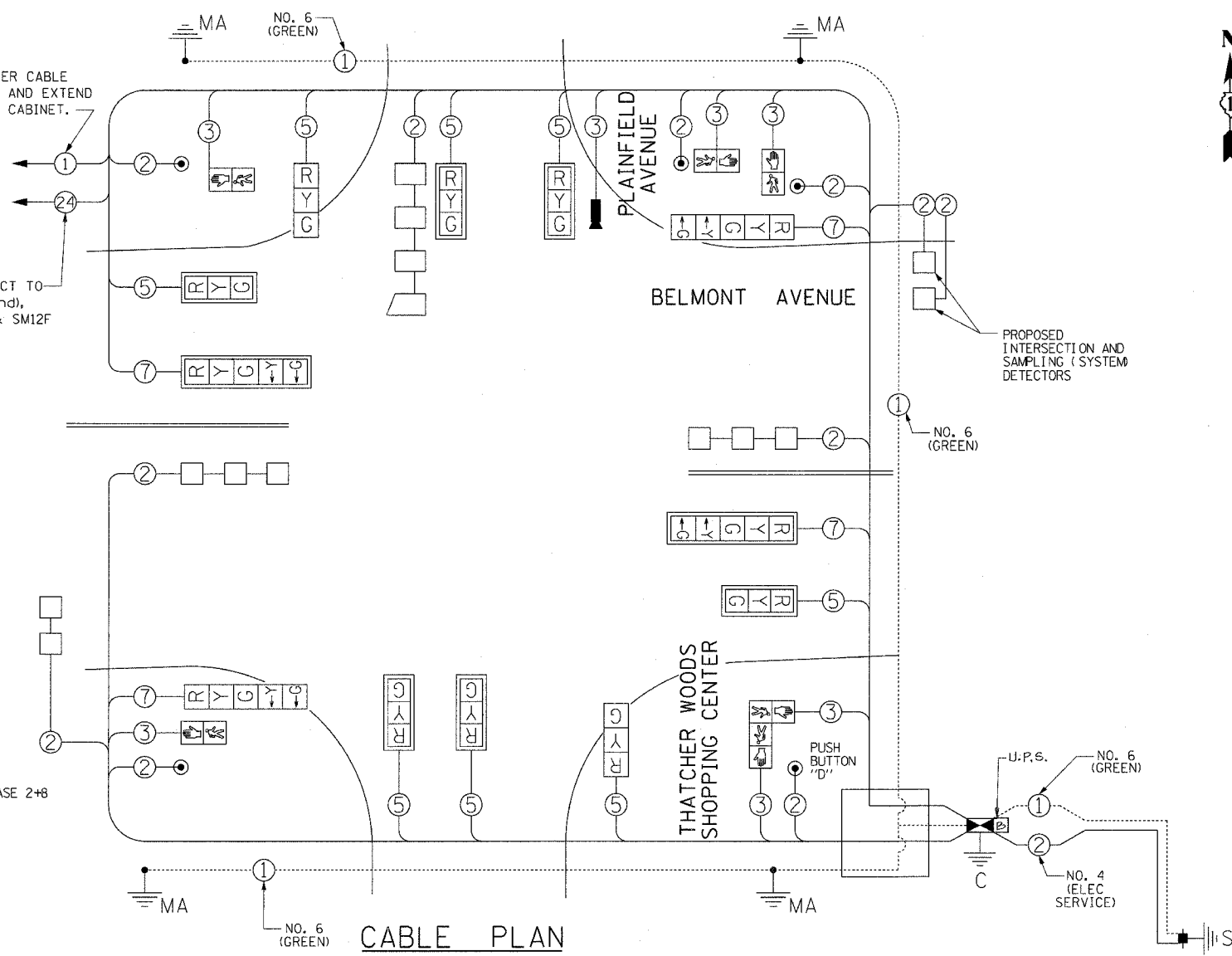
- ⊕ DUAL ENTRY PHASE
- ⊙ SINGLE ENTRY PHASE
- OL OVERLAP
- ⊖ PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

PROPOSED INTERCONNECT TO IL. R+e. 171(Cumberland), NO. 62.5/125, MM12F & SM12F

PUSH BUTTON "D" SHALL PLACE A CALL IN PHASE 2+8



CABLE PLAN

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY	ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SO FT	34.5	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 28 FT.	EACH	1
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	574	CONCRETE FOUNDATION, TYPE A	FOOT	4
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	6	CONCRETE FOUNDATION, TYPE C	FOOT	4
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	18	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	350	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	55	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	225	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
HANDHOLE	EACH	6	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
HEAVY-DUTY HANDHOLE	EACH	2	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	4
DOUBLE HANDHOLE	EACH	1	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	748	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1	INDUCTIVE LOOP DETECTOR	EACH	6
TRANSCIVER - FIBER OPTIC	EACH	1	DETECTOR LOOP, TYPE I	FOOT	607
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	639	PEDESTRIAN PUSH-BUTTON	EACH	4
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	911	SERVICE INSTALLATION, POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1292	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	842
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	591	VIDEO CAMERA DETECTION SYSTEM (COMPLETE)	L SUM	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1559	UPS BATTERY BACK-UP	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 4 2 C	FOOT	398	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM - LEVEL II	L SUM	1
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1			

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" (6m+L-0.6m)=
E - M. ARM POLE		SIGNAL POST	2 (1.0)		
30" (750mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
36" (900mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		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)

THE BRAND OF CONTROLLER SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM INSTALLATION.

CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
⊕	⊕	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
⊖	⊖	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.
①	①	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
②④	②④	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM12F
⊖	⊖	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
⊖	⊖	RAILROAD CONTROL CABINET
⊖	⊖	ILLUMINATED SIGN "NO LEFT TURN"
⊖	⊖	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
		VIDEO CAMERA DETECTOR
		UNINTERRUPTABLE POWER SUPPLY

NOTE: EQUIPMENT GROUND CONDUCTOR (GREEN COLOR CODED) SPLICE TO FRAME AND COVER IS REQUIRED FOR ALL HANDHOLES OR DOUBLE HANDHOLES THAT CARRY SIGNAL CABLES AND SERVICE CABLES.

REVISIONS	NAME	DATE
60% PRELIMINARY SUBMITTAL		01-22-07
90% PRE-FINAL SUBMITTAL		02-27-07
100% FINAL SUBMITTAL		03-12-07
REVISION 1		04-16-07

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES (VIDEO CAMERA DETECTION OPTION)
BELMONT AVENUE AT PLAINFIELD AVENUE
 SCALE: VERT. NONE
 HORIZ. NONE
 DATE: 04-16-07
 DRAWN BY: TPC
 DESIGNED BY: TPC
 CHECKED BY: ER

PLOT DATE * DATE *
 PLOT SCALE * SCALE *
 USER NAME * USER *

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	12	135	17	0.50	102.00
(YELLOW)	12	135	25	0.25	75.00
(GREEN)	12	135	15	0.25	45.00
ARROW	8	135	12	0.10	9.60
PED. SIGNAL	12	90	25	1.00	300.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN	0	84		0.05	0.00
FLASHER	0			0.50	0.00
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, ILLINOIS 60196-1096					TOTAL = 631.60
ENERGY SUPPLY CONTACT: MR. LARRY KESLINKE					
PHONE: (708) 410-5314					
COMPANY: COM. ED.					

INFRASTRUCTURE ENGINEERING, INC.
 33 W. MONROE ST., SUITE 1540
 CHICAGO, IL 60603-5322
 PHONE 312.425.9560
 FAX 312.425.9564