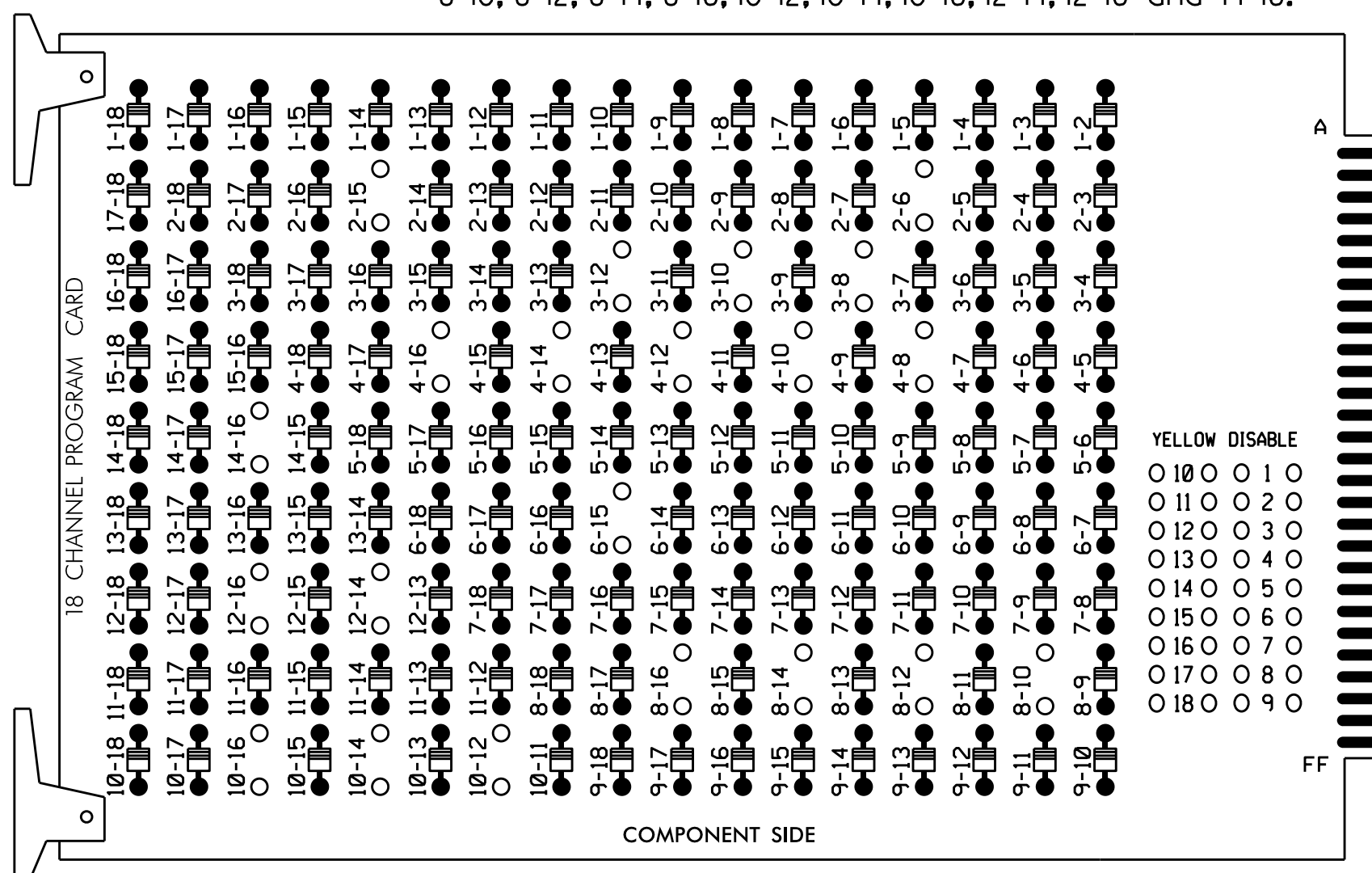


**EDI MODEL 2018ECL-NC CONFLICT MONITOR**

**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, 4-14, 4-16, 6-15, 8-10, 8-12, 8-14, 8-16, 10-12, 10-14, 10-16, 12-14, 12-16 and 14-16.



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 Calls for phases 4, 6 and 8.
- 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	P41, P42	NU	62,63	P61, P62	NU	81,82	P81, P82	NU	31	NU	NU	41	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					118													
Hand								104			119							110
Walking								106			121							112

NU = Not Used

\* Denotes install load resistor. See load resistor installation detail this sheet.

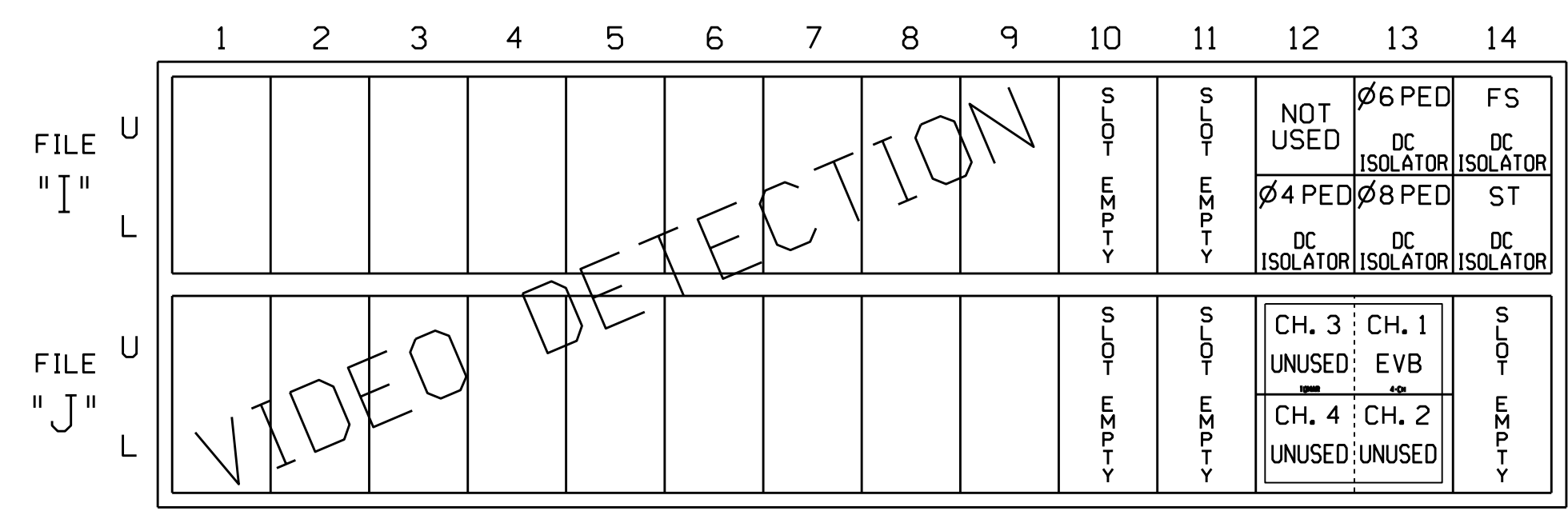
\* See pictorial of head wiring in detail below.

**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,S6,S8,S9,S11,S12  
 AUX S2,AUX S5  
 PHASES USED.....2,3\*,4,4 PED,6,6 PED,8,8 PED  
 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
P41,P42	TB8-5,6	I12L	27	69	2	4 PED
P61,P62	TB8-7,9	I13U	26	68	2	6 PED
P81,P82	TB8-8,9	I13L	28	70	2	8 PED

NOTE:  
 INSTALL DC ISOLATORS IN INPUT FILE SLOTS 112 AND 113

**DETECTOR ATTRIBUTES LEGEND:**

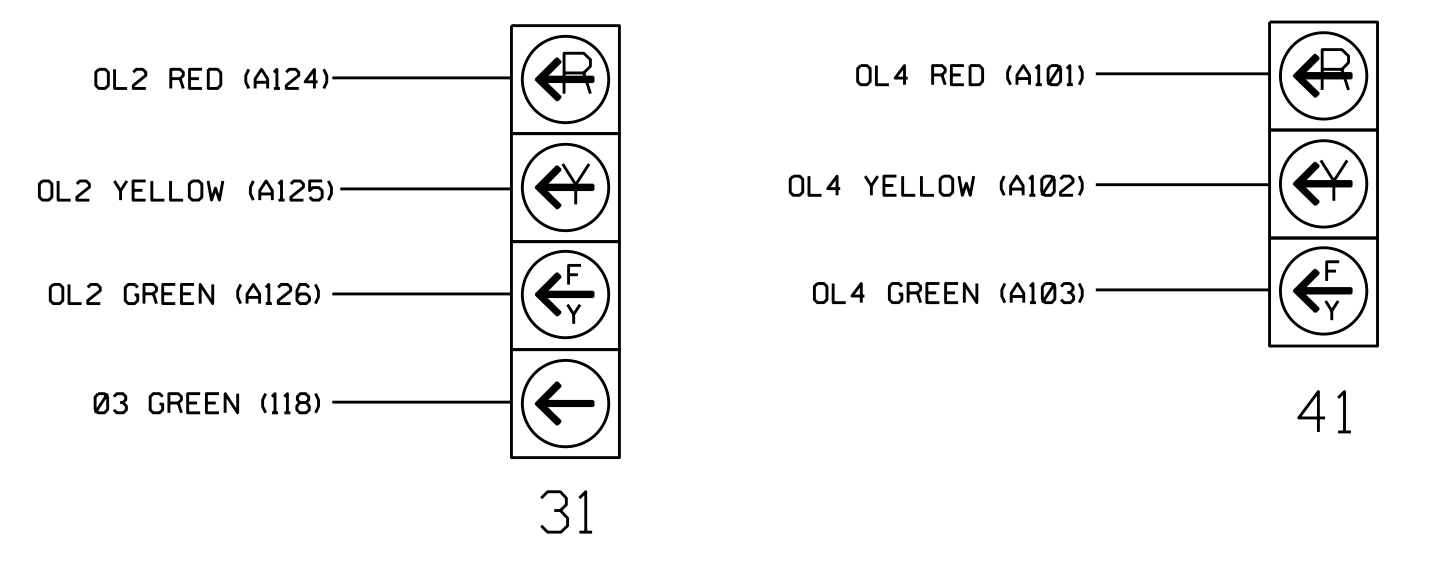
- FULL TIME DELAY
- PED CALL
- RESERVED
- COUNTING
- EXTENSION
- TYPE 3
- CALLING
- ALTERNATE

**INPUT FILE POSITION LEGEND:**

- FILE J
- SLOT 2
- LOWER

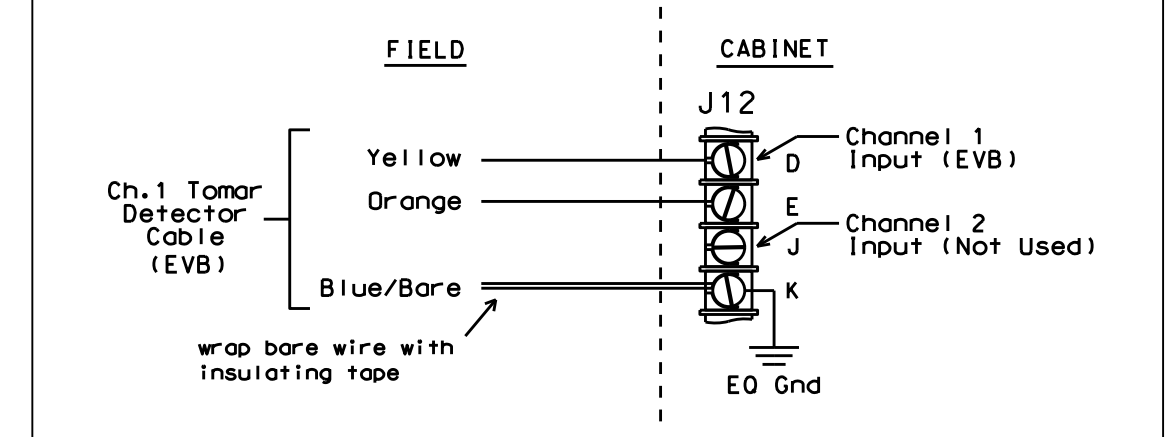
**FYA SIGNAL WIRING DETAIL**

(wire signal heads as shown)



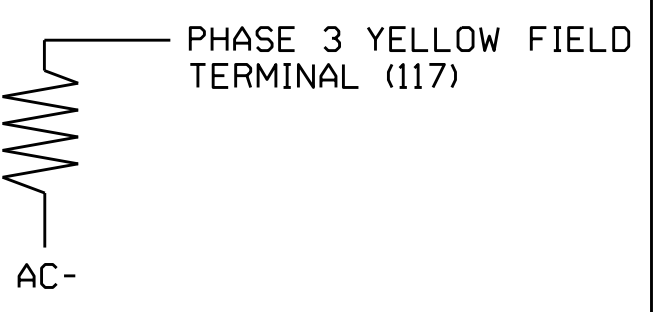
**TYPICAL TOMAR FIELD WIRE DETAIL**

(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: 05-1029T5  
 DESIGNED: September 2014  
 SEALED: 4/2/15  
 REVISED: N/A

Electrical Detail - Sheet 1 of 2 (Temporary Design 5)

Electrical and Programming Details for: **NC 55 (North Alston Avenue) at Liberty St**

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: B. SIMMONS REVIEWED BY:

REVISIONS INIT. DATE

Seal: **GEORGE C. BROWN** ENGINEER 022013

DocuSigned by: **George C. Brown** 4/7/2015

750 N. Greenfield Pkwy, Garner, NC 27529

SIG. INVENTORY NO. 05-1029T5

24-Apr-2015 10:32  
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