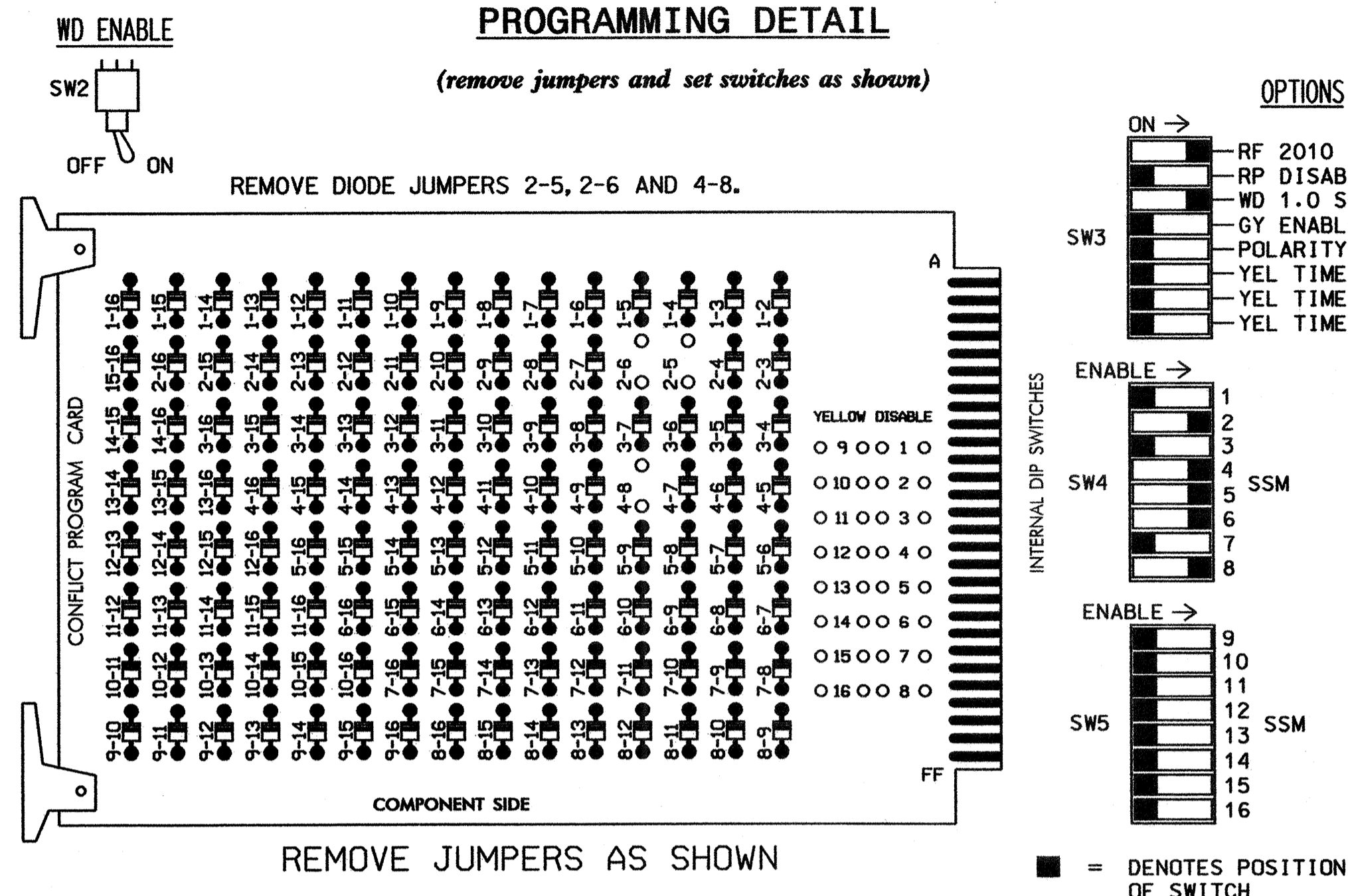


EDI MODEL 2010ECL CONFLICT MONITOR

PROGRAMMING DETAIL



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 1,3,7,9,10,11,12,13,14,15 & 16 to load switch AC+ per the cabinet manufacturer's instructions.
- Program phases 2 and 6, on the controller unit, for Start Up In Green.
- Enable Simultaneous Gap-Out, on the controller unit, for all phases.
- Program phases 4 and 8, on the controller unit, for Dual Entry.
- The cabinet and controller are part of the Gastonia City System.

SIGNAL HEAD 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	81,82	NU
GREEN		130			103			136				109
YELLOW		129			102			135				108
RED		128			101		*	134				107
RED ARROW												
YELLOW ARROW							132					
GREEN ARROW							133					

NU = Not Used
* Denotes install load resistor. See load resistor installation detail this sheet.

EQUIPMENT INFORMATION

CONTROLLER.....CONTRACTOR SUPPLIED 2070L
CABINET.....CONTRACTOR SUPPLIED 336
SOFTWARE.....ECONOLITE OASIS
CABINET MOUNT.....POLE
OUTPUT FILE POSITIONS...12
LOAD SWITCHES USED.....S2,S4,S5,S6,S8
PHASES USED.....2,4,5,6,8
OVERLAPS.....NONE

DYNAMIC BACK-UP CONTROL PROGRAMMING

(program controller as shown below)

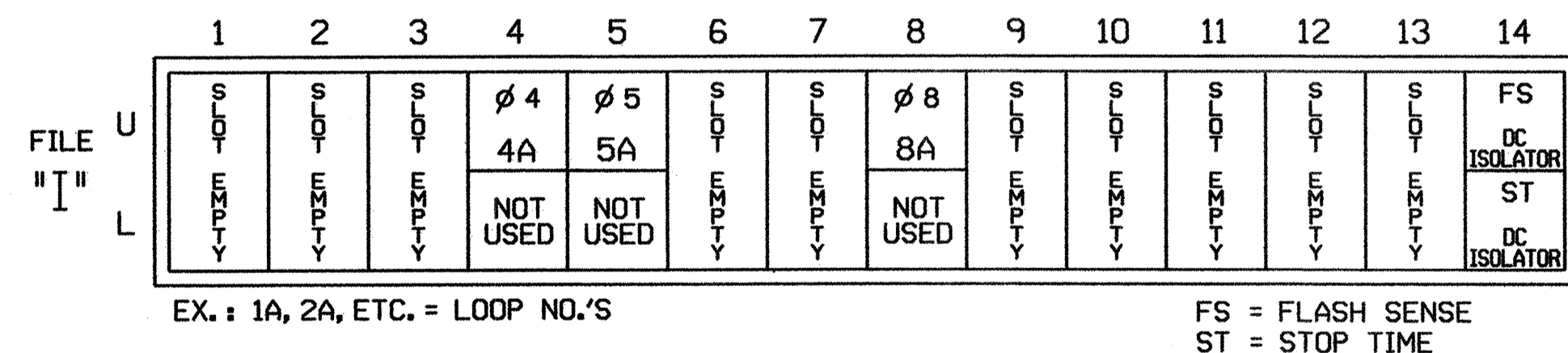
- From Main Menu press '2' (Phase Control), then '1' (Phase Control Functions). Scroll to the bottom of the menu and enable Dynamic/Backup Control Function 1.
- From Phase Control Functions Menu press '2' (Dynamic/Backup Control Functions).

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

BACKUP PROTECTION PROGRAMMING COMPLETE

INPUT FILE POSITION LAYOUT

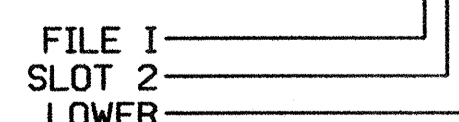
(front view)



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
4A	TB21-7,8	I4U	41	3	4	4	Y	Y			10
5A	TB21-9,10	I5U	55	17	5	5	Y	Y			15
8A	TB22-1,2	I8U	42	4	8	8	Y	Y			10

INPUT FILE POSITION LEGEND: I2L



LOAD RESISTOR INSTALLATION DETAIL

VALUE (ohms)	WATTAGE
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)

PHASE 5 RED FIELD TERMINAL (I3I)



NOTE: The purpose of this resistor is to load the channel red monitor input in order for the Signal Sequence Monitor to use the full signal sequence monitoring capability on this channel, which does not use the red display in the field.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 12-0046
DESIGNED: 11/2005
SEALED: 01/03/06
REVISED: N/A

This Plan shall supersede the plan signed and sealed by George C. Brown, PE, on 12/09/2004.

Signal Upgrade

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared in the Offices of:
The State of North Carolina
Department of Transportation
Signal Management Section
122 N. McDowell St., Raleigh, NC 27603

US 29-74
(E. Franklin Boulevard)
at
N. Church Street

Division 12 Gaston County Gastonia

PLAN DATE: December 2005 REVIEWED BY: T. J. Jupp
PREPARED BY: A. A. Klooz REVIEWED BY:

REVISIONS INIT. DATE

George C. Brown 1/4/06
SIGNATURE DATE

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 022013
GEORGE C. BROWN

SIG. INVENTORY NO. 12-0046