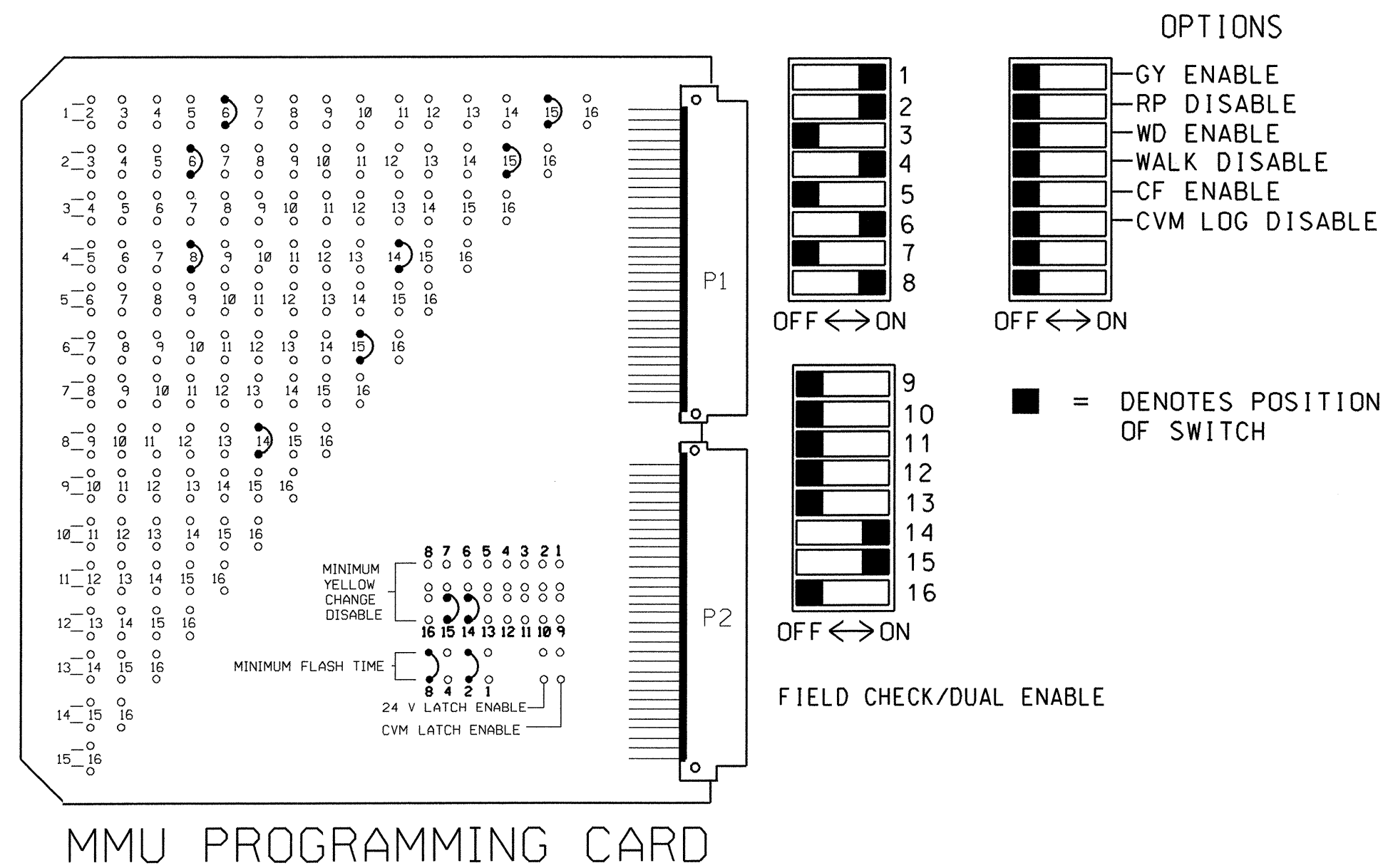


**EDI MODEL MMU-16E  
MALFUNCTION MANAGEMENT UNIT  
PROGRAMMING DETAIL**

(program card and set switches as shown below)



**NOTES**

1. TO PREVENT "FLASH-CONFLICT" PROBLEMS, WIRE ALL UNUSED LOAD SWITCHES TO FLASH RED. VERIFY THAT SIGNAL HEADS FLASH IN ACCORDANCE WITH THE SIGNAL PLANS.
2. TO PREVENT RED FAILURES ON UNUSED MONITOR CHANNELS, TIE UNUSED LOAD SWITCH RED OUTPUTS 3,5,7,9,10,11,12,13, & 16 TO LOAD SWITCH AC+ BY INSERTING A JUMPER PLUG IN THE UNUSED LOAD SWITCH SOCKET FROM PIN 1 (LS AC+) TO PIN 3 (RED OUT). MAKE SURE ALL FLASH TRANSFER RELAYS ARE IN PLACE.
3. PROGRAM CONTROLLER TO START UP IN PHASES 2 AND 6 GREEN.
4. SET POWER-UP FLASH TIME TO 10 SECONDS AND IMPLEMENT ON THE MALFUNCTION MANAGEMENT UNIT. SET CONTROLLER POWER-UP FLASH TIME TO 0 SECONDS.
5. ENABLE SIMULTANEOUS GAP-OUT FEATURE, ON CONTROLLER UNIT, FOR ALL PHASES.
6. PROGRAM DETECTORS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS TO ACCOMPLISH THE DETECTION SCHEMES SHOWN ON THE SIGNAL DESIGN PLANS.
7. PROGRAM DETECTOR CALL DELAY AND EXTENSION TIMING ON THE CONTROLLER, UNLESS OTHERWISE SPECIFIED.
8. SET ALL DETECTOR CARD UNIT CHANNELS TO "PRESENCE" MODE.
9. PROGRAM PHASES 4 AND 8, ON CONTROLLER UNIT, FOR DUAL ENTRY.
10. PROGRAM AND WIRE THIS CONTROLLER AND CABINET TO BE PART OF THE HIGH POINT CITY SIGNAL SYSTEM. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER INTERCONNECTION AND OPERATION OF THIS SIGNAL WITHIN THE SYSTEM.

**FIELD CONNECTION HOOK-UP CHART**

PHASE	1	2	3	4	5	6	7	8	OLA	OLB	OLC	OLD	2 PED	4 PED	6 PED	8 PED
SIGNAL HEAD NO.	6I	2I,22	NU	4I,42	NU	6I,62	NU	8I,82	NU	NU	NU	NU	NU	P4I, P42	P6I, P62	NU
GREEN		2G		4G		6G		8G								
YELLOW		2Y		4Y		6Y		8Y								
RED	*	2R		4R		6R		8R								
RED ARROW																
YELLOW ARROW	1Y															
GREEN ARROW	1G															
														14G	15G	
														14R	15R	

NU = NOT USED

\* A LOAD RESISTOR SHALL BE INSTALLED ON LOAD SWITCH I RED FIELD TERMINAL. REFER TO LOAD RESISTOR INSTALLATION DETAIL THIS SHEET.

**DETECTOR RACK SET-UP DETAIL**

INSERT DETECTOR CARDS IN RACK ACCORDING TO THE DETAIL SHOWN BELOW. PARTICULAR DETECTOR CHANNELS WILL CALL PHASES INDICATED.

BIU	SLOT	CH1	CH1	SLOT	CH1	SLOT	SLOT	SLOT	POWER SUPPLY AREA
		L1 Ø1	L7 Ø4		L11 Ø8				
	EMPTY	CH2 NOT USED	CH2 L8 Ø4	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	

WIRE LOOPS TO TERMINALS ON LOOP PANEL AS SHOWN IN THE CHART BELOW

LOOP NO.	LOOP PANEL TERMINALS
1A	L1A, L1B
---	L2A, L2B
---	L3A, L3B
---	L4A, L4B
---	L5A, L5B
---	L6A, L6B
4A	L7A, L7B
4B	L8A, L8B
---	L9A, L9B
---	L10A, L10B
8A	L11A, L11B
8B	L12A, L12B
---	L13A, L13B
---	L14A, L14B
---	L15A, L15B
---	L16A, L16B

**NOTE**  
BE SURE TO PROGRAM DETECTOR TYPES AND TIMERS (EXTEND AND DELAY) AS SHOWN ON THE SIGNAL PLANS.

ASSIGN CONTROLLER SYSTEM DETECTORS TO LOCAL CONT. DET. NUMBERS AS SHOWN IN CHART BELOW

CONTROLLER SYS. DET. NO.	LOCAL CONT. DETECTOR NO.
1	
2	
3	
4	
5	
6	
7	
8	

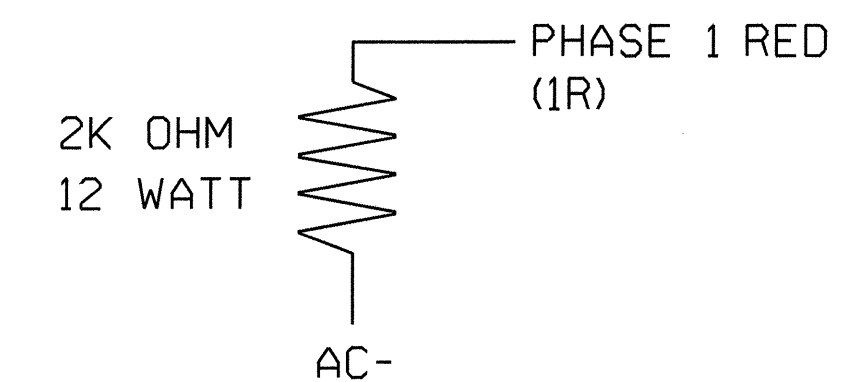
PROGRAM CONTROLLER DETECTORS ACCORDING TO THE SCHEDULE SHOWN IN THE CHART BELOW

CONTROLLER DETECTOR NO.	FUNCTION	TIMING	
		FEATURE	TIME (SEC)
1	Ø 1	DELAY	15
2	---	---	---
3	---	---	---
4	---	---	---
5	---	---	---
6	---	---	---
7	Ø 4	DELAY	3
8	Ø 4	DELAY	10
9	---	---	---
10	---	---	---
11	Ø 8	DELAY	3
12	Ø 8	DELAY	10
13	---	---	---
14	---	---	---
15	---	---	---
16	---	---	---

**EQUIPMENT INFORMATION**

CONTROLLER.....PEEK TRAFFIC 3000  
 CABINET .....PEEK TRAFFIC NC-6 **TS2-1**  
 CABINET MOUNT.....BASE  
 LOADBAY POSITIONS.....16  
 LOAD SWITCHES USED.....1, 2, 4, 6, 8, 14, 15  
 PHASES USED.....1, 2, 4, 6, 8, 4PED, 6PED  
 OL/A.....NOT USED  
 OL/B.....NOT USED  
 OL/C.....NOT USED  
 OL/D.....NOT USED

**LOAD RESISTOR INSTALLATION DETAIL**



NOTE: THE PURPOSE OF THIS RESISTOR IS TO LOAD THE CHANNEL RED MONITOR INPUT IN ORDER FOR THE MALFUNCTION MANAGEMENT UNIT TO USE THE FULL SIGNAL SEQUENCE MONITORING CAPABILITY ON PHASES THAT DO NOT USE THE RED DISPLAY IN THE FIELD.

HIGH POINT CITY SIGNAL SYSTEM  
INTERSECTION I.D. 710

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 07-2052T1  
 DESIGNED: 03/19/2004  
 SEALED: 06/15/2004  
 REVISED:

TEMPORARY SIGNAL 1 - TCP PHASE 1-2

PAGE 1 OF 2

**PLANS PREPARED BY :**  
**RUMMEL KLEPPER & KAHL, LLP**  
*consulting engineers*  
 5800 FARINGDON PLACE SUITE 105  
 RALEIGH, NORTH CAROLINA 27609-3960  
**FOR**  
**DIVISION OF HIGHWAYS**

ELECTRICAL AND PROGRAMMING DETAILS FOR:  
 SR 1113 (KIVETT DRIVE)  
 AT  
 TRIANGLE LAKE ROAD / DILLON ROAD

DIVISION 07 GUILFORD COUNTY HIGH POINT  
 PLAN DATE: MAY 2004 REVIEWED BY: J O DEATON  
 PREPARED BY: M W YALCH REVIEWED BY:  
 REVISIONS: INIT. DATE

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 SEAL 07438  
 JAMES O. DEATON  
 SIGNATURE DATE