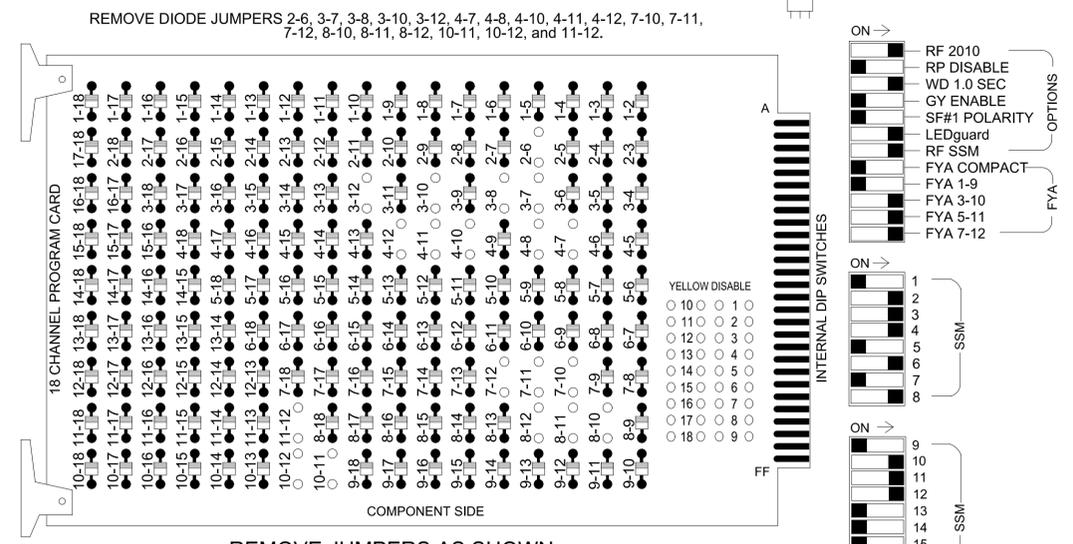


### 18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



**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 the Red Enable is active at all times during normal operation.
4. Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

### INPUT FILE POSITION LAYOUT

(front view)

FILE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	S-O-T P-M-E Y	S-O-T P-M-E Y	S-O-T P-M-E Y	S-O-T P-M-E Y	∅ 3 3A NOT USED	S-O-T P-M-E Y	FS DC ISOLATOR ST DC ISOLATOR							
FILE "J"	S-O-T P-M-E Y	S-O-T P-M-E Y	S-O-T P-M-E Y	S-O-T P-M-E Y	∅ 7 7A NOT USED	S-O-T P-M-E Y								

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

FS = FLASH SENSE  
ST = STOP TIME

### NOTES

1. To prevent "flash-conflict" problems, insert red flash program blocks for all vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
2. Program phases 4 and 8 for Dual Entry.
3. Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
4. If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
5. The cabinet and controller are part of the SR 1700 (Covered Bridge Road) System.

### EQUIPMENT INFORMATION

Controller.....2070LX  
 Cabinet.....332 w/ Aux  
 Software.....Q-Free MAXTIME  
 Cabinet Mount.....Base  
 Output File Positions.....18 With Aux. Output File  
 Load Switches Used.....S2, S4, S5, S8, S10, S11, AUX S2, AUX S4, AUX S5  
 Phases Used.....2, 3, 4, 6, 7, 8  
 Overlap "1".....NOT USED  
 Overlap "2".....\*  
 Overlap "3".....\*  
 Overlap "4".....\*

\*See overlap programming detail on sheet 2

### SIGNAL HEAD HOOK-UP CHART

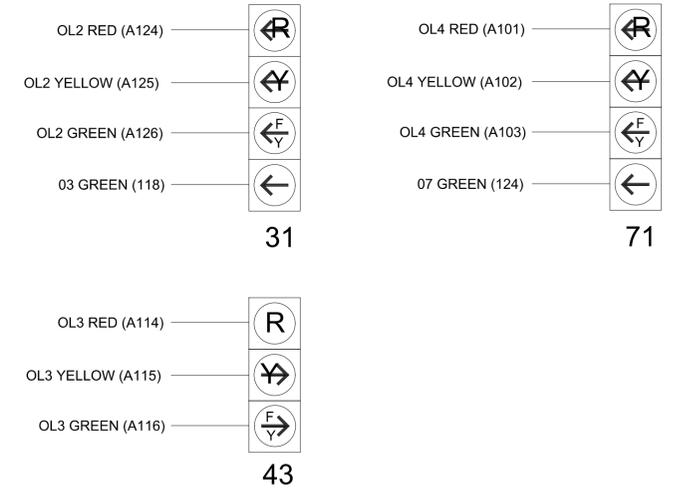
LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6	
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18	
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE	
SIGNAL HEAD NO.	NU	21,22	NU	31*	22	41,42	NU	NU	61,62	NU	71*	81,82	NU	NU	31*	NU	43*	71*	NU
RED		128			*	101			134			107						A114	
YELLOW		129				102			135		*	108							
GREEN		130				103			136			109							
RED ARROW															A124			A101	
YELLOW ARROW						117									A125			A115 A102	
FLASHING YELLOW ARROW															A126			A116 A103	
GREEN ARROW						118 118						124							

NU = Not Used

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

### FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



### INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN
3A	TB4-5,6	I5U	58	20	7 ★	3	15		X		X	
				-	30 ★	8	3		X		X	
7A	TB5-5,6	J5U	57	19	21 ★	7	15		X		X	
				-	32 ★	4	3		X		X	

★ For the detectors to work as shown on the signal design plan, see the Detector Programming Detail for Alternate Phasing on Sheet 2 of this plan.

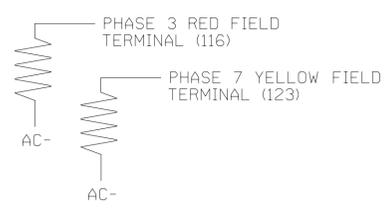
### INPUT FILE POSITION LEGEND: J2L



### LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown below)

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



### SPECIAL DETECTOR NOTE

Install a multizone microwave 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.

Electrical Detail - Sheet 1 of 3 - Temporary Design 1

Electrical and Programming Details For: SR 1700 (Covered Bridge Road) at SR 1003 (Buffalo Road)

Prepared in the Offices of:

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Divison 4 Johnston County Archer Lodge  
 PLAN DATE: April 2025 REVIEWED BY: M.L. Stygles  
 PREPARED BY: L. Gottlieb REVIEWED BY: J. Ma

REVISIONS: \_\_\_\_\_ INIT. DATE \_\_\_\_\_

Seal: NORTH CAROLINA PROFESSIONAL ENGINEER MATTHEW L. STYGLES SEAL 046057

Signed by: DATE: 4/24/2025  
 304851E8469246C  
 SIG. INVENTORY NO. 04-1181T1

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