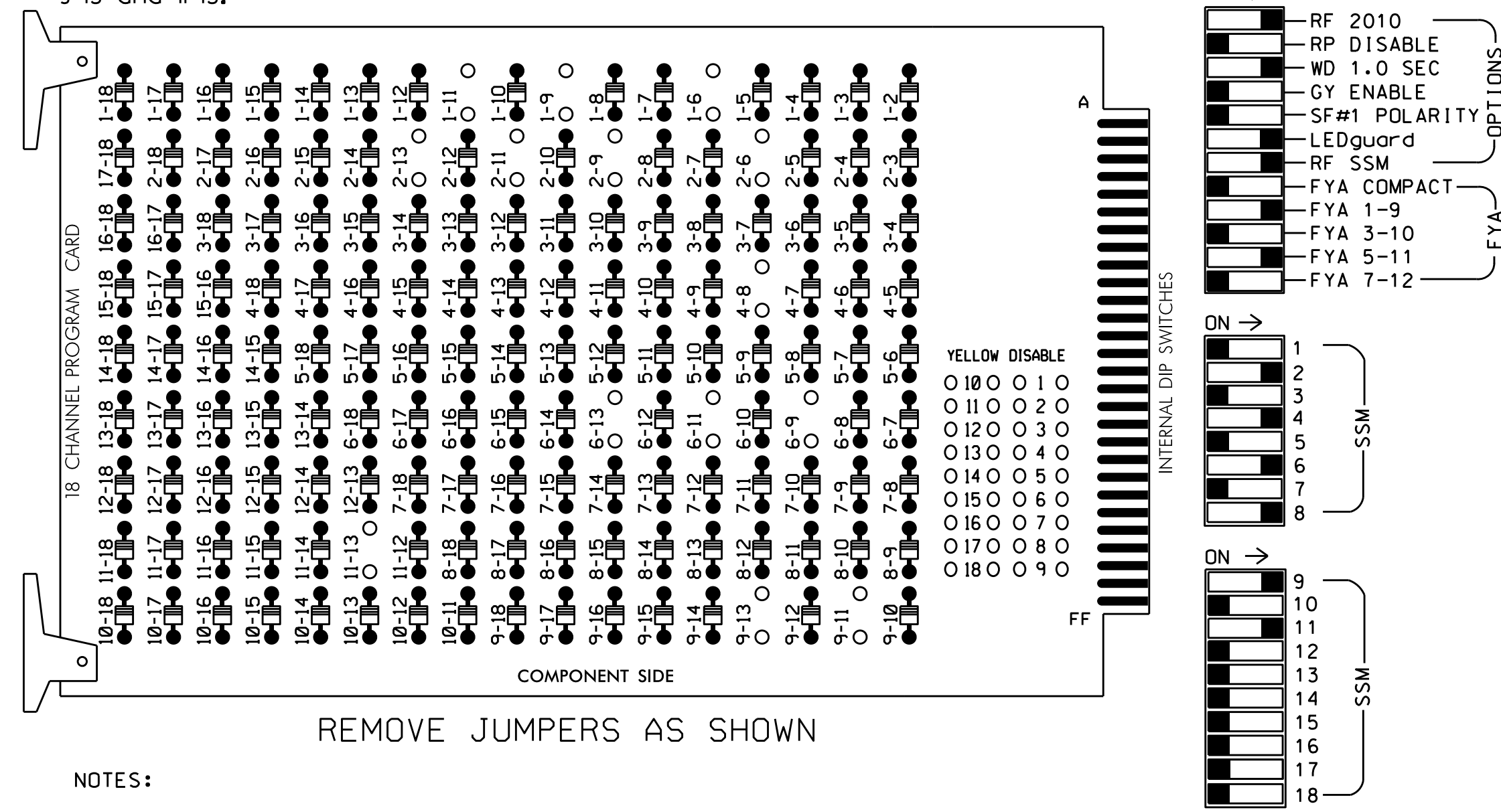


EDI MODEL 2018ECL-NC CONFLICT MONITOR
PROGRAMMING DETAIL
(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS I-6, I-9, I-11, 2-6, 2-9, 2-11, 2-13, 4-8, 6-9, 6-11, 6-13, 9-II, 9-13 and II-13.



NOTES:

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

NOTES

1. 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.
2. Program controller to Start Up in phases 2 and 6 green.
3. 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.
4. Enable Simultaneous Gap-Out feature for all phases.
5. Program all timing information into phase banks 1, 2, and 3 unless otherwise noted.
6. Set phase bank 3 maximum limit to 250 seconds for phases used.
7. Program phases 4 and 8 for Double Entry.
8. Ensure start up flash phases are coordinated with flash program block assignments.
9. Program Startup Ped Call for phase 2.
10. Set the Red Revert interval on the controller to 1 second.
11. 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,S3,S5,S8,S11,AUX S1,AUX S4
 PHASES USED.....**1,2,2 PED,4,6,8
 OVERLAP 1.....*
 OVERLAP 2.....NOT USED
 OVERLAP 3.....2+6
 OVERLAP 4.....NOT USED

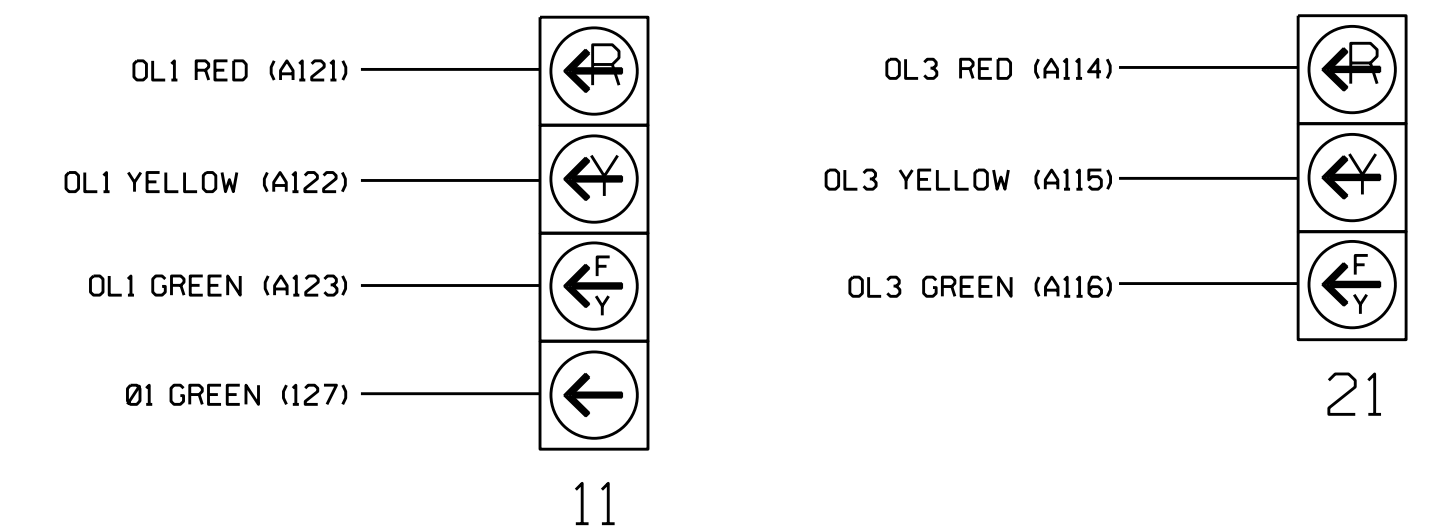
* See FYA PPLT Programming Detail on Sheet 2.
 ** Phase used only during Preempt.

SIGNAL HEAD HOOK-UP CHART

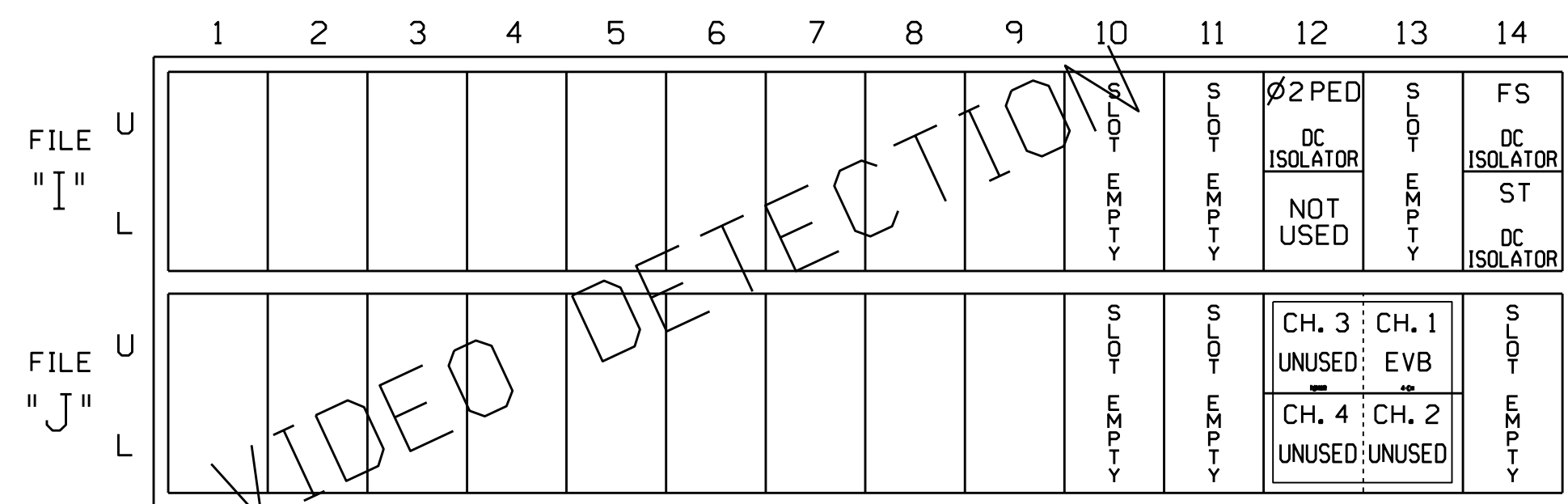
LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	11	22,23	P21, P22	NU	41,42	NU	NU	61,62	NU	NU	81,82	NU	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																	
Hand																		
Person																		

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

INPUT FILE CONNECTION & PROGRAMMING CHART

PED PUSH BUTTONS	LOOP TERMINAL	INPUT FILE POS.	DETECTOR NO.	PIN NO.	ATTRIBUTES	NEMA PHASE
P21,P22	T88-4,6	I12U	25	67	2	2 PED

NOTE: INSTALL DC ISOLATORS IN INPUT FILE SLOT 112.

- 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

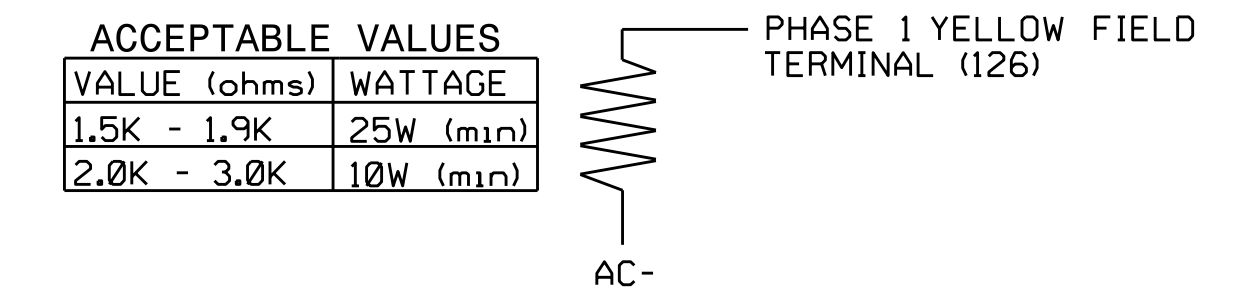
SPECIAL DETECTOR NOTE

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.

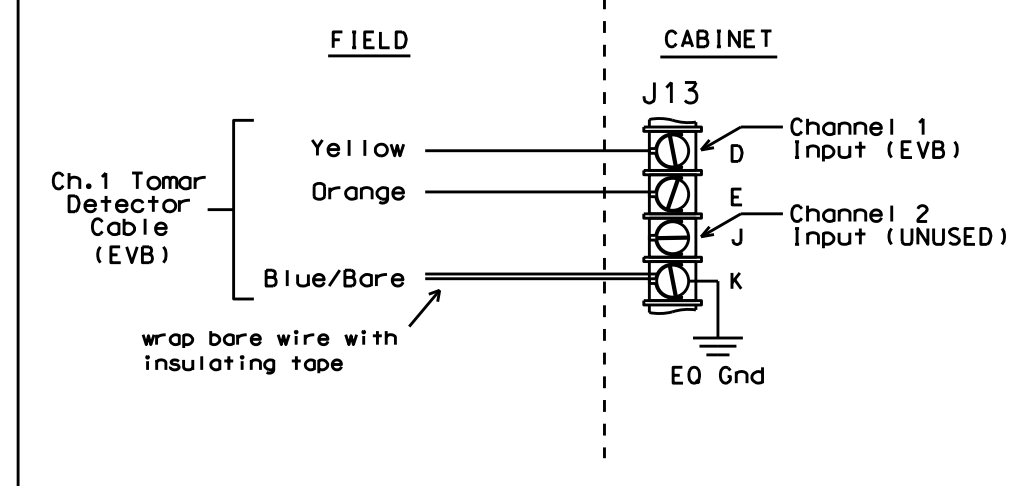
STARTUP CALLS PROGRAMMING

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)



TYPICAL TOMAR FIELD WIRE DETAIL
(input file, rear view)



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 05-0228T2
 DESIGNED: September 2014
 SEALED: 04/02/2015
 REVISED: N/A

Electrical Detail - Temporary 2 - Sheet 1 of 2

Prepared In the Offices of:
 TRANSPORTATION MOBILITY AND SAFETY CONSULTANTS, INC.
 750 N. Greenfield Pkwy, Garner, NC 27529

DETAILS FOR: NC 55 (North Alston Avenue) at Taylor Street

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
 F12001E008B439 DATE

SIG. INVENTORY NO. 05-0228T2

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 27-MAR-2015 16:53