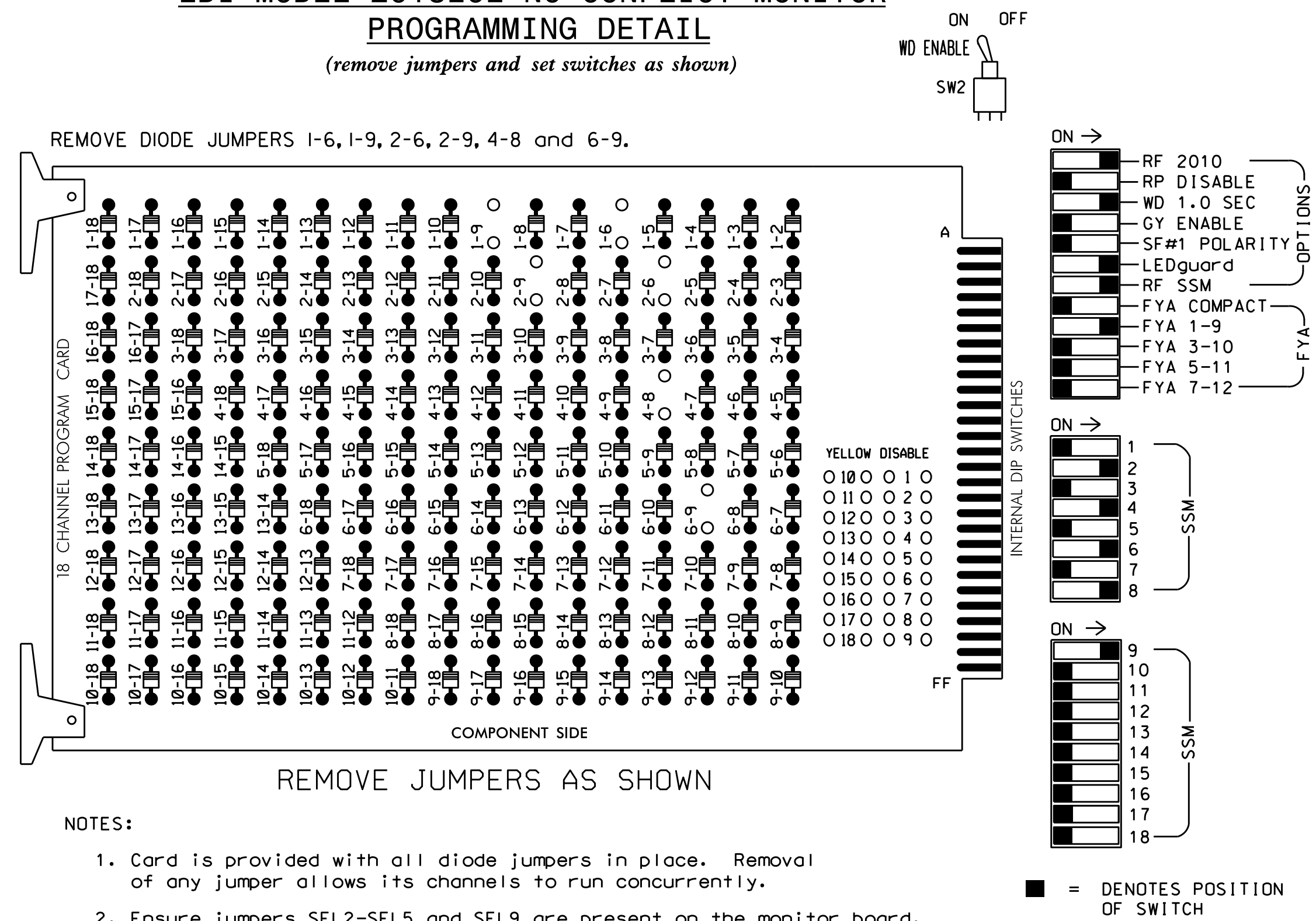


**EDI MODEL 2018ECL-NC CONFLICT MONITOR
PROGRAMMING DETAIL**

(remove jumpers and set switches as shown)



NOTES

- To prevent "flash-conflict" problems, insert red flash program blocks for all unused vehicle load switches in the output file. Verify that signal heads flash in accordance with the signal plans.
- Program controller to Start Up in phases 2 and 6 green.
- Set power-up flash time to 0 seconds within the controller programming. The conflict monitor will govern startup flash. Ensure STARTUP "RED START" is set to 0 seconds.
- Enable Simultaneous Gap-Out feature for all phases.
- Program all timing information into phase banks 1, 2, and 3 unless otherwise noted.
- Set phase bank 3 maximum limit to 250 seconds for phases used.
- Program phases 4 and 8 for Double Entry.
- Ensure start up flash phases are coordinated with flash program block assignments.
- Set the Red Revert interval on the controller to 1 second.
- This cabinet and controller are part of the Durham Signal System.

EQUIPMENT INFORMATION

CONTROLLER.....2070E
 CABINET.....332 W/ AUX
 SOFTWARE.....McCain 2033
 CABINET MOUNT.....BASE
 OUTPUT FILE POSITIONS...18 WITH AUX FILE
 LOAD SWITCHES USED.....S1,S2,S5,S8,S11,AUX S1
 PHASES USED.....**1,2,4,6,8
 OVERLAP 1.....*
 OVERLAP 2.....NOT USED
 OVERLAP 3.....NOT USED
 OVERLAP 4.....NOT USED

* See FYA PPLT Programming Detail on Sheet 2.
 ** Phase used only during Preempt.

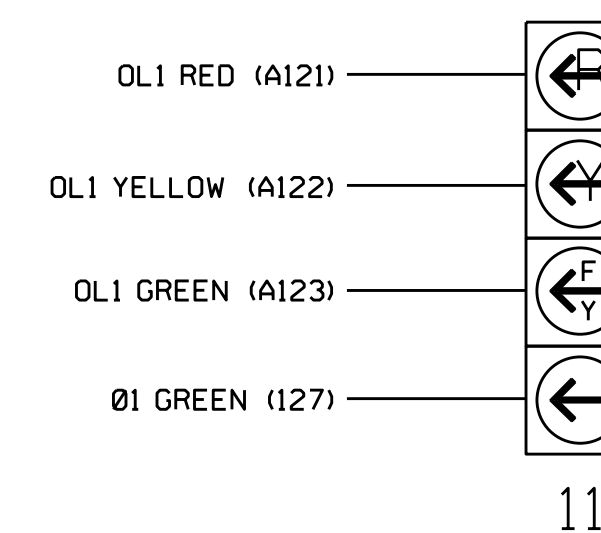
SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6	
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18	
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE	
SIGNAL HEAD NO.	11	22,23	NU	NU	41,42	NU	NU	61,62	NU	NU	81,82	NU	11	NU	NU	NU	NU	NU	
RED	128				101			134			107								
YELLOW	*	129			102			135			108								
GREEN		130			103			136			109								
RED ARROW																		A121	
YELLOW ARROW																			A122
FLASHING YELLOW ARROW																			A123
GREEN ARROW	127																		

NU = Not Used
 * Denotes install load resistor. See load resistor installation detail this sheet.
 ★ See pictorial of head wiring in detail below.

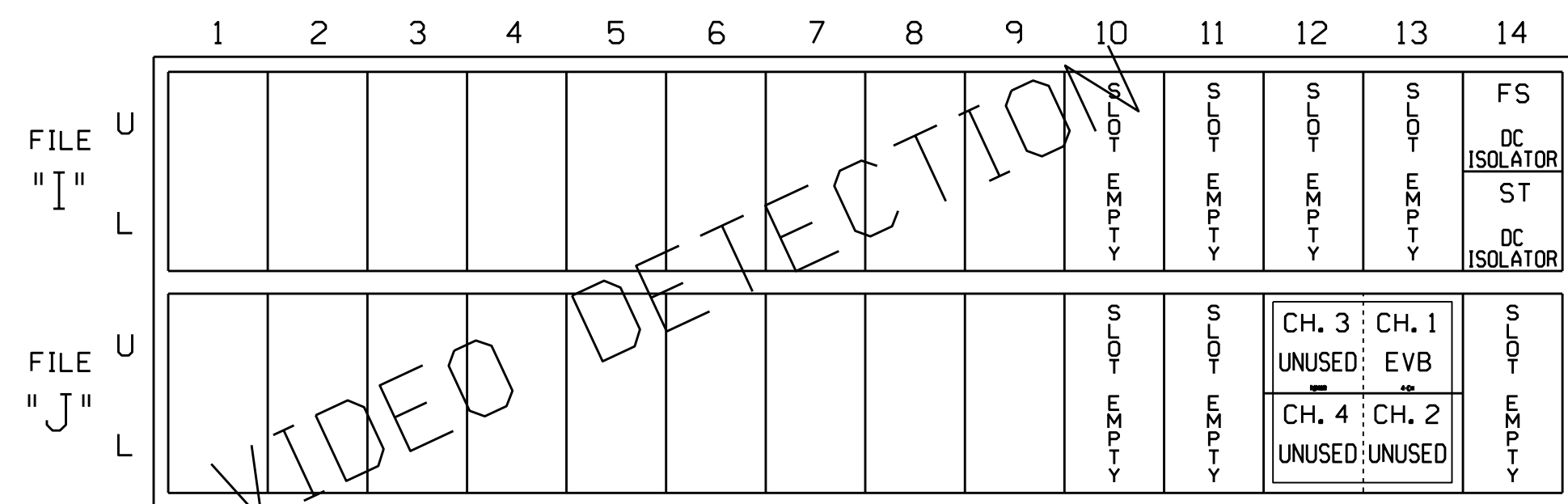
FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



INPUT FILE POSITION LAYOUT

(front view)



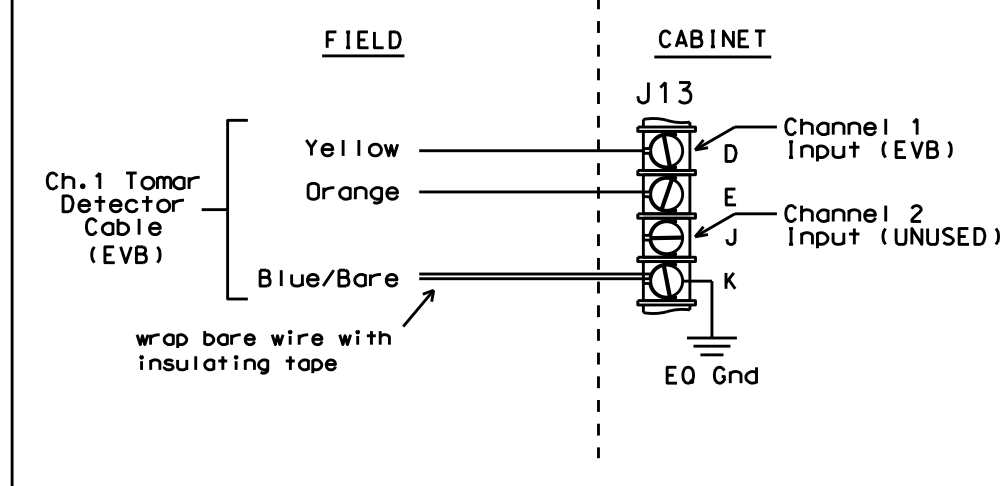
EX.: 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
 ST = STOP TIME
 EVx = EMERGENCY VEHICLE PREEMPT

4 CHANNEL TOMAR OSP CARD
 INSERT CARD INTO SLOT J13

TYPICAL TOMAR FIELD WIRE DETAIL

(input file, rear view)



SPECIAL DETECTOR NOTE

Install a video detection system for vehicle detection. Perform installation according to manufacturer's directions and NCDOT engineer-approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

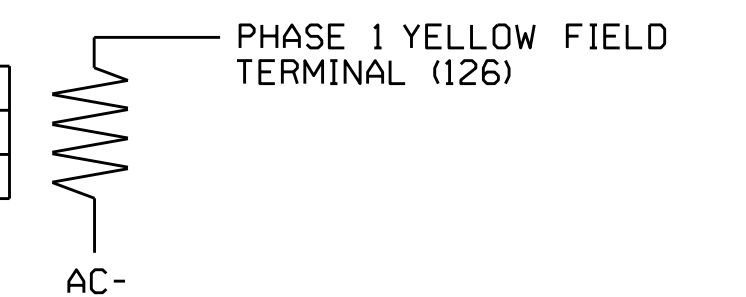
STARTUP CALLS PROGRAMMING

Prevents Veh Call to phase 1 during Startup. Phase 1 used only during Preempt.
 Main Menu - 9) UTILITIES - 1) STARTUP
 VEHICLE CALLS 2,4,6,8

LOAD RESISTOR INSTALLATION DETAIL

(install resistor as shown below)

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



Electrical Detail - Temporary 3 and 5 - Sheet 1 of 2

Electrical and Programming Details For: **NC 55 (North Alston Avenue) at Taylor Street**

Prepared In the Offices of: **TRANSPO-MOBILITY AND SAFETY SOLUTIONS**

Division 5 Durham County Durham

PLAN DATE: November 2014 REVIEWED BY: T. Joyce

PREPARED BY: C. Strickland REVIEWED BY:

REVISIONS INIT. DATE

DocuSigned by: **George C. Brown** 4/2/2015

750 N. Greenfield Pkwy, Garner, NC 27529

SEAL: GEORGE C. BROWN, PROFESSIONAL ENGINEER, SEAL 022013

SIG. INVENTORY NO. 05-0228T3/T5

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 05-0228T3/T5
 DESIGNED: September 2014
 SEALED: 04/02/2015
 REVISED: N/A

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 27-MAR-2015 16:56
 C:\Users\jgibson\Documents\Signal\work\proj\05-0228_sml_e_000.dgn
 27-MAR-2015 16:56