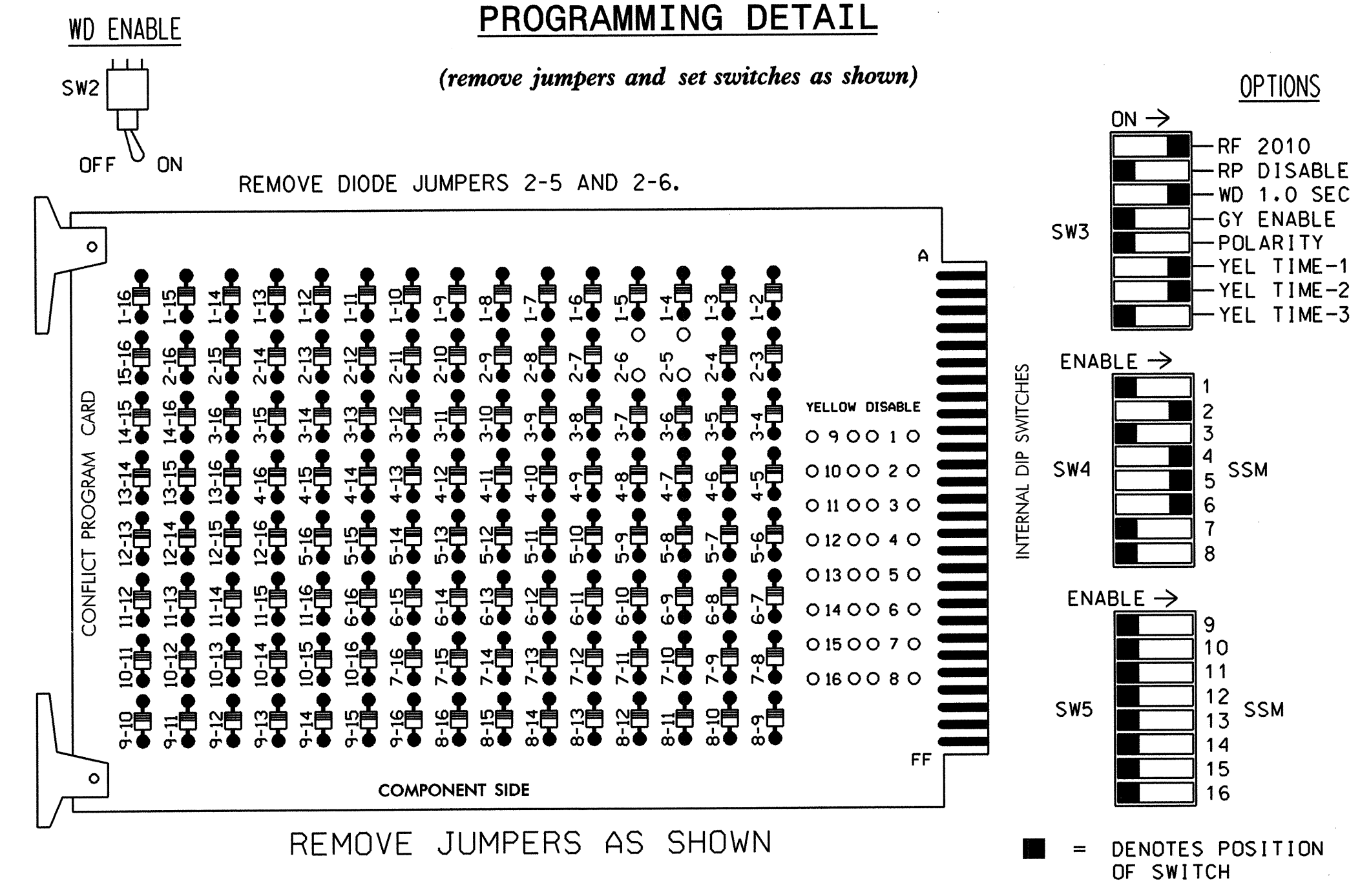


**EDI MODEL 2010ECL CONFLICT MONITOR**

**PROGRAMMING DETAIL**

(remove jumpers and set switches as shown)

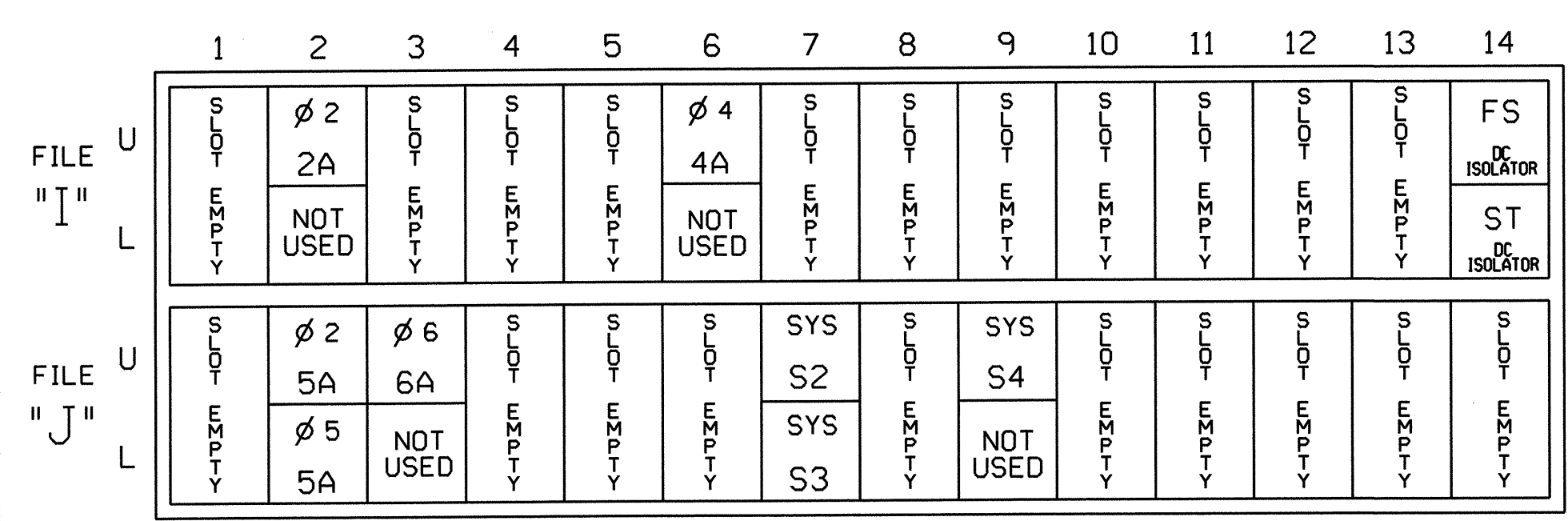


**NOTES:**

- 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.

**INPUT FILE POSITION LAYOUT**

(front view)

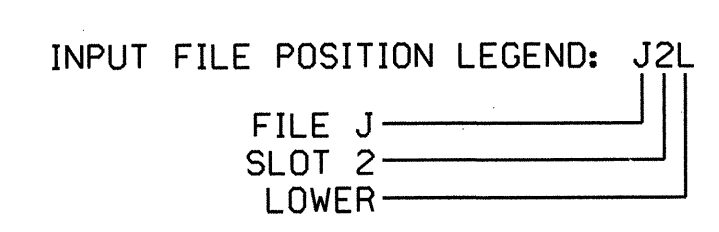


EX.: 1A, 2A, ETC. = LOOP NO.'S FS = FLASH SENSE ST = STOP TIME

**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
2A	TB2-5,6	I2U	39	1	2	2	Y	Y	-	---	--
4A	TB4-9,10	I6U	41	3	4	4	Y	Y	-	---	--
5A <sup>1</sup>	TB3-5,6	J2U	40	2	6	2	Y	Y	-	---	--
	TB3-7,8	J2L	44	6	16	5	Y	Y	-	---	15
6A	TB3-9,10	J3U	64	26	36	6	Y	Y	-	---	--
* S2	TB7-1,2	J7U	66	28	38	SYS	-	-	-	---	--
* S3	TB7-3,4	J7L	79	41	48	SYS	-	-	-	---	--
* S4	TB7-9,10	J9U	59	21	15	SYS	-	-	-	---	--

<sup>1</sup> DENOTES ADD JUMPERS FOR LOOP 5A FROM TB3-5 TO TB3-7, AND FROM TB3-6 TO TB3-8.  
\* SYSTEM DETECTOR ONLY. REMOVE THE VEHICLE PHASE ASSIGNED TO THIS DETECTOR IN THE DEFAULT PROGRAMMING.



**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 1,3,7,8,9,10,11,12,13,14,15 & 16 TO LOAD SWITCH AC+ PER 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.
- THE CONTROLLER AND CABINET ARE TO BE PROGRAMMED AND WIRED TO BE PART OF A CLOSED LOOP SIGNAL SYSTEM. CONTROLLER ASSET: 0431

**EQUIPMENT INFORMATION**

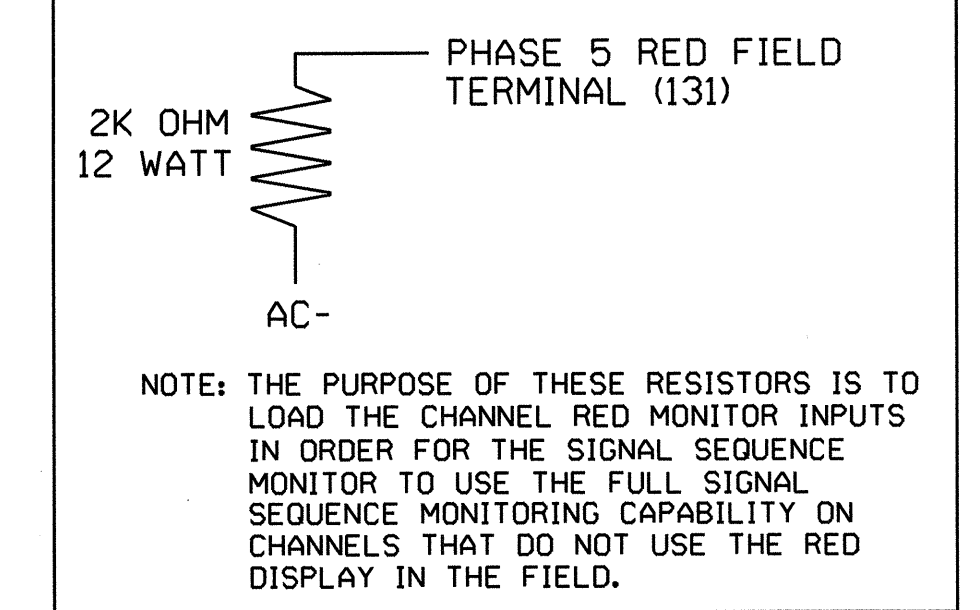
CONTROLLER.....CONTRACTOR SUPPLIED 2070L  
CABINET .....CONTRACTOR SUPPLIED 332  
SOFTWARE .....ECONOLITE OASIS  
CABINET MOUNT.....BASE  
OUTPUT FILE POSITIONS...12  
LOAD SWITCHES USED.....S2,S4,S5,S6  
PHASES USED.....2,4,5,6  
OVERLAPS.....NONE

**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.	NU	21,22	NU	NU	41,42	NU	21	61,62	NU	NU	NU	NU
GREEN		130			103			136				
YELLOW		129			102			135				
RED		128			101		*	134				
RED ARROW												
YELLOW ARROW								132				
GREEN ARROW								133				

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

**LOAD RESISTOR INSTALLATION DETAIL**



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 13-0431  
DESIGNED: 02-24-2003  
SEALED: 02/26/2004  
REVISED: TBD

SIGNAL UPGRADE - FINAL

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared for the Offices of:

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

NC 146 (LONG SHOALS ROAD) AT I-26 WESTBOUND ON/OFF RAMP

DIVISION 13 BUNCOMBE COUNTY ASHEVILLE

PLAN DATE: JUNE 2003 REVIEWED BY: JO DEATON

PREPARED BY: MW YALCH REVIEWED BY:

REVISIONS INIT. DATE

James O. Deaton 2/26/04  
SIGNATURE DATE

SIG. INVENTORY NO. 13-0431