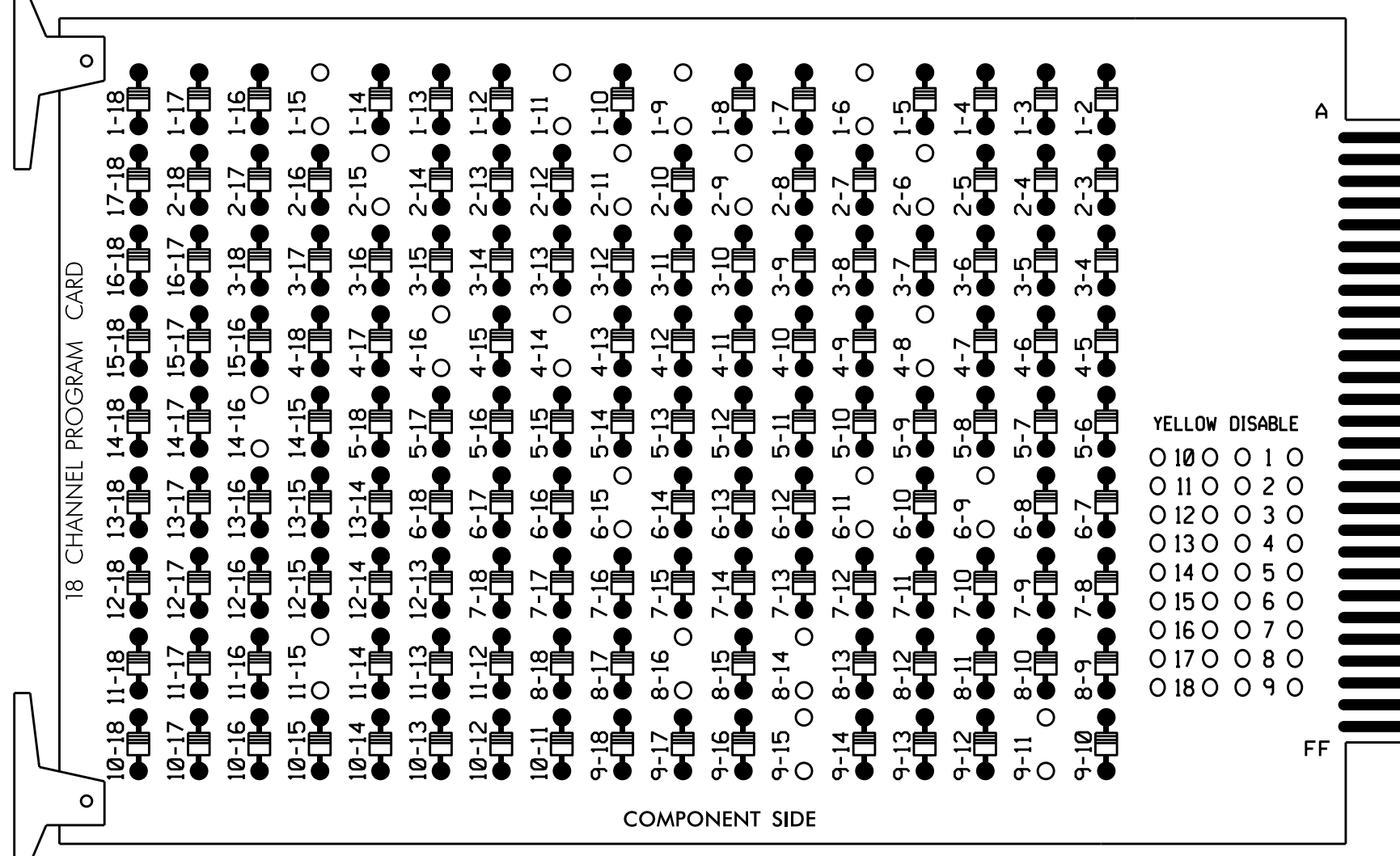


### EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

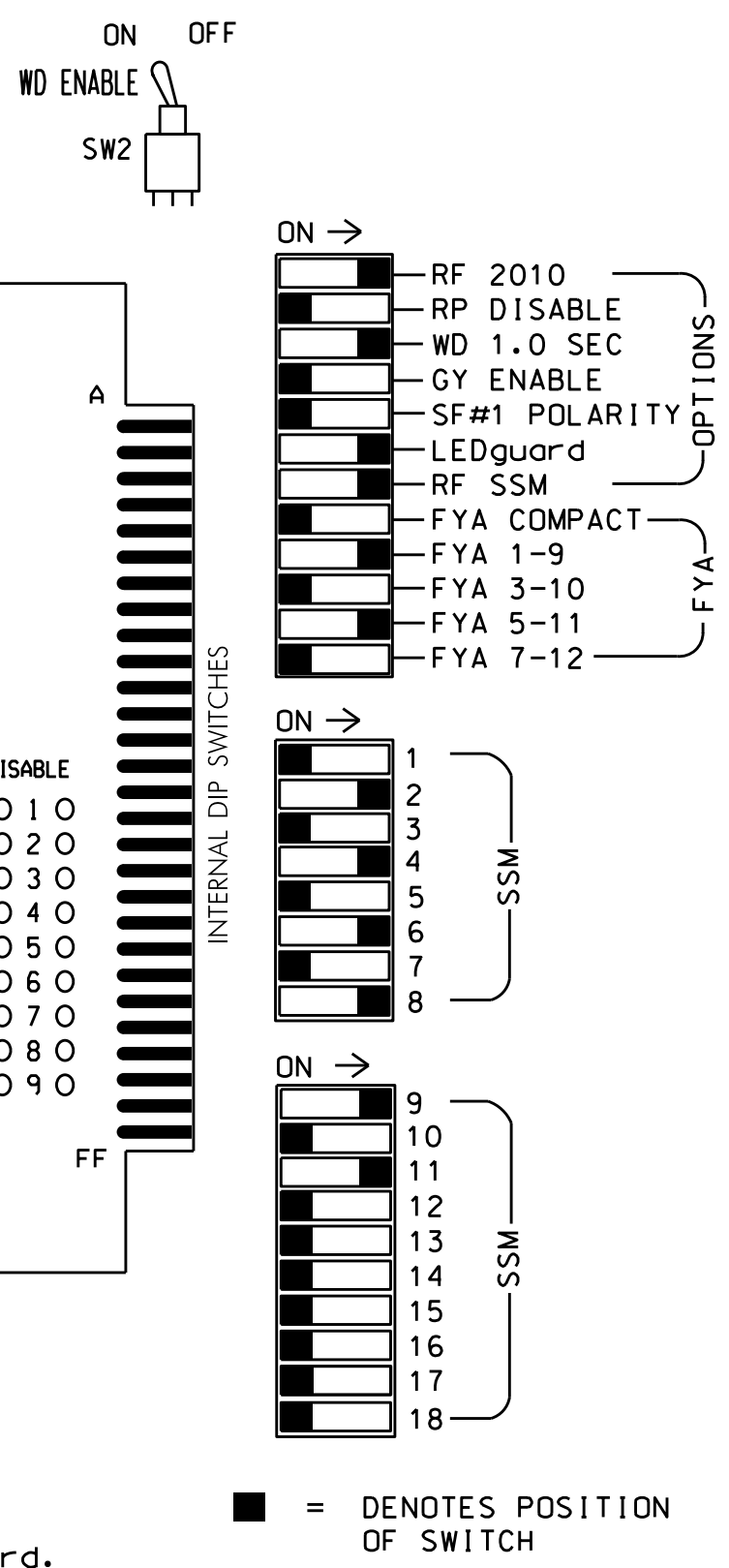
REMOVE DIODE JUMPERS 1-6, 1-9, 1-11, 1-15, 2-6, 2-9, 2-11, 2-15, 4-8, 4-14, 4-16, 6-9, 6-11, 6-15, 8-14, 8-16, 9-11, 9-15, 11-15 and 14-16.



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.



### 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.

### 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,S6,S8,S9,S11,S12,  
 AUX S1,AUX S4  
 PHASES USED.....1,2,4,4 PED,6,6 PED,8,8 PED  
 OVERLAP 1.....\*  
 OVERLAP 2.....NOT USED  
 OVERLAP 3.....2+6  
 OVERLAP 4.....NOT USED

\* See FYA PPLT Programming Detail on Sheet 2.

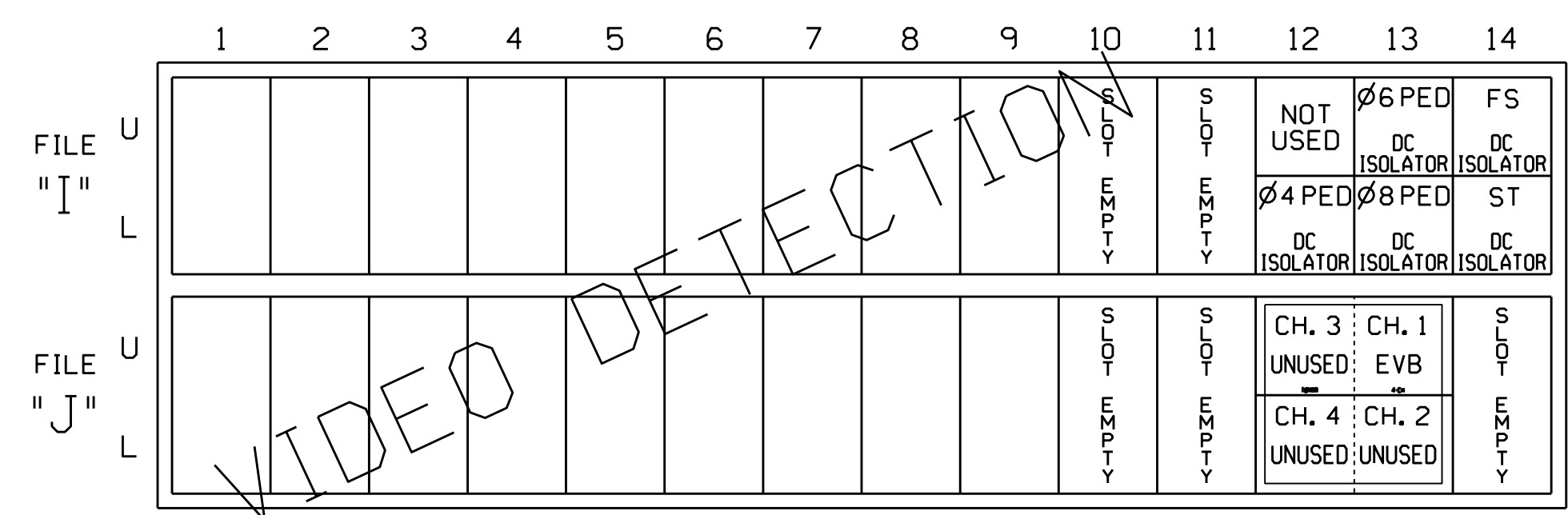
### SIGNAL HEAD HOOK-UP CHART

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
CHU 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	P41, P42	NU	61,62	P61, P62	NU	81,82	P81, P82	11	NU	NU	21	NU	NU
RED		128			101			134				107						
YELLOW	*	129			102			135				108						
GREEN		130			103			136				109						
RED ARROW													A121				A114	
YELLOW ARROW													A122				A115	
FLASHING YELLOW ARROW													A123				A116	
GREEN ARROW	127																	
						104			119			110						
						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.

### INPUT FILE POSITION LAYOUT

(front view)



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

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

### 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: INPUT FILE POSITION LEGEND: J2L

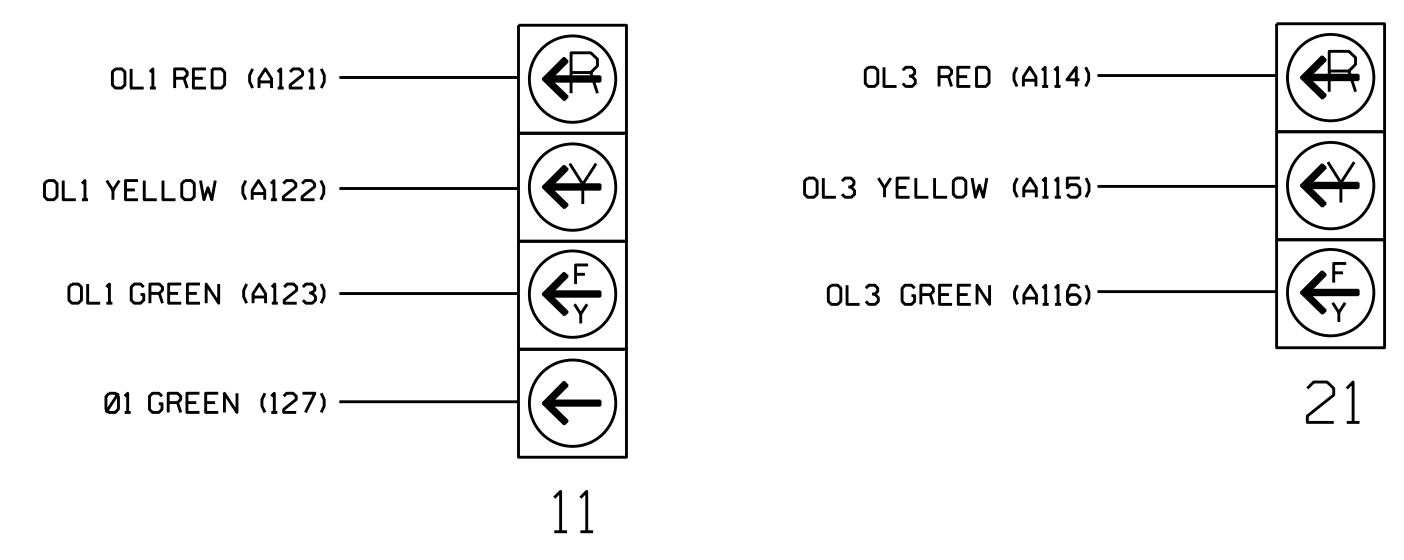
- 1-FULL TIME DELAY  
 2-PED CALL  
 3-RESERVED  
 4-COUNTING  
 5-EXTENSION  
 6-TYPE 3  
 7-CALLING  
 8-ALTERNATE
- FILE J  
 SLOT 2  
 LOWER

### 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.

### FYA SIGNAL WIRING DETAIL

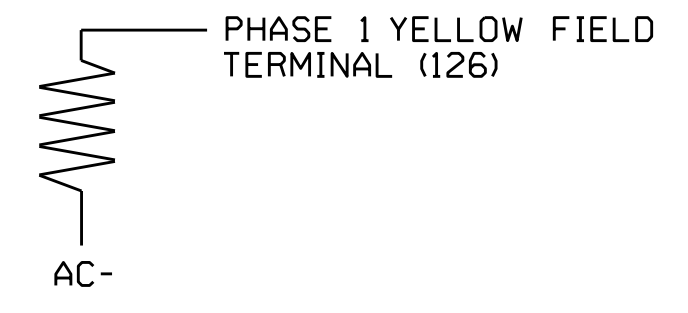
(wire signal heads as shown)



### LOAD RESISTOR INSTALLATION DETAIL

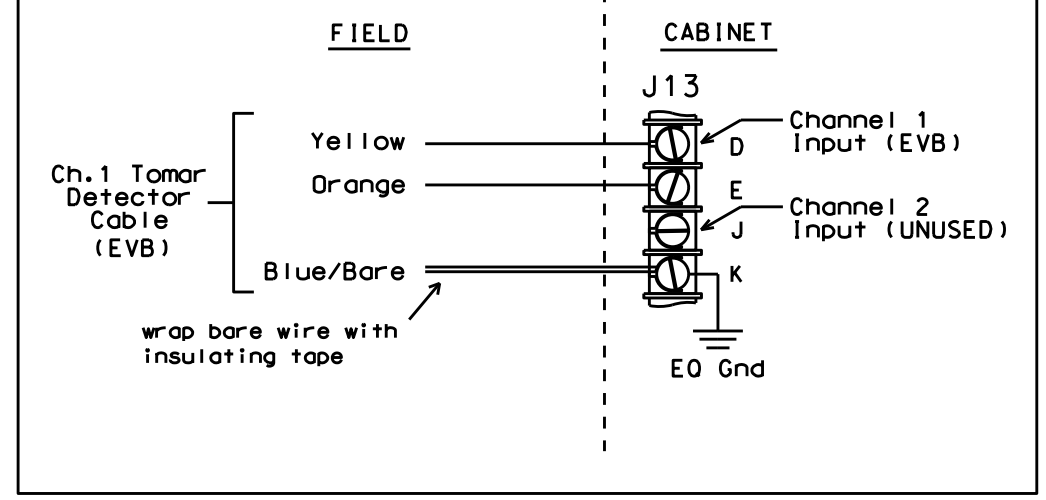
(install resistor as shown below)

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



### TYPICAL TOMAR FIELD WIRE DETAIL

(input file, rear view)



Electrical Detail - Temporary 5 - Sheet 1 of 2

	PREPARED IN THE OFFICES OF: TRANSPORTATION MOBILITY AND SAFETY SOLUTIONS, INC. 750 N. Greenfield Pkwy, Garner, NC 27529	DETAILS FOR: NC 55 (South Alston Avenue) at SR 1926 (Angier Avenue)	SEAL 
DESIGNED: March 2015 SEALED: 04/02/2015 REVISED: N/A		Division 5 Durham County Durham PLAN DATE: March 2015 REVIEWED BY: T. Joyce PREPARED BY: C. Strickland REVIEWED BY:	DocuSigned by: George C. Brown 4/2/2015 DATE:

C:\Users\jgibson\Documents\Signal\work\proj\05-1026T5\smc\_e\_0000.dgn  
 04-02-2015 13:45  
 S:\IT\ASST\T5\Signal\work\proj\05-1026T5\smc\_e\_0000.dgn  
 04/02/2015 13:45