

**NOTES**

1. 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.
2. 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 2,5,6, 7,8,9,10,11,12,13,14,15 & 16 TO LOAD SWITCH AC+ PER THE CABINET MANUFACTURER'S INSTRUCTIONS.
3. PROGRAM CONTROLLER TO START UP IN PHASE 2 GREEN.
4. ENABLE SIMULTANEOUS GAP-OUT FEATURE, ON CONTROLLER UNIT, FOR ALL PHASES.
5. PROGRAM PHASES 1, 2, 3, 4 AND 5 FOR RED REST.
6. PROGRAM PHASE 2 AS START UP CALL.

**BACK-UP PROTECTION PROGRAMMING DETAIL**  
(program controller as shown below)

1. 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 1,2,3,4,5 AND 6.
2. FROM PHASE CONTROL FUNCTIONS MENU PRESS '2' (DYNAMIC/BACKUP CONTROL FUNCTIONS).

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

PRESS 'NEXT'

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

PRESS 'NEXT'

DYNAMIC/BACKUP CONTROL FUNCTION #03  
OVERLAPS: ABCDEFGHIJKLMNOP  
IF OVERLAPS ARE ACTIVE :  
OR PHASES: 12345678910111213141516  
IF PHASES ARE ON: X  
OMIT PHASES : X  
CALL PHASES : X

PRESS 'NEXT'

DYNAMIC/BACKUP CONTROL FUNCTION #04  
OVERLAPS: ABCDEFGHIJKLMNOP  
IF OVERLAPS ARE ACTIVE :  
OR PHASES: 12345678910111213141516  
IF PHASES ARE ON: X  
OMIT PHASES : X  
CALL PHASES : X

PRESS 'NEXT'

DYNAMIC/BACKUP CONTROL FUNCTION #05  
OVERLAPS: ABCDEFGHIJKLMNOP  
IF OVERLAPS ARE ACTIVE :  
OR PHASES: 12345678910111213141516  
IF PHASES ARE ON: X  
OMIT PHASES : X  
CALL PHASES : X

PRESS 'NEXT'

DYNAMIC/BACKUP CONTROL FUNCTION #06  
OVERLAPS: ABCDEFGHIJKLMNOP  
IF OVERLAPS ARE ACTIVE :  
OR PHASES: 12345678910111213141516  
IF PHASES ARE ON: X  
OMIT PHASES : X  
CALL PHASES : X

BACKUP PROTECTION PROGRAMMING COMPLETE

**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	NC	NU	31,32	41,42	NU	NC	NU	NU	NU	NU	NU
GREEN	127			118	103							
YELLOW	126			117	102							
RED	125			116	101							
RED ARROW												
YELLOW ARROW												
GREEN ARROW												

NU = NOT USED  
NC = NO CONNECTION, USED FOR TIMING PURPOSES ONLY.

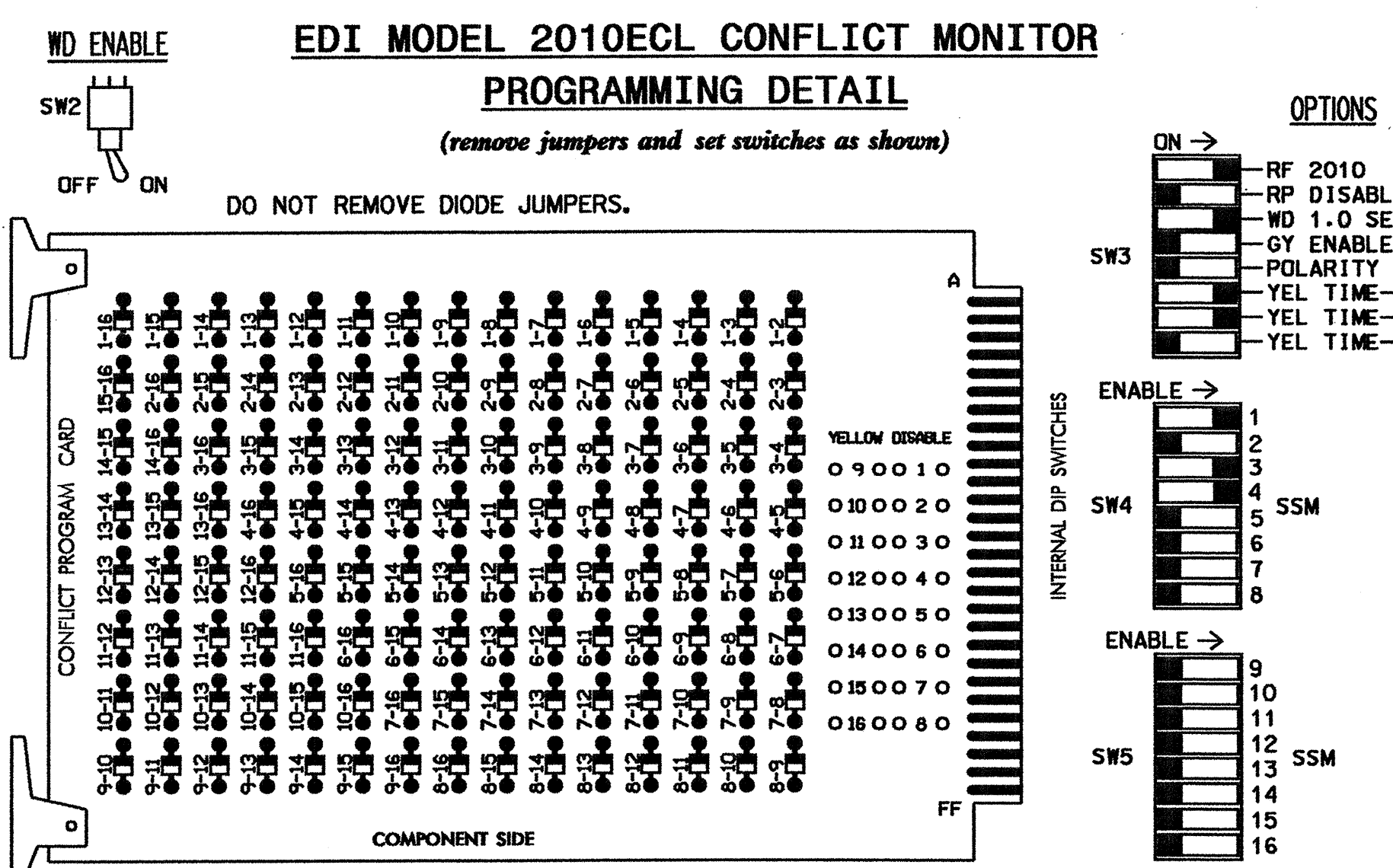
**EQUIPMENT INFORMATION**

CONTROLLER.....CONTRACTOR SUPPLIED 2070L  
CABINET .....CONTRACTOR SUPPLIED 336  
SOFTWARE .....ECONOLITE OASIS  
CABINET MOUNT.....POLE  
OUTPUT FILE POSITIONS...12  
LOAD SWITCHES USED.....S1,S3,S4  
PHASES USED.....1,2,3,4,5  
OVERLAPS.....NONE

**PHASE SEQUENCE PROGRAMMING DETAIL**  
(program controller as shown below)

FROM OASIS LOCAL CONTROLLER MAIN MENU  
SELECT: 4 PHASE SEQUENCE

PHASE SEQUENCE: PAGE 1 NEXT: PAGES)							
RNG	LEAD	BARRIER 1	X-LAG	LEAD	BARRIER 2	X-LAG	
1	1	2	3	4	5	0	0
2	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0



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

**INPUT FILE POSITION LAYOUT**  
(front view)

FILE	U	1	2	3	4	5	6	7	8	9	10	11	12	13	14
		∅ 1	∅ 3	∅ 4	∅ 5	∅ 6	∅ 7	∅ 8	∅ 9	∅ 10	∅ 11	∅ 12	∅ 13	∅ 14	FS
		1A	3A	4A											DC ISOLATOR
		NOT USED	NOT USED	NOT USED											ST
															DC ISOLATOR

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
1A	TB21-1,2	I1U	56	18	1	1	Y	Y			
3A	TB21-5,6	I3U	58	20	3	3	Y	Y			
4A	TB21-7,8	I4U	41	3	4	4	Y	Y			3

INPUT FILE POSITION LEGEND: I2L  
FILE 1  
SLOT 2  
LOWER

NEW INSTALLATION - TEMPORARY 1 & 2 - SHEET 1 OF 2

<p>Prepared in the Office of:                    STATE OF NORTH CAROLINA                  DEPARTMENT OF TRANSPORTATION                  Street Management Section                  122 N. McDowell St., Raleigh, NC 27603</p>	<p>US 264 AT BRIDGE NO. 32 OVER ROSE BAY CREEK</p>		<p>SEAL  </p>
	<p>DIVISION 01 HYDE COUNTY W. OF SWAN QUARTER</p>	<p>PLANNING DATE: FEBRUARY 2004 REVIEWED BY: J. H. Haskew</p>	
	<p>PREPARED BY: JAMES PETERSON REVIEWED BY:</p>	<p>REVISIONS INIT. DATE</p>	

Signature: James Peterson 3/2/04  
Date: 3/2/04  
Sig. Inventory No. 01-07397