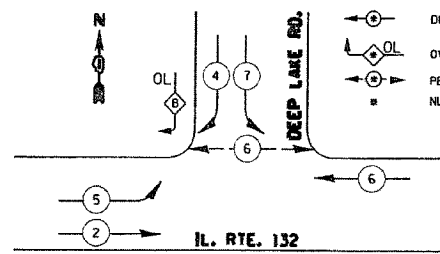


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
541	2004-121 TS	LAKE	19	12
STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62887				



CONTROLLER SEQUENCE



LEGEND

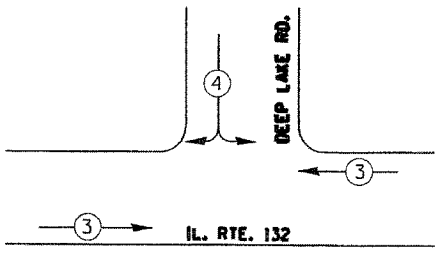
- DUAL ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

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

PROPOSED INTERCONNECT TO DEEP LAKE RD. (SEE INTERCONNECT PLAN).

FIBER OPTIC CABLE
NO. 62.5/125 12F MULTIMODE
NO. 9/125 12F SINGLE MODE

EXIST. INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

LOCAL AND MASTER CONTROLLER IN TYPE V CABINET

PROPOSED INTERCONNECT TO GRANADA BLVD. (SEE INTERCONNECT PLAN).

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

① EXISTING CABINET CONSIST OF AN UNCONNECTED MASTER CONTROLLER. CONTRACTOR TO ACTIVATE THE MASTER CONTROLLER AS PER ENGINEER'S SPECIFICATION.

CABLE PLAN LEGEND

- | | | | |
|--|-----------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------|
| | EXISTING 8" (200mm) TRAFFIC SIGNAL SECTION | | PROPOSED 12" (300mm) TRAFFIC SIGNAL SECTION |
| | EXISTING 12" (300mm) PEDESTRIAN SIGNAL SECTION | | PROPOSED 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | EXISTING CONTROLLER CABINET | | PROPOSED ILLUMINATED SIGN "NO LEFT TURN" |
| | EXISTING SERVICE INSTALLATION | | PROPOSED ILLUMINATED SIGN "NO RIGHT TURN" |
| | EXISTING TELEPHONE CONNECTION | | PROPOSED GROUND ROD AT HANDHOLE(H), DOUBLE HANDHOLE(H), OR CONTROLLER(C) |
| | EXISTING MAGNETIC DETECTOR | | PROPOSED GROUND ROD AT POST (P) OR MAST ARM POLE (MA) |
| | EXISTING EMERGENCY VEHICLE LIGHT DETECTOR | | PROPOSED GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | EXISTING CONFIRMATION BEACON | | PROPOSED GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | EXISTING PUSHBUTTON DETECTOR | | PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F |
| | EXISTING VEHICLE DETECTOR, INDUCTION LOOP | | |
| | EXISTING DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. | | |

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	LSUM	.17
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	.17
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	.17
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	10	135	17	0.50	85.00
(YELLOW)	10	135	25	0.25	62.50
(GREEN)	10	135	15	0.25	37.50
ARROW	8	135	12	0.10	24.00
PED. SIGNAL	2	90	25	1.00	50.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 359.00

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST		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'
E - M. ARM POLE		SIGNAL POST	2 (1.0)	(6m+L-0.6m)=	
	24" (600mm)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
	30" (750mm)	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)

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM,
EMERGENCY VEHICLE PREEMPTION SEQUENCE,
AND
SCHEDULE OF QUANTITIES
IL. RTE. 132 @ MUNN RD.
SCALE: VERT. 1"=20'
HORIZ. 1"=20'
DATE: 5/1/2006
DRAWN BY: BK
DESIGNED BY: BCK
CHECKED BY: DAD