

RTE NO.	SECTION	COUNTY	TOTAL	SHEET #
F.A.P. 646	125W-1,RS-2	PEORIA	256	5A

CONTRACT NUMBER 88679

TRAFFIC SIGNALS (Y030-1F)						
CODE NUMBER	PAY ITEM	UNIT	TOTAL	FED ST CNTY 80/10/10 CITY	FED ST CNTY 80/10/10 COUNTY	FED ST TOWNSHIP 80/10/10 TOWNSHIP
* 80500200	SERVICE INSTALLATION, TYPE B	EACH	3	1	1	1
* M8100260	CONDUIT IN TRENCH, 50mm DIA., P V C	METER	2452	935.5	285	1231.5
* M8100280	CONDUIT IN TRENCH, 75mm DIA., P V C	METER	115.5	39.5	46	30
* M8100290	CONDUIT IN TRENCH, 90mm DIA., P V C	METER	44.5	22	11	11.5
* M8101470	CONDUIT PUSHED, 75mm DIA., P V C	METER	119	44.5	37.5	37
* M8101480	CONDUIT PUSHED, 90mm DIA., P V C	METER	70	19	24.5	26.5
* 81400700	HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	27	10	5	12
* 81400720	DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	3	1	1	1
* M8190200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	2612	997	342	1273
* 85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	3	1	1	1
* M8731220	ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 3C	METER	55 126	55 126		
* M8731240	ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 5C	METER	396	163		233
* M8731250	ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 7C	METER	1286	506	465	315
* M8731510	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 3 PAIR	METER	1380	474	429	477
* M8770750	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 10.36 METER	EACH	1			1
* M8770755	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 10.97 METER	EACH	1			1
* M8770770	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 12.80 METER	EACH	1	1		
* M8770780	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 15.24 METER	EACH	6	3	1	2
* M8780200	CONCRETE FOUNDATION, TYPE D	METER	3.3	1.1	1.1	1.1
* M8780400	CONCRETE FOUNDATION, TYPE E 750MM DIAMETER	METER	16.4		8.2	8.2
* MX878030	CONCRETE FOUNDATION TYPE E 900MM DIAMETER	METER	36.2	17.8	9.2	9.2
* 88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	19	6	7	6
* 88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2			2
* 88030080	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	10	4	4	2
* 88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	10	4	4	2
* 88102710	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	2	2		
* 88102740	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	1	1		
* 88200310	TRAFFIC SIGNAL BACKPLATE, LOUVERED, PLASTIC	EACH	29	10	11	8
* 88500100	INDUCTIVE LOOP DETECTOR	EACH	32	11	11	10
* M8860100	DETECTOR LOOP, TYPE I	METER	1,245	403	448	394
* MX871055	FIBEROPTIC CABLE IN CONDUIT, NO 62.5/125, MM12F SM12F	METER	2831	1811		1020
* M8770055	STEEL MAST ARM ASSEMBLY AND POLE, 10.36 METER	EACH	1			1
* M8770060	STEEL MAST ARM ASSEMBLY AND POLE, 10.97 METER	EACH	1			1
* M8770095	STEEL MAST ARM ASSEMBLY AND POLE, 15.24 METER	EACH	1			1

*SPECIALTY ITEM

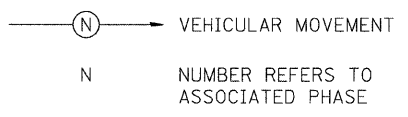
TRAFFIC SIGNALS (Y030-1F)						
CODE NUMBER	PAY ITEM	UNIT	TOTAL	FED ST CNTY 80/10/10 CITY	FED ST CNTY 80/10/10 COUNTY	FED ST TOWNSHIP 80/10/10 TOWNSHIP
* MX873027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	METER	458	158	141	159
* 88800100	PEDESTRIAN PUSH-BUTTON	EACH	4	4		
X0325977	TEMPORARY TRAFFIC SIGNAL INSTALLATION (LOCATION 1)	EACH	1			
X0325978	TEMPORARY TRAFFIC SIGNAL INSTALLATION (LOCATION 2)	EACH	1		1	
89502380	REMOVE EXISTING HAND HOLE	EACH	9	4	4	1
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	9	3	5	1

HIGHWAY LIGHTING (URBAN Y030-1E)						
CODE NUMBER	PAY ITEM	UNIT	TOTAL	100% CITY	100% COUNTY	100% TOWNSHIP
* 82102400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	8	4		4
* 82500605	LIGHTING CONTROLLER PHOTOCCELL RELAY	EACH	1			1
* X8250208	LIGHTING CONTROLLER PHOTOCCELL RELAY, INSTALL ONLY	EACH	1	1		
* M8170040	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	METER	690	350	50	290
* 82103900	LUMINAIRE, SODIUM VAPOR, MULTI-MOUNT, 250 WATT	EACH	2		2	

▲ SHEET ADDED
5/26/09

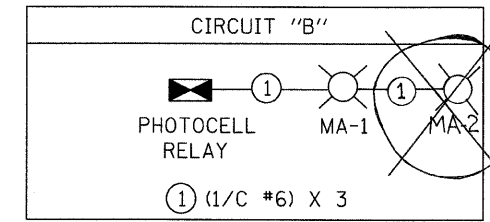
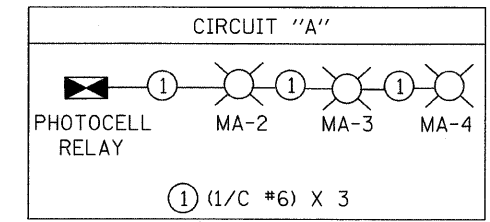
▲ REVISED 7-15-09

LEGEND



REFERRING TO STANDARD 857001, THE VEHICULAR PHASES USED ARE DESIGNATED BELOW.
CONTROLLER SPECIFIED: ECONOLITE AEC/3 TS-2 TYPE 2 IN TYPE IV CABINET.

LIGHTING CIRCUIT DIAGRAM



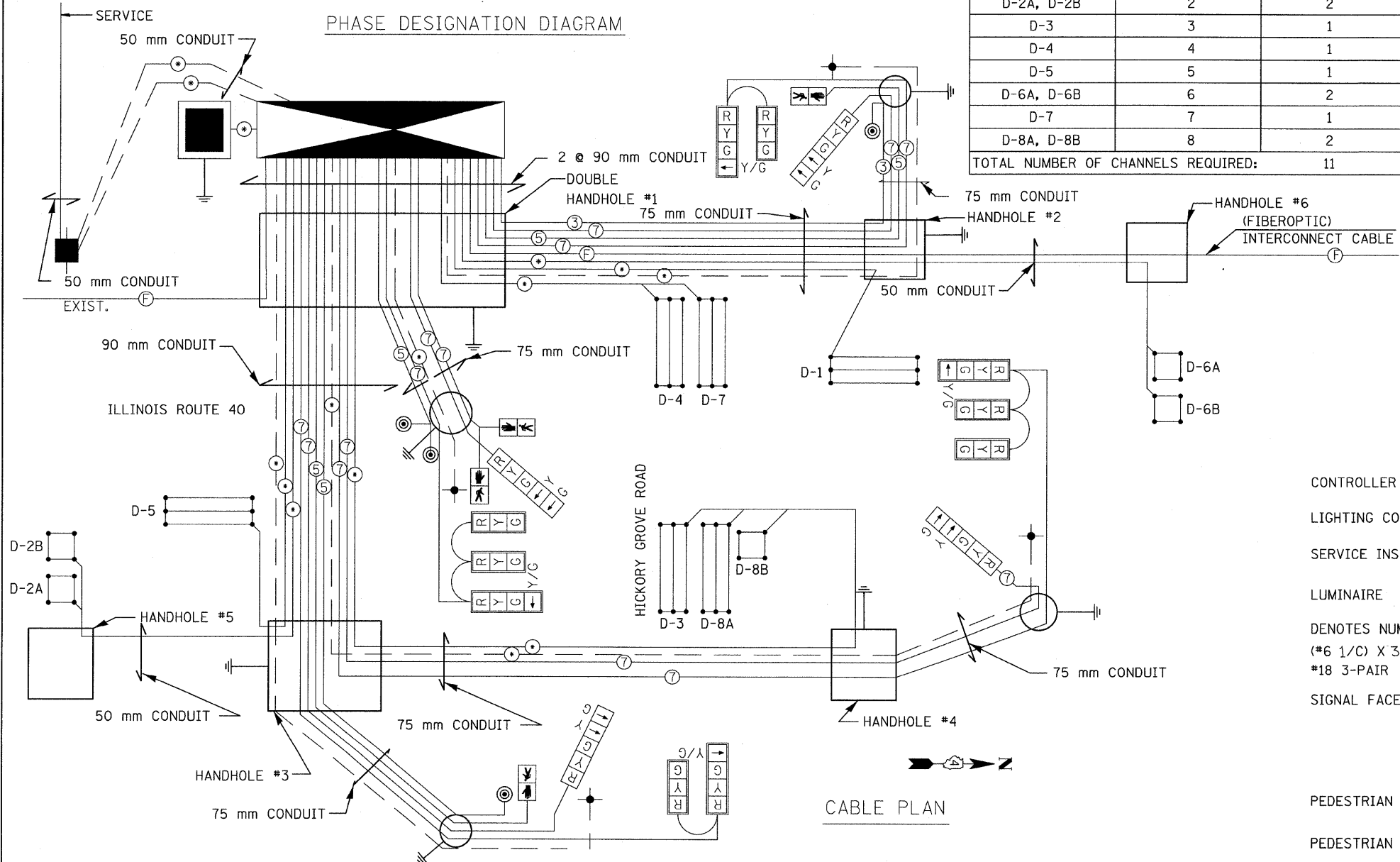
SCHEDULE OF QUANTITIES

CONDUIT IN TRENCH, 90mm DIA., PVC	22 M
CONDUIT IN TRENCH, 75mm DIA., PVC	39.5 M
CONDUIT IN TRENCH, 50mm DIA., PVC	935.5 M
CONDUIT PUSHED, 90mm DIA., PVC	19 M
CONDUIT PUSHED, 75mm DIA., PVC	44.5 M
HANDHOLE	10 EA.
DOUBLE HANDHOLE	1 EA.
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO.6	350 M
ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 18, 3 PAIR	474 M
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	158 M
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	55 M
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	171 M
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	506 M
INDUCTIVE LOOP DETECTOR	11 EA.
DETECTOR LOOP, TYPE 1	403 M
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F	1811 M
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 12.80 METER	1 EA.
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 15.24 METER	3 EA.
CONCRETE FOUNDATION, TYPE D	1.1 M
CONCRETE FOUNDATION, TYPE E, 900mm DIA.	17.8 M
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	6 EA.
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	4 EA.
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	4 EA.
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	1 EA.
PEDESTRIAN PUSH BUTTON	4 EA.
TRAFFIC SIGNAL BACKPLATE, LOUVERED	10 EA.
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	4 EA.
TEMPORARY TRAFFIC SIGNAL INSTALLATION, LOCATION NO. 1	1 EA.
LIGHTING CONTROLLER PHOTOCELL RELAY, INSTALL ONLY	1 EA.
SERVICE INSTALLATION, TYPE B	1 EA.
TRENCH AND BACKFILL FOR ELECTRICAL WORK	997 M
REMOVE EXISTING HANDHOLE	4 EA.
REMOVE EXISTING CONCRETE FOUNDATION	3 EA.
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	1 EA.
PEDESTRIAN SIGNAL HEAD, LED, 1 FACE, BRACKET MOUNTED	2 EA.

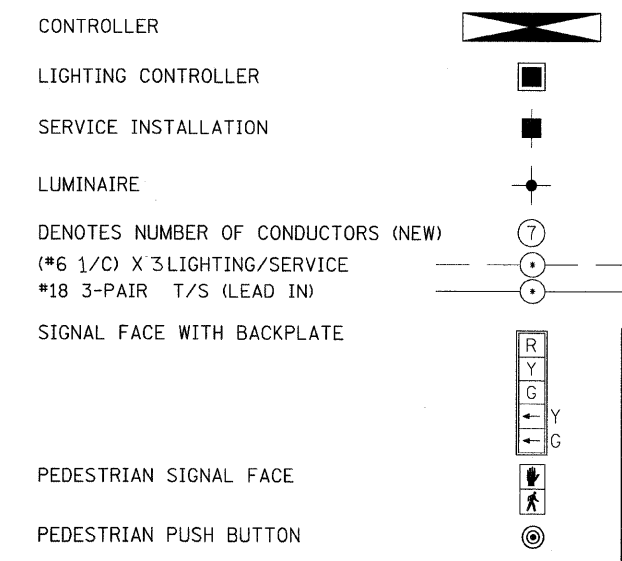
DETECTOR ASSIGNMENT SCHEDULE

DETECTOR LOOP	ASSIGNED PHASE	NO. OF CHANNELS REQUIRED
D-1	1	1
D-2A, D-2B	2	2
D-3	3	1
D-4	4	1
D-5	5	1
D-6A, D-6B	6	2
D-7	7	1
D-8A, D-8B	8	2
TOTAL NUMBER OF CHANNELS REQUIRED:		11

PHASE DESIGNATION DIAGRAM



CABLE PLAN LEGEND

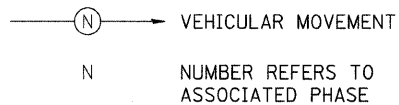


REVISED 7-15-09

ILLINOIS DEPARTMENT OF TRANSPORTATION
PROPOSED TRAFFIC WIRING DIAGRAM
F.A. RTE. 646 (IL. RTE. 40)
AND HICKORY GROVE ROAD
SECTION 125W-1, RS-2
PEORIA COUNTY

SCALE: NONE
DATE: 03/13/09
DRAWN BY: JRC, JDU
CHECKED BY: ECM

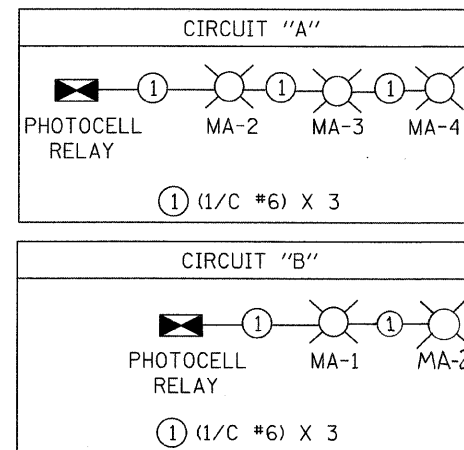
LEGEND



REFERRING TO STANDARD 857001, THE VEHICULAR PHASES USED ARE DESIGNATED BELOW.

CONTROLLER SPECIFIED: ECONOLITE ASC /3 TS-2 TYPE 2 IN TYPE IV CABINET

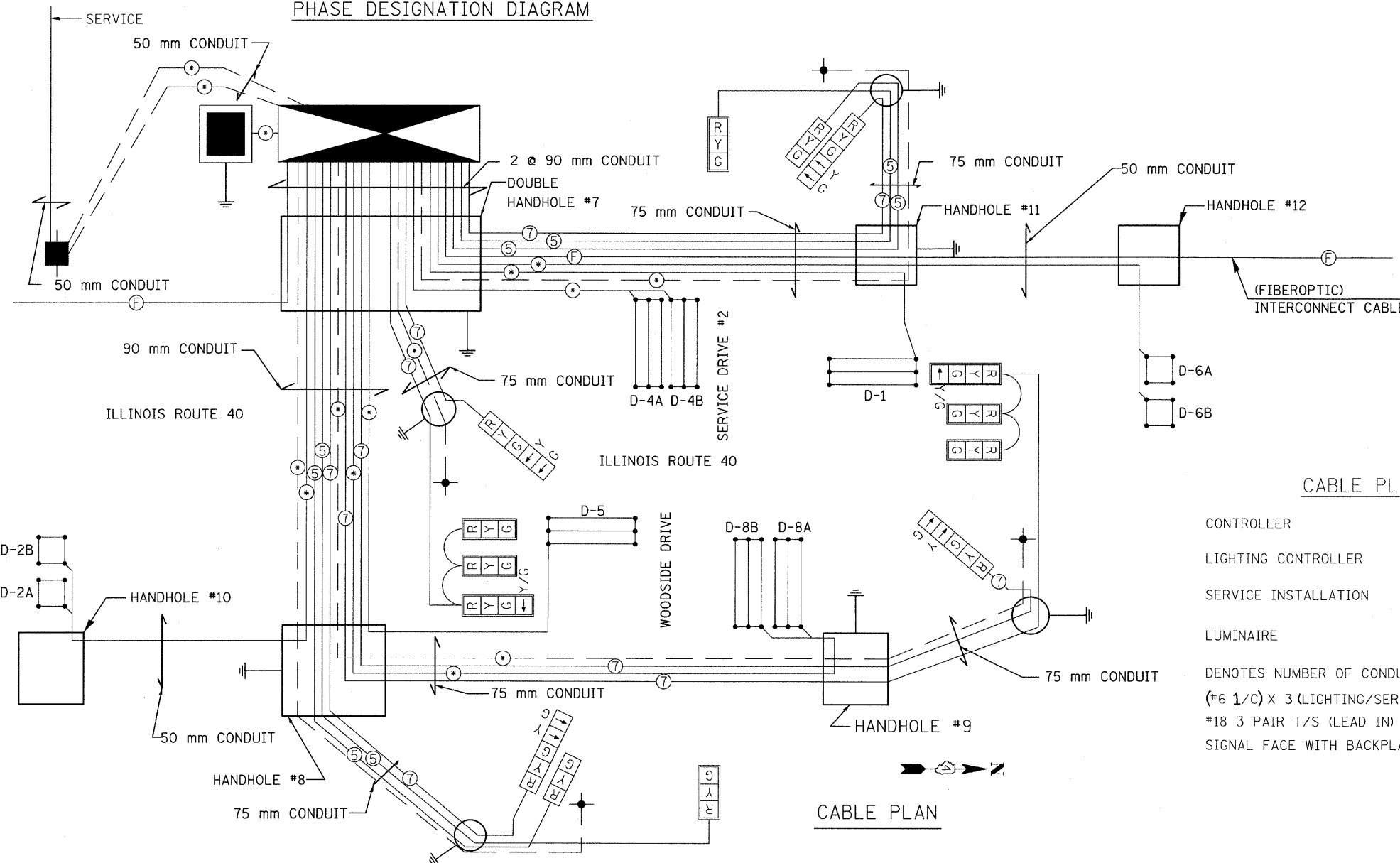
LIGHTING CIRCUIT DIAGRAM



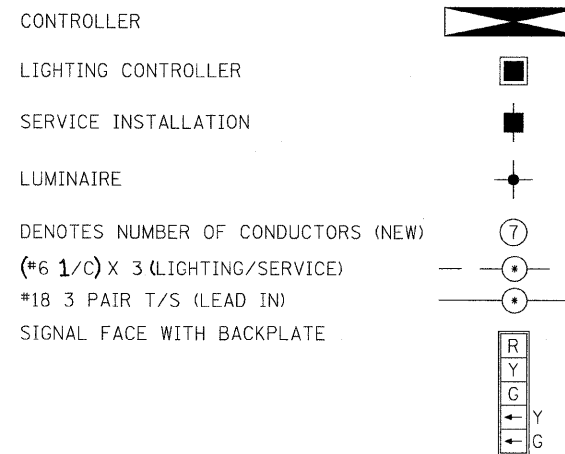
SCHEDULE OF QUANTITIES

CONDUIT IN TRENCH, 90mm DIA., PVC	11.5 M
CONDUIT IN TRENCH, 75mm DIA., PVC	30.0 M
CONDUIT IN TRENCH, 50mm DIA., PVC	1,231.5 M
CONDUIT PUSHED, 90mm DIA., PVC	26.5 M
CONDUIT PUSHED, 75mm DIA., PVC	37.0 M
HANDHOLE	12 EA.
DOUBLE HANDHOLE	1 EA.
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F	1020 M
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	290 M
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	231 M
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	315 M
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18, 3 PAIR	477 M
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1/C	159 M
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 10.36 METER	1 EA.
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 10.97 METER	1 EA.
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 15.24 METER	2 EA.
CONCRETE FOUNDATION, TYPE D	1.1 M
CONCRETE FOUNDATION, TYPE E, 750mm DIA.	8.2 M
CONCRETE FOUNDATION, TYPE E, 900mm DIA.	9.2 M
SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED	6 EA.
SIGNAL HEAD, 1-FACE, 5-SECTION, BRACKET MOUNTED	2 EA.
SIGNAL HEAD, 1-FACE, 4-SECTION, MAST ARM MOUNTED	2 EA.
SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED	2 EA.
TRAFFIC SIGNAL BACKPLATE, LOUVERED	8 EA.
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	4 EA.
LIGHTING CONTROLLER PHOTOCELL RELAY	1 EA.
SERVICE INSTALLATION, TYPE B	1 EA.
TRENCH AND BACKFILL FOR ELECTRICAL WORK	1,273 M
INDUCTIVE LOOP DETECTOR	10 EA.
DETECTOR LOOP, TYPE 1	394 M
REMOVE EXISTING CONCRETE FOUNDATION	1 EA.
REMOVE EXISTING HANDHOLE	1 EA.
FULL ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	1 EA.

PHASE DESIGNATION DIAGRAM



CABLE PLAN LEGEND



DETECTOR ASSIGNMENT SCHEDULE

DETECTOR LOOP	ASSIGNED PHASE	NO. OF CHANNELS REQUIRED
D-1	1	1
D-2A, D-2B	2	2
D-4A, D-4B	4	2
D-5	5	1
D-6A, D-6B	6	2
D-8A, D-8B	8	2
TOTAL NUMBER OF CHANNELS REQUIRED:		10

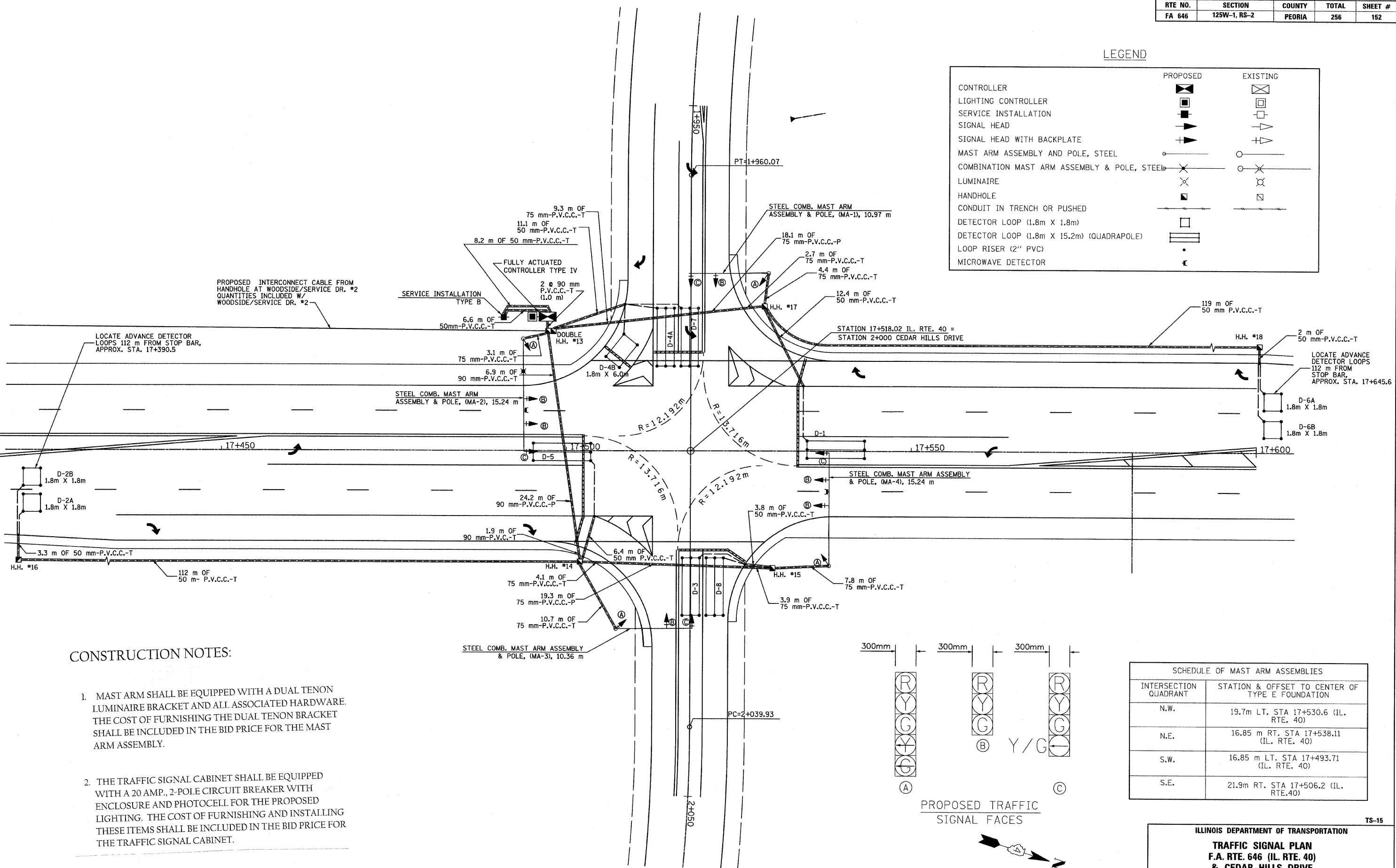
REVISED 7-15-09

ILLINOIS DEPARTMENT OF TRANSPORTATION
PROPOSED TRAFFIC WIRING DIAGRAM
F.A. RTE. 646 (IL. RTE. 40) &
WOODSIDE DRIVE/SERVICE DRIVE #2
SECTION 125W-1, RS-2
PEORIA COUNTY

DESIGNED BY: JRC, JDU
DATE: 03/13/09
DRAWN BY: JRC, JDU
CHECKED BY: ECM

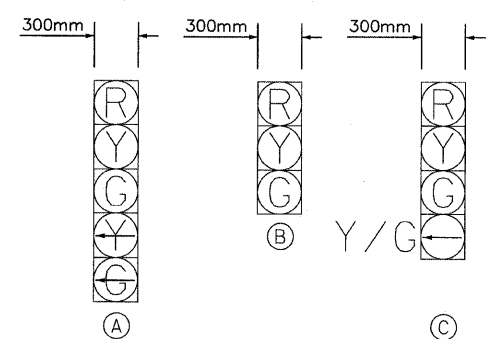
LEGEND

	PROPOSED	EXISTING
CONTROLLER		
LIGHTING CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
MAST ARM ASSEMBLY AND POLE, STEEL		
COMBINATION MAST ARM ASSEMBLY & POLE, STEEL		
LUMINAIRE		
HANDHOLE		
CONDUIT IN TRENCH OR PUSHED		
DETECTOR LOOP (1.8m X 1.8m)		
DETECTOR LOOP (1.8m X 15.2m) (QUADRAPOLE)		
LOOP RISER (2" PVC)		
MICROWAVE DETECTOR		

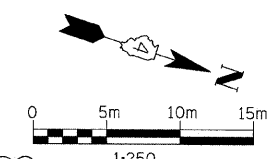


CONSTRUCTION NOTES:

- MAST ARM SHALL BE EQUIPPED WITH A DUAL TENON LUMINAIRE BRACKET AND ALL ASSOCIATED HARDWARE. THE COST OF FURNISHING THE DUAL TENON BRACKET SHALL BE INCLUDED IN THE BID PRICE FOR THE MAST ARM ASSEMBLY.
- THE TRAFFIC SIGNAL CABINET SHALL BE EQUIPPED WITH A 20 AMP., 2-POLE CIRCUIT BREAKER WITH ENCLOSURE AND PHOTOCCELL FOR THE PROPOSED LIGHTING. THE COST OF FURNISHING AND INSTALLING THESE ITEMS SHALL BE INCLUDED IN THE BID PRICE FOR THE TRAFFIC SIGNAL CABINET.



PROPOSED TRAFFIC SIGNAL FACES



REVISOR'S SHEET 7-15-09

SCHEDULE OF MAST ARM ASSEMBLIES	
INTERSECTION QUADRANT	STATION & OFFSET TO CENTER OF TYPE E FOUNDATION
N.W.	19.7m LT. STA 17+530.6 (IL. RTE. 40)
N.E.	16.85 m RT. STA 17+538.11 (IL. RTE. 40)
S.W.	16.85 m LT. STA 17+493.71 (IL. RTE. 40)
S.E.	21.9m RT. STA 17+506.2 (IL. RTE.40)

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN
F.A. RTE. 646 (IL. RTE. 40)
& CEDAR HILLS DRIVE
SECTION 125W-1, RS-2
PEORIA COUNTY

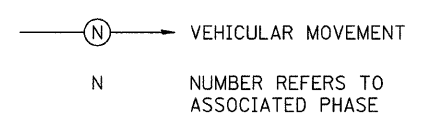
DESIGN BY: _____ DATE: 02/13/09

DRAWN BY: JRC, JDU
 CHECKED BY: ECM

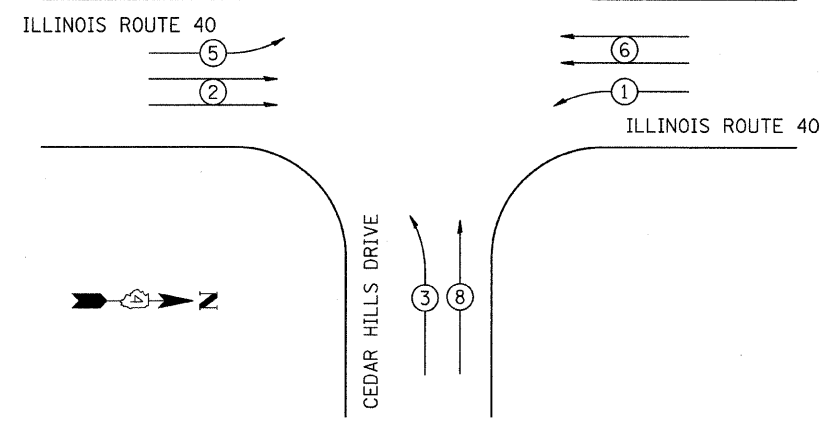
SCHEDULE OF QUANTITIES

CONDUIT IN TRENCH, 90mm DIA., PVC	11.0 M
CONDUIT IN TRENCH, 75mm DIA., PVC	46.0 M
CONDUIT IN TRENCH, 50mm DIA., PVC	285.0 M
CONDUIT PUSHED, 90mm DIA., PVC	24.5 M
CONDUIT PUSHED, 75mm DIA., PVC	37.5 M
HANDHOLE	5 EA.
DOUBLE HANDHOLE	1 EA.
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	51 M
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	465 M
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18, 3 PAIR	429 M
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1/C	141 M
STEEL MAST ARM ASSEMBLY AND POLE 10.36 METER	1 EA.
STEEL MAST ARM ASSEMBLY AND POLE 10.97 METER	1 EA.
STEEL MAST ARM ASSEMBLY AND POLE 15.24 METER	1 EA.
CONCRETE FOUNDATION, TYPE D	1.1 M
CONCRETE FOUNDATION, TYPE E, 750mm DIA.	8.2 M
CONCRETE FOUNDATION, TYPE E, 900mm DIA.	9.2 M
SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED	7 EA.
SIGNAL HEAD, 1-FACE, 5-SECTION, BRACKET MOUNTED	4 EA.
SIGNAL HEAD, 1-FACE, 4-SECTION, MAST ARM MOUNTED	4 EA.
TRAFFIC SIGNAL BACKPLATE, LOUVERED	11 EA.
LUMINAIRE, SODIUM VAPOR, MULTI-MOUNT, 250 WATT	2 EA.
SERVICE INSTALLATION, TYPE B	1 EA.
TRENCH AND BACKFILL FOR ELECTRICAL WORK	342 M
INDUCTIVE LOOP DETECTOR	11 EA.
DETECTOR LOOP, TYPE 1	406 M
REMOVE EXISTING CONCRETE FOUNDATION	5 EA.
REMOVE EXISTING HANDHOLE	4 EA.
TEMPORARY TRAFFIC SIGNAL INSTALLATION, LOCATION 2	1 EA.
FULL ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	1 EA.
STEEL MAST ARM ASSEMBLY AND POLE, 15.24 METER	1 EA.

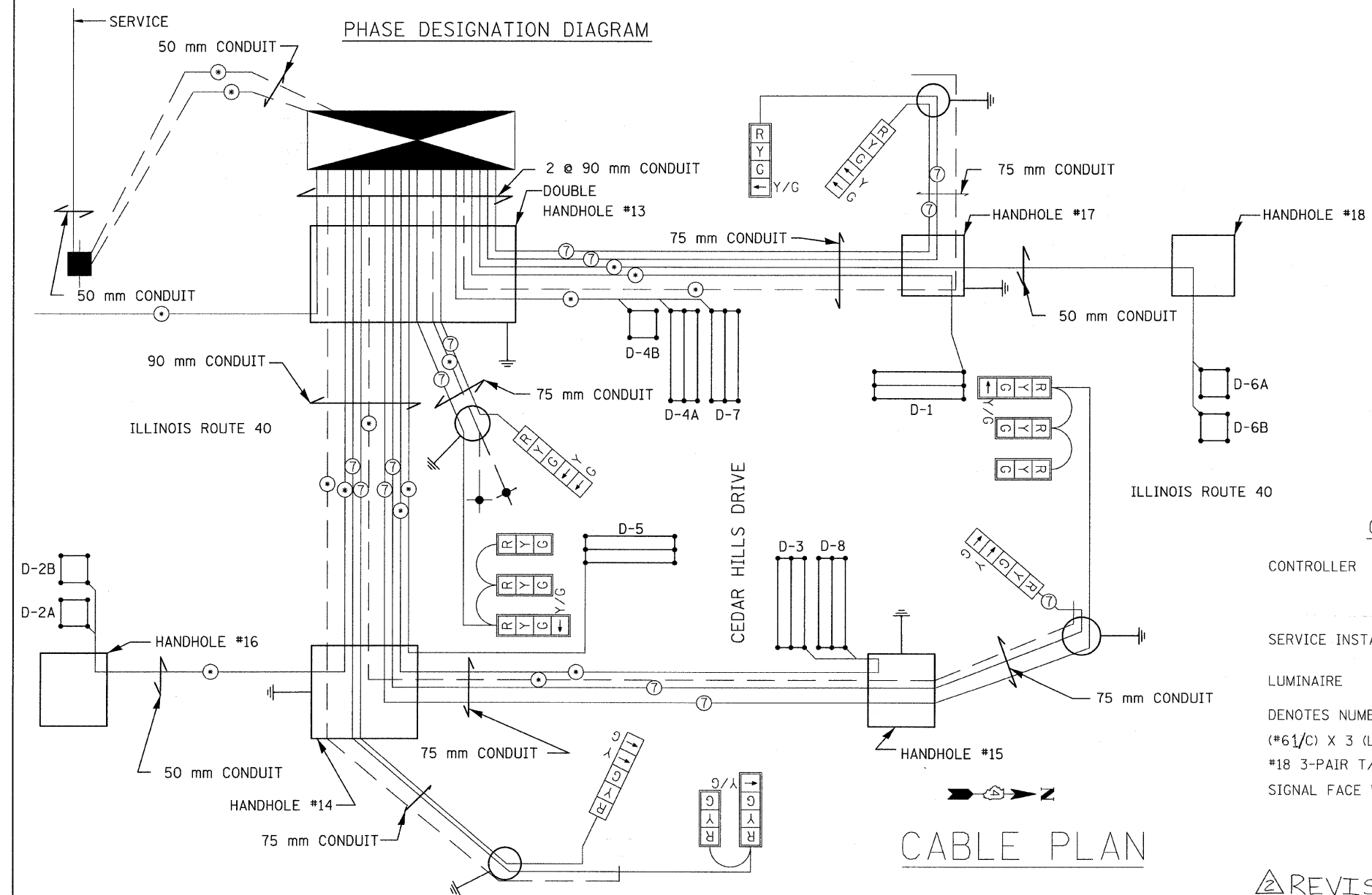
LEGEND



REFERRING TO STANDARD 857001, THE VEHICULAR PHASES USED ARE DESIGNATED BELOW.
CONTROLLER SPECIFIED: ECONOLITE ASC/3 TS-2 TYPE 2 IN TYPE IV CABINET



PHASE DESIGNATION DIAGRAM



CABLE PLAN

DETECTOR ASSIGNMENT SCHEDULE

DETECTOR LOOP	ASSIGNED PHASE	NO. OF CHANNELS REQUIRED
D-1	1	1
D-2A, D-2B	2	2
D-3	3	1
D-4A, D-4B	4	2
D-5	5	1
D-6A, D-6B	6	2
D-7	7	1
D-8	8	1
TOTAL NUMBER OF CHANNELS REQUIRED:		11

ILLINOIS DEPARTMENT OF TRANSPORTATION
PROPOSED TRAFFIC WIRING DIAGRAM
F.A. RTE. 646 (IL. RTE. 40)
AND CEDAR HILLS DRIVE
SECTION 125W-1, RS-2
PEORIA COUNTY

SCALE: NONE
DATE: 031309

DRAWN BY: JRC, JDU
CHECKED BY: ECM

REVISOR'S SHEET 7-15-09