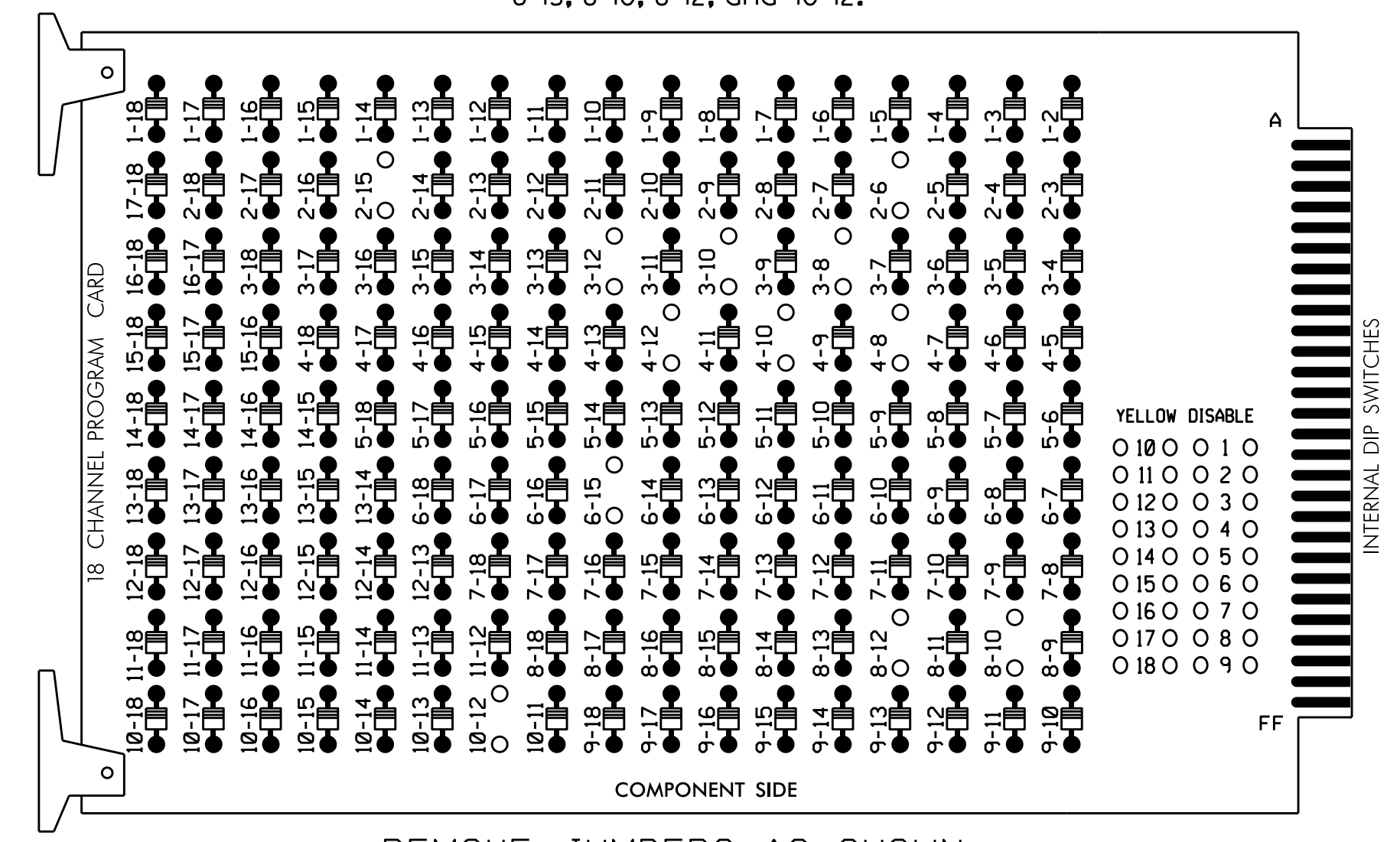


### EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 2-6, 2-15, 3-8, 3-10, 3-12, 4-8, 4-10, 4-12, 6-15, 8-10, 8-12, and 10-12.



REMOVE JUMPERS AS SHOWN

**NOTES:**

- Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
- Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
- Ensure that Red Enable is active at all times during normal operation.
- Ensure conflict monitor communicates with 2070.

■ = DENOTES POSITION OF SWITCH

### 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.
- Program Startup Ped Call for phase 6.
- Set the Red Revert interval on the controller to 1 second.
- This cabinet and controller are part of the Durham Signal System.

### 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.	NU	22,23	NU	31	42,43	NU	NU	62,63	P61, P62	NU	81,82	NU	31	NU	NU	41	NU	NU
RED		128			101			134			107							
YELLOW		129		*	102			135			108							
GREEN		130			103			136			109							
RED ARROW														A124				A101
YELLOW ARROW														A125				A102
FLASHING YELLOW ARROW														A126				A103
GREEN ARROW																		
Hand icon													119					
Person icon																		

NU = Not Used

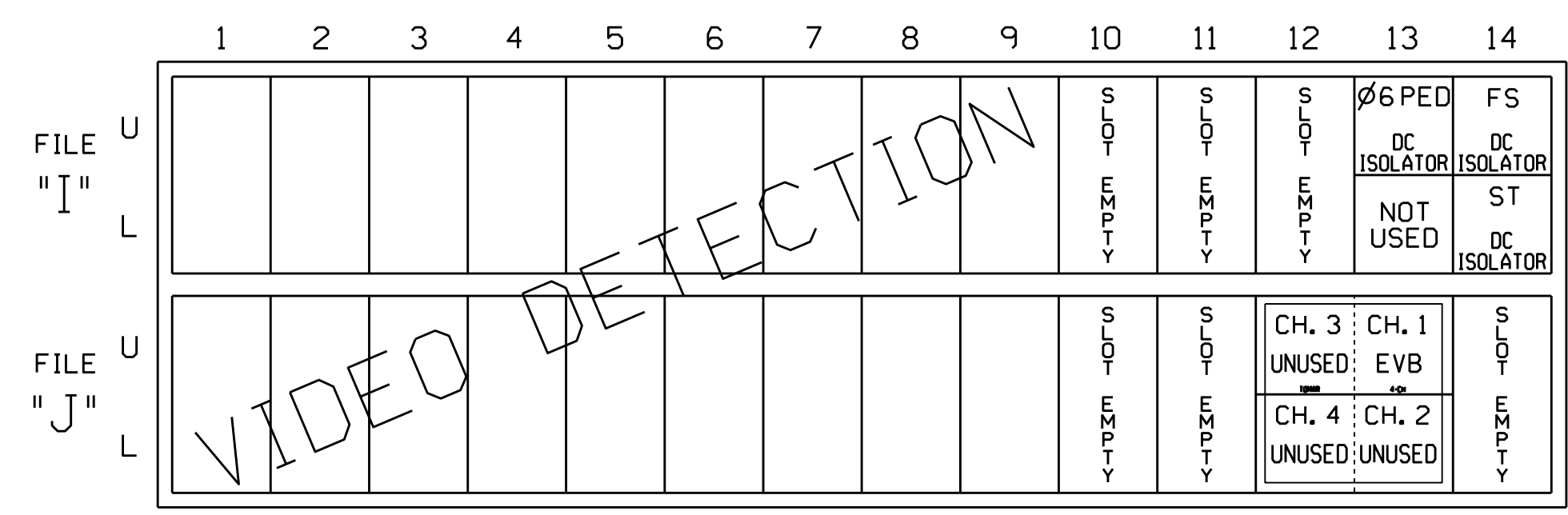
\* Denotes install load resistor. See load resistor installation detail this sheet.  
 \* See pictorial of head wiring in detail below.

### EQUIPMENT INFORMATION

CONTROLLER.....2070E  
 CABINET.....332 W/ AUX  
 SOFTWARE.....McCAIN 2033  
 CABINET MOUNT.....BASE  
 OUTPUT FILE POSITIONS...18 WITH AUX FILE  
 LOAD SWITCHES USED.....S2,S4,S5,S8,S9,S11  
 AUX S2,AUX S5  
 PHASES USED.....2,3\*,4,6,6 PED,8  
 OVERLAP 1.....NOT USED  
 OVERLAP 2.....\*\*  
 OVERLAP 3.....NOT USED  
 OVERLAP 4.....4+8  
 \* Phase used only during Preempt.  
 \*\* See FYA PPLT Programming - Sheet 2.

### INPUT FILE POSITION LAYOUT

(front view)



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

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

4 CHANNEL TOMAR OSP CARD  
 INSERT CARD INTO SLOT J13

### INPUT FILE CONNECTION & PROGRAMMING CHART

PED PUSH BUTTONS	LOOP TERMINAL	INPUT FILE POS.	DETECTOR NO.	PIN NO.	ATTRIBUTES	NEMA PHASE
P61,P62	TB8-7,9	113U	26	68	2	6 PED

NOTE: INSTALL DC ISOLATOR IN INPUT FILE SLOT 113

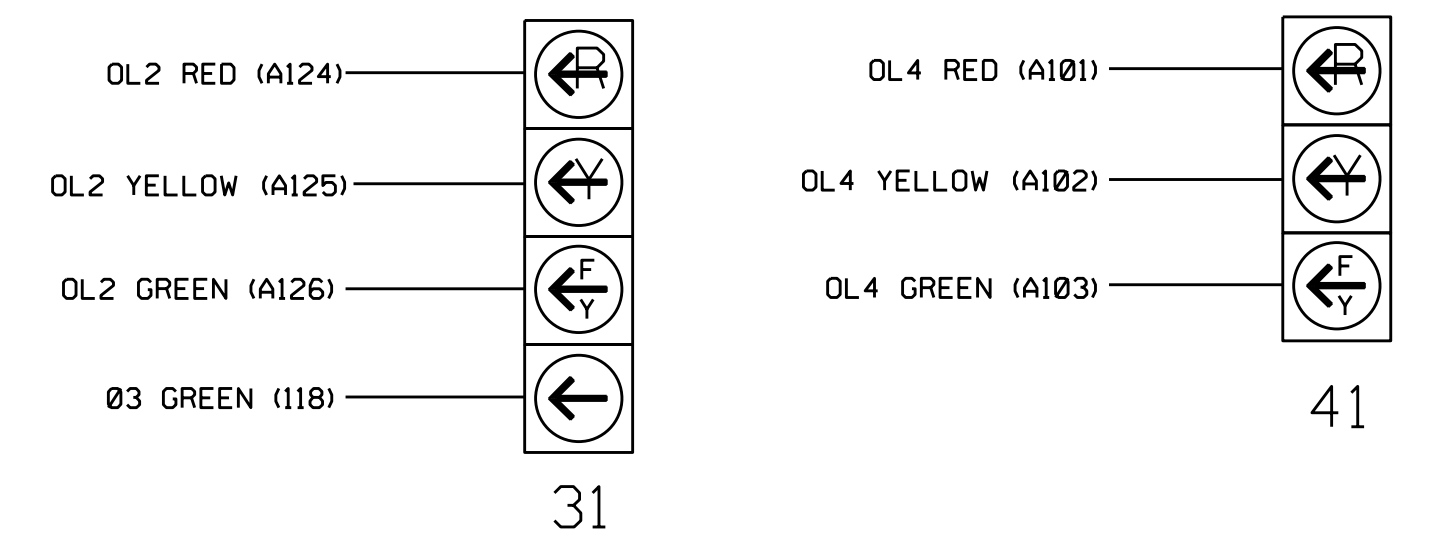
DETECTOR ATTRIBUTES LEGEND: INPUT FILE POSITION LEGEND: J2L

- 1-FULL TIME DELAY
- 2-PED CALL
- 3-RESERVED
- 4-COUNTING
- 5-EXTENSION
- 6-TYPE 3
- 7-CALLING
- 8-ALTERNATE

- FILE J
- SLOT 2
- LOWER

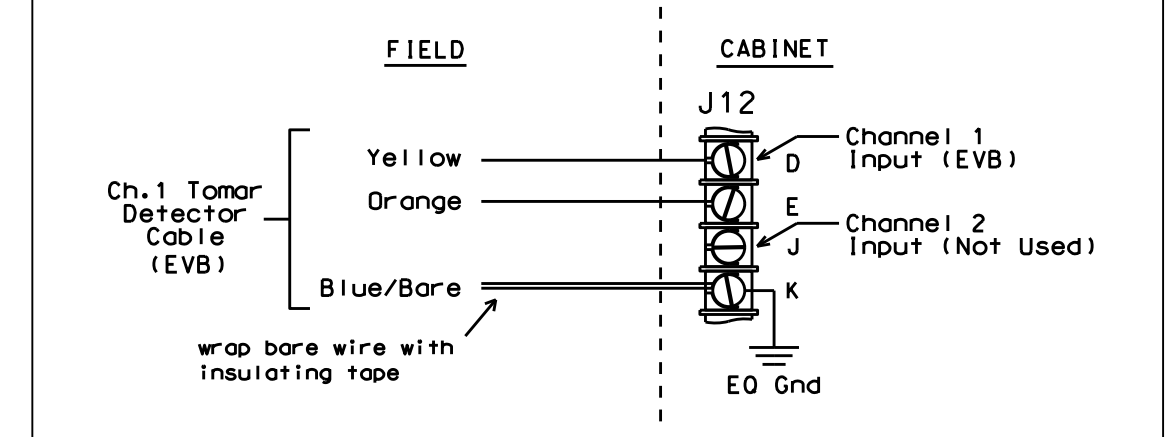
### FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



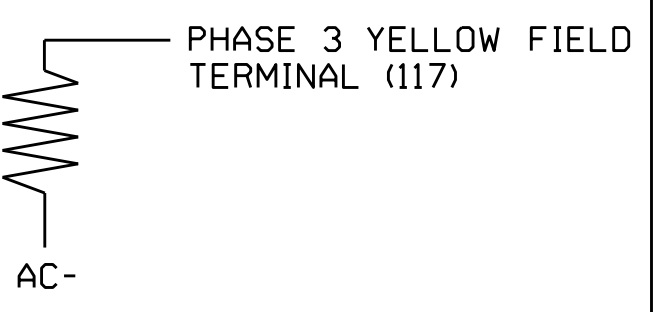
### TYPICAL TOMAR FIELD WIRE DETAIL

(input file, rear view)



### LOAD RESISTOR INSTALLATION DETAIL

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



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 05-1029T3  
 DESIGNED: September 2014  
 SEALED: 4/2/15  
 REVISED: N/A

Electrical Detail - Sheet 1 of 2 (Temporary Design 3)

ELECTRICAL AND PROGRAMMING DETAILS FOR: Prepared In the Offices of:  750 N. Greenfield Pkwy, Garner, NC 27529	NC 55 (North Alston Avenue) at Liberty St		SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 022013 GEORGE C. BROWN
	PLAN DATE: November 2014 PREPARED BY: B. SIMMONS	REVIEWED BY: T. Joyce REVIEWED BY:	

07-10-2014 10:40 S:\MITSU\115\SIGNAL\working\Map\5\mms\working\Folder\Electrical\Detail\051029T3\_sml.ele\_xxx.dgn  
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