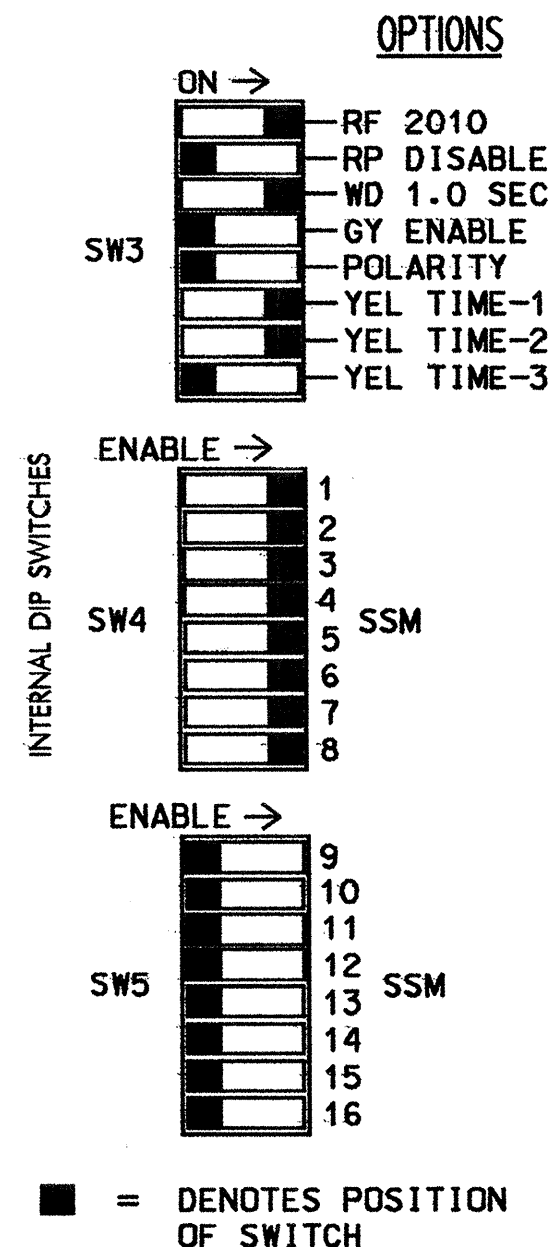
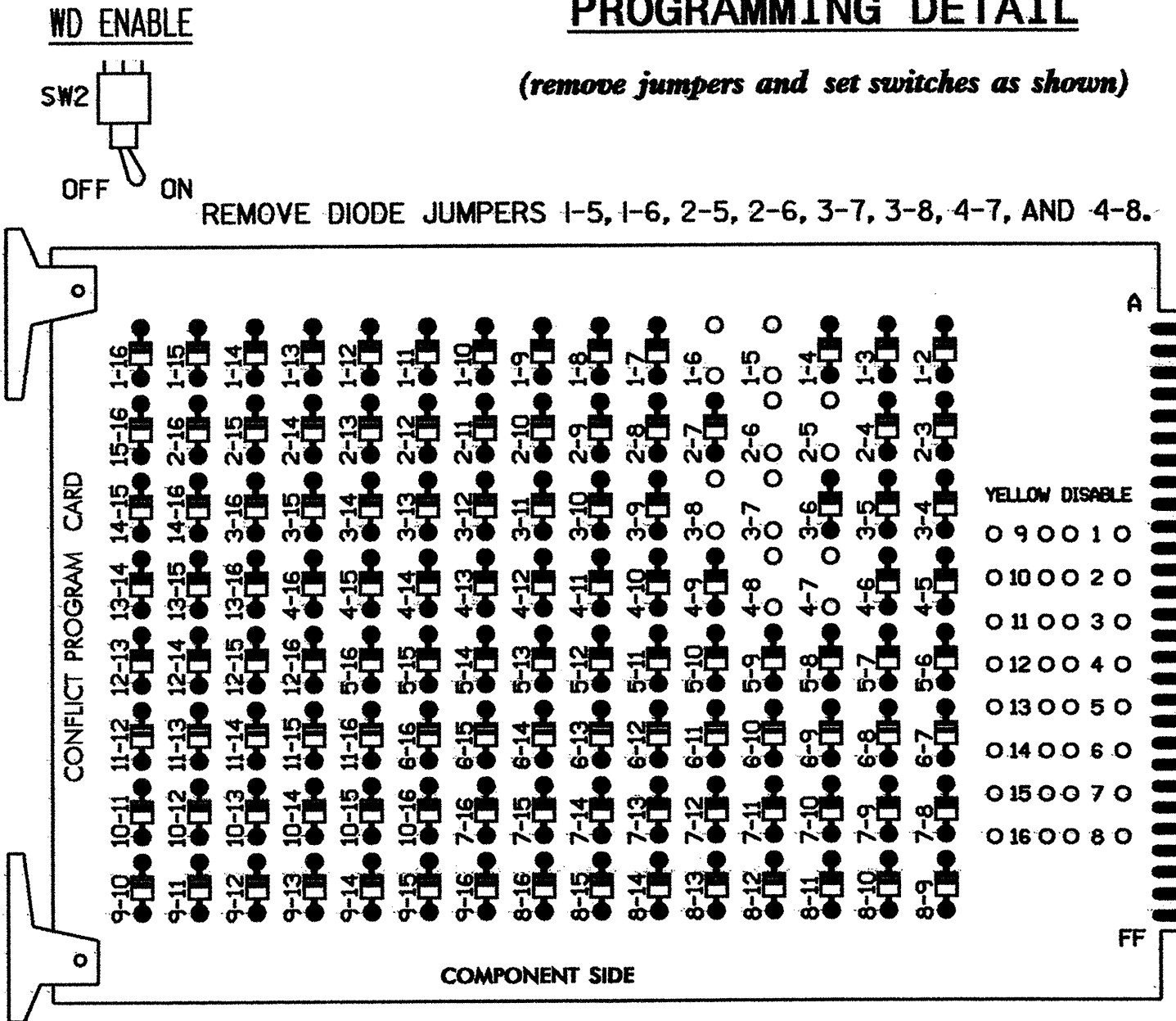


**EDI MODEL 2010ECL CONFLICT MONITOR**

**PROGRAMMING DETAIL**



- REMOVE JUMPERS AS SHOWN
- NOTES:
- CARD IS PROVIDED WITH ALL DIODE JUMPERS IN PLACE. REMOVAL OF ANY JUMPER ALLOWS ITS CHANNELS TO RUN CONCURRENTLY.
  - MAKE SURE JUMPERS SEL1-SEL5 ARE PRESENT ON THE MONITOR BOARD.

**NOTES**

- TO PREVENT "FLASH-CONFLICT" PROBLEMS, INSERT RED FLASH PROGRAM BLOCKS FOR ALL UNUSED VEHICLE LOAD SWITCHES IN THE OUTPUT FILE. THE INSTALLER SHALL VERIFY THAT SIGNAL HEADS FLASH IN ACCORDANCE WITH THE SIGNAL PLANS.
- ENSURE THAT RED ENABLE IS ACTIVE AT ALL TIMES DURING NORMAL OPERATION. TO PREVENT RED FAILURES ON UNUSED MONITOR CHANNELS, TIE UNUSED RED MONITOR INPUTS 9,10, 11,12,13,14,15 & 16 TO LOAD SWITCH AC+ PER THE CABINET MANUFACTURER'S INSTRUCTIONS.
- PROGRAM CONTROLLER TO START UP IN PHASES 2 AND 6 GREEN.
- ENABLE SIMULTANEOUS GAP-OUT FEATURE, ON CONTROLLER UNIT, FOR ALL PHASES.
- PROGRAM PHASES 4 AND 8, ON CONTROLLER UNIT, FOR DUAL ENTRY.
- PROGRAM PHASES 2 AND 6, ON CONTROLLER UNIT, FOR VARIABLE INITIAL AND GAP REDUCTION.
- PROGRAM PHASES 4 AND 8, ON CONTROLLER UNIT, FOR GAP REDUCTION.
- THE CABINET AND CONTROLLER ARE PART OF THE NC 59 CLOSED LOOP SIGNAL SYSTEM.

**FIELD CONNECTION HOOK-UP CHART**

LOAD SWITCH NO.	S1	S2	S2P	S3	S4	S4P	S5	S6	S6P	S7	S8	S8P	
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	
SIGNAL HEAD NO.	11,12	83	21, 22,23	NU	22,81	41,42 43,44	NU	43	51,52	61 62,63	NU	41,62 81,82 83,84	NU
GREEN		130			103				136			109	
YELLOW		129			102				135			108	
RED		128		*	101				134		*	107	
RED ARROW	125								131				
YELLOW ARROW	126	126			117			132	132			123	
GREEN ARROW	127	127			118			133	133			124	

NU = NOT USED  
\* DENOTES INSTALL LOAD RESISTOR. SEE LOAD RESISTOR INSTALLATION DETAIL THIS PAGE.

**EQUIPMENT INFORMATION**

CONTROLLER.....EXISTING 2070L  
CABINET .....EXISTING 332  
SOFTWARE .....ECONOLITE OASIS  
CABINET MOUNT.....BASE  
OUTPUT FILE POSITIONS...12  
LOAD SWITCHES USED.....S1,S2,S3,S4,S5,S6,S7,S8  
PHASES USED.....1,2,3,4,5,6,7,8  
OVERLAPS.....NONE

**BACK-UP PROTECTION PROGRAMMING DETAIL**

(program controller as shown below)

- FROM MAIN MENU PRESS '2' (PHASE CONTROL), THEN '1' (PHASE CONTROL FUNCTIONS). SCROLL TO THE BOTTOM OF THE MENU AND ENABLE DYNAMIC/BACKUP CONTROL FUNCTIONS 1 AND 2.
- FROM PHASE CONTROL FUNCTIONS MENU PRESS '2' (DYNAMIC/BACKUP CONTROL FUNCTIONS).

DYNAMIC/BACKUP CONTROL FUNCTION #01  
OVERLAPS: ABCDEFGHIJKLMNPO  
IF OVERLAPS ARE ACTIVE :  
OR PHASES: 12345678910111213141516  
IF PHASES ARE ON: X  
OMIT PHASES : X  
CALL PHASES :

PRESS 'NEXT'

DYNAMIC/BACKUP CONTROL FUNCTION #02  
OVERLAPS: ABCDEFGHIJKLMNPO  
IF OVERLAPS ARE ACTIVE :  
OR PHASES: 12345678910111213141516  
IF PHASES ARE ON: X  
OMIT PHASES : X  
CALL PHASES :

BACKUP PROTECTION PROGRAMMING COMPLETE

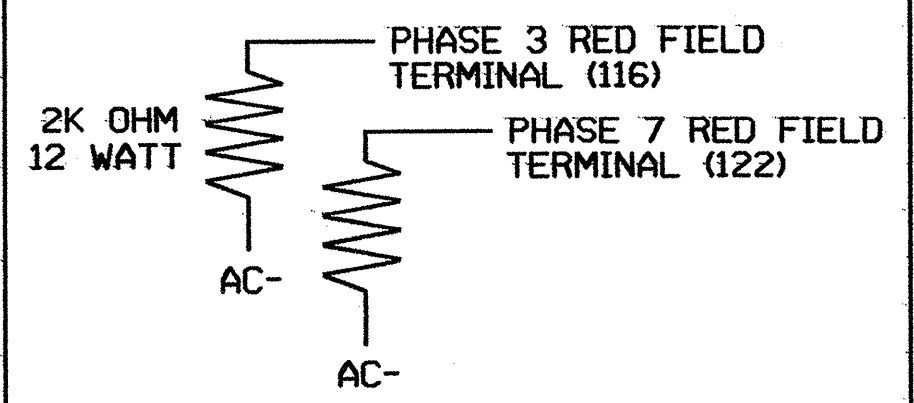
**INPUT FILE POSITION LAYOUT**

(front view)

FILE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	φ 1	φ 1	φ 2/SYS	φ 4	φ 4	φ 8	φ 4	φ 8	φ 4	φ 8	φ 4	φ 8	φ 4	φ 8
L	1A	1B	2A/S09	4C	4D	3A	4A	3A	4B	3A	4B	3A	4B	3A
U	NOT USED	φ 1	φ 2/SYS	NOT USED	NOT USED	φ 3	φ 4	φ 3	φ 4	φ 3	φ 4	φ 3	φ 4	φ 3
L	1C	1C	2B/S10	NOT USED	NOT USED	3A	4B	3A	4B	3A	4B	3A	4B	3A
U	φ 5	φ 5	φ 6/SYS	φ 8	φ 8	φ 4	φ 8	φ 4	φ 8	φ 4	φ 8	φ 4	φ 8	φ 4
L	5A	5B	6A/S11	8C	8D	7A	8A	7A	8A	7A	8A	7A	8A	7A
U	NOT USED	φ 5	φ 6/SYS	NOT USED	NOT USED	φ 7	φ 8	φ 7	φ 8	φ 7	φ 8	φ 7	φ 8	φ 7
L	5C	5C	6B/S12	NOT USED	NOT USED	7A	8B	7A	8B	7A	8B	7A	8B	7A

EX. : 1A, 2A, ETC. = LOOP NO.'S  
FS = FLASH SENSE  
ST = STOP TIME

**LOAD RESISTOR INSTALLATION DETAIL**



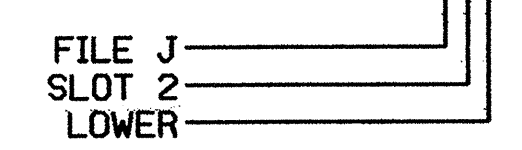
NOTE: THE PURPOSE OF THESE RESISTORS IS TO LOAD THE CHANNEL RED MONITOR INPUTS IN ORDER FOR THE SIGNAL SEQUENCE MONITOR TO USE THE FULL SIGNAL SEQUENCE MONITORING CAPABILITY ON CHANNELS THAT DO NOT USE THE RED DISPLAY IN THE FIELD.

**INPUT FILE CONNECTION & PROGRAMMING CHART**

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
1A	TB2-1,2	11U	56	18	1	1	Y	Y			3
1B	TB2-5,6	12U	39	1	2	1	Y	Y			
1C	TB2-7,8	12L	43	5	12	1	Y	Y			15
2A/S09	TB2-9,10	13U	63	25	32	2/SYS	Y	Y			
2B/S10	TB2-11,12	13L	76	38	42	2/SYS	Y	Y			
4C	TB4-1,2	14U	47	9	22	4	Y	Y	Y	2	5
4D	TB4-5,6	15U	58	20	3	4	Y	Y	Y	2	5
3A <sup>1</sup>	TB4-9,10	16U	41	3	4	8	Y	Y			3
	TB4-11,12	16L	45	7	14	3	Y	Y			15
4A	TB6-1,2	17U	65	27	34	4		Y			
4B	TB6-3,4	17L	78	40	44	4		Y			
*S07	TB6-9,10	19U	60	22	11	SYS					
*S08	TB6-11,12	19L	62	24	13	SYS					
5A	TB3-1,2	11U	55	17	5	5	Y	Y			3
5B	TB3-5,6	12U	40	2	6	5	Y	Y			
5C	TB3-7,8	12L	44	6	16	5	Y	Y			15
6A/S11	TB3-9,10	13U	64	26	36	6/SYS	Y	Y			
6B/S12	TB3-11,12	13L	77	39	46	6/SYS	Y	Y			
8C	TB5-1,2	14U	48	10	26	8	Y	Y	Y	2	5
8D	TB5-5,6	15U	57	19	7	8	Y	Y	Y	2	5
7A <sup>2</sup>	TB5-9,10	16U	42	4	8	4	Y	Y			3
	TB5-11,12	16L	46	8	18	7	Y	Y			15
8A	TB7-1,2	17U	66	28	38	8		Y			
8B	TB7-3,4	17L	79	41	48	8		Y			

- ADD JUMPERS FROM TB4-9 TO TB4-11, AND FROM TB4-10 TO TB4-12.
  - ADD JUMPERS FROM TB5-9 TO TB5-11, AND FROM TB5-10 TO TB5-12.
- \* SYSTEM DETECTOR ONLY. REMOVE THE VEHICLE PHASE ASSIGNED TO THIS DETECTOR IN THE DEFAULT PROGRAMMING.

INPUT FILE POSITION LEGEND: J2L



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 06-0610  
DESIGNED: MAY 2003  
SEALED: 10-22-03  
REVISED:

**SIGNAL UPGRADE: FINAL DESIGN**

ELECTRICAL AND PROGRAMMING DETAILS FOR: **NC 59 (NORTH MAIN STREET) AT HOPE MILLS BYPASS**

Prepared in the Office of: **WILLIAM HAIRSTON**

Division 6 CUMBERLAND COUNTY HOPE MILLS  
PLAN DATE: **SEPTEMBER 2003** REVIEWED BY: *T. Jape*  
PREPARED BY: **WILLIAM HAIRSTON** REVIEWED BY:  
REVISIONS: \_\_\_\_\_ INIT. DATE  
SIGNATURE: *W. Hairston* DATE: \_\_\_\_\_  
SIG. INVENTORY NO. **06-0610**