

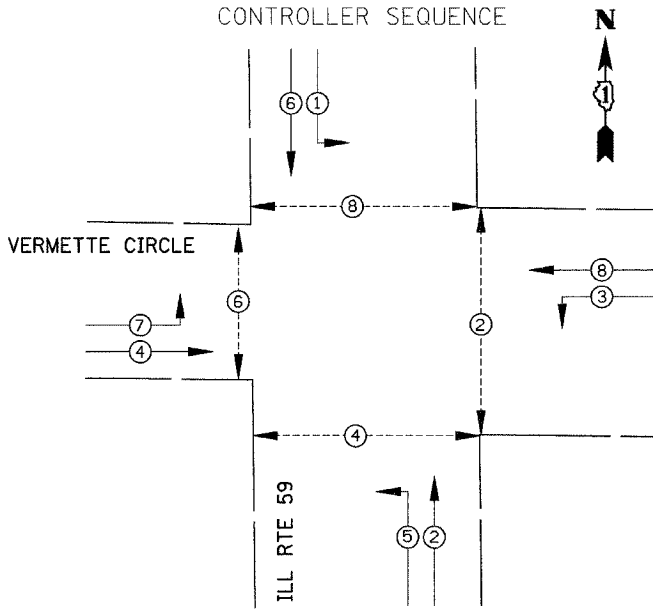
PREPARED BY:
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL	243	355
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62416				

CABLE PLAN LEGEND

- | | |
|--|---|
| | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | 12" (300mm) TRAFFIC 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 |
| | DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | 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 (H), OR CONTROLLER (C) |
| | GROUND ROD AT POST (P), OR MAST ARM POLE (MA) |
| | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | UNINTERRUPTIBLE POWER SUPPLY |
| | PERFORMED DETECTOR LOOP |

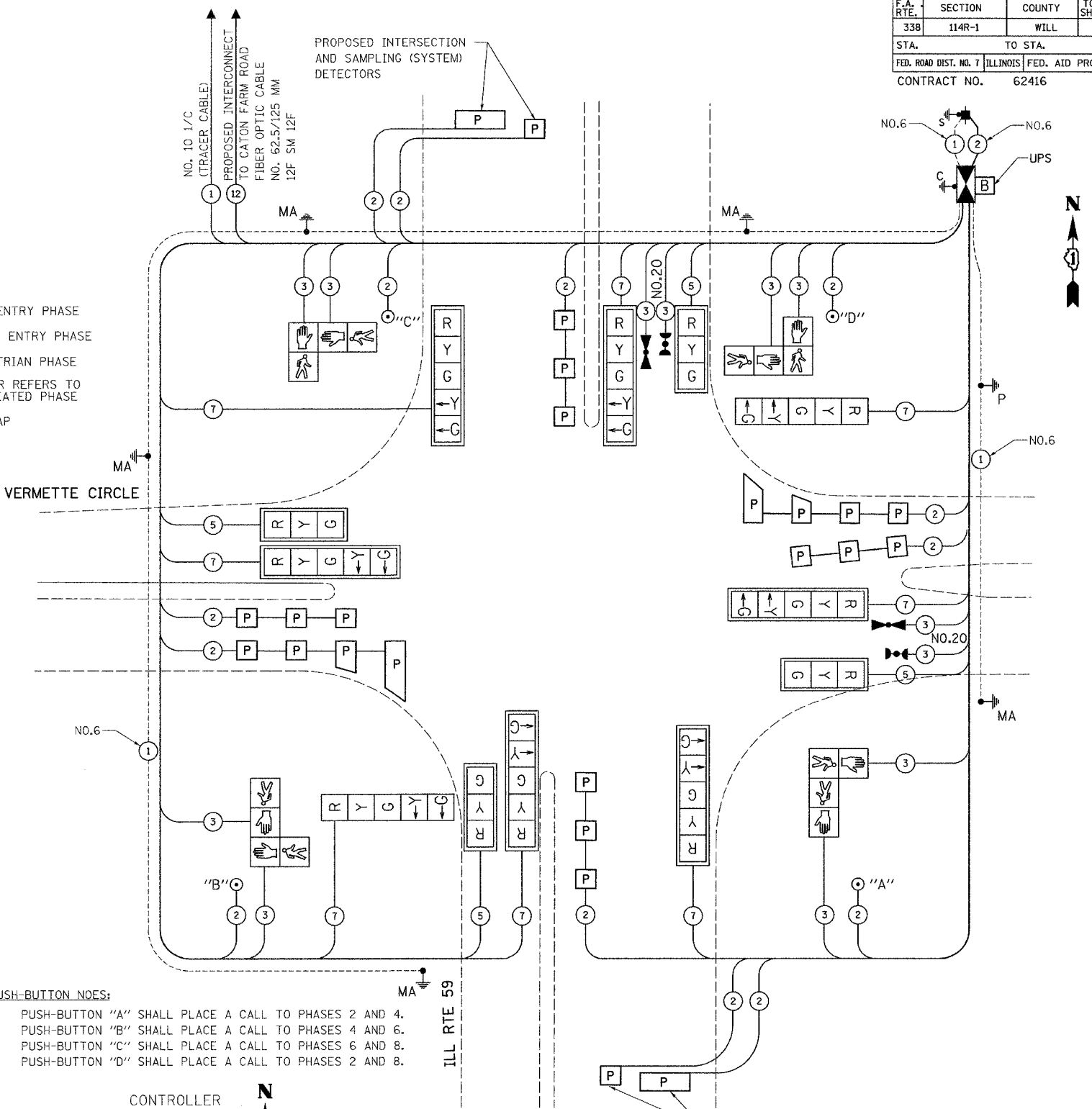


PROPOSED PHASE DESIGNATION DIAGRAM

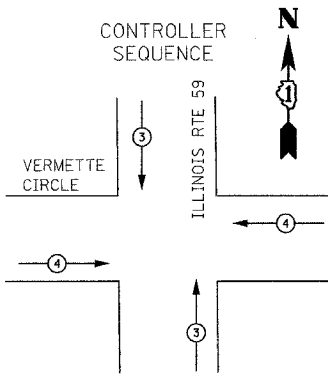
SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL, TYPE 1	SQ FT	33
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	555
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	96
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	58
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	90
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	269
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	704
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	715
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1818
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	772
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1822
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2721
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	31
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 WITH DUAL MAST ARMS, 30FT & 38FT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 34FT & 30FT	EACH	1
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	6
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	10
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
PERFORMED DETECTOR LOOP	FOOT	912
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6, 1C	FOOT	513
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED & SHIELDED	FOOT	337
UNINTERRUPTIBLE POWER SUPPLY	EACH	1

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



- PUSH-BUTTON NOES:**
- 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.



EMERGENCY VEHICLE PREEMPTION SEQUENCE

PROPOSED EMERGENCY VEHICLE PREEMPTOR	3	4
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↑	→

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES
 ILL RTE 59
 AT VERMETTE CIRCLE

SCALE: VERT. NONE
 HORIZ. NONE
 DATE 3/17/2008

DRAWN BY RDS
 DESIGNED BY BPT
 CHECKED BY BPT

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE [INCAND.]	LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
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 =	541.2

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)

PLOT DATE = 3/17/2008
 FILE NAME = I:\Projects\352843\signal\11\11\CABLE_RTE59\VERMETTE.dgn
 PLOT SCALE = 1"=20'
 USER NAME = RDS