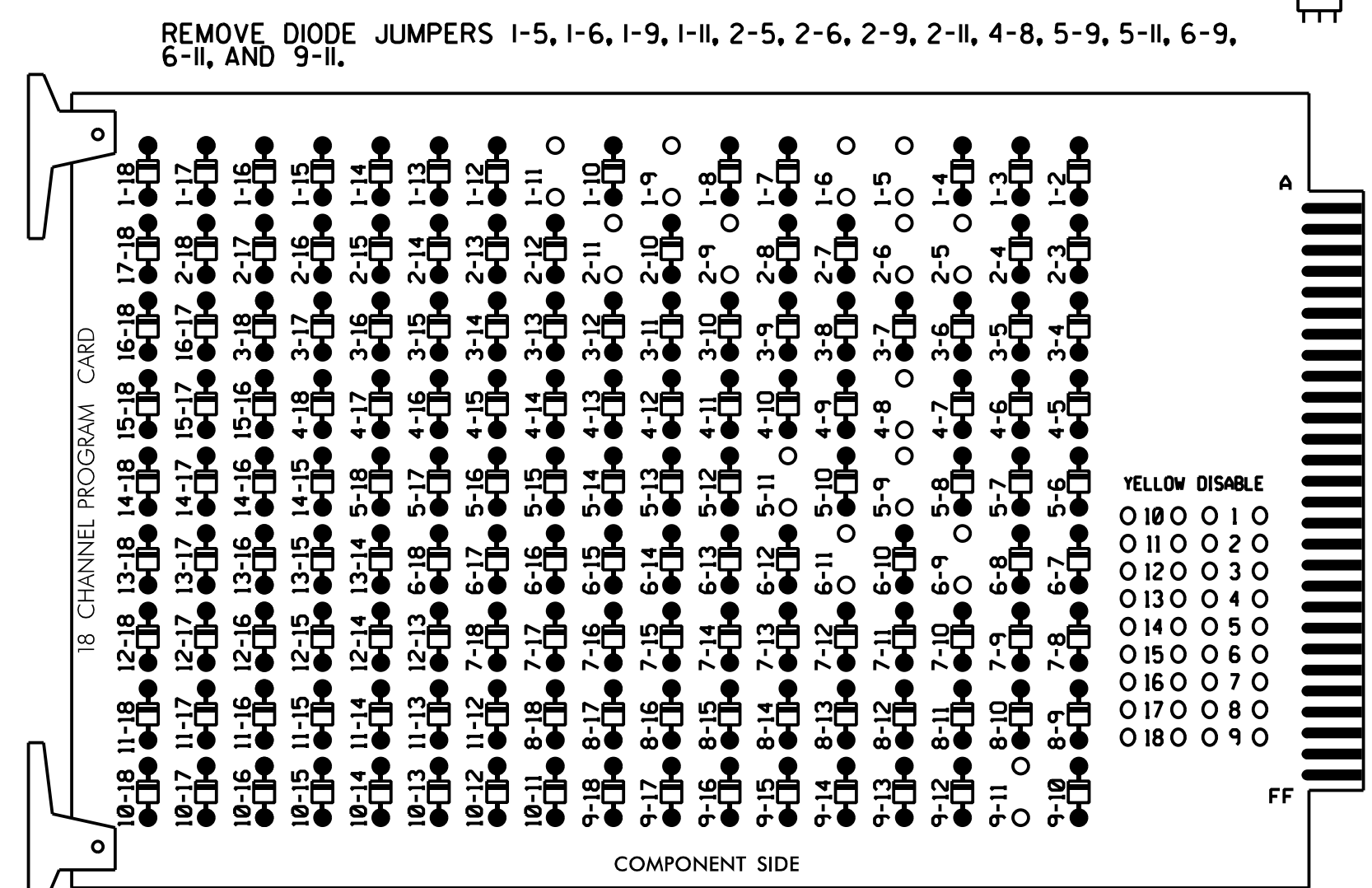
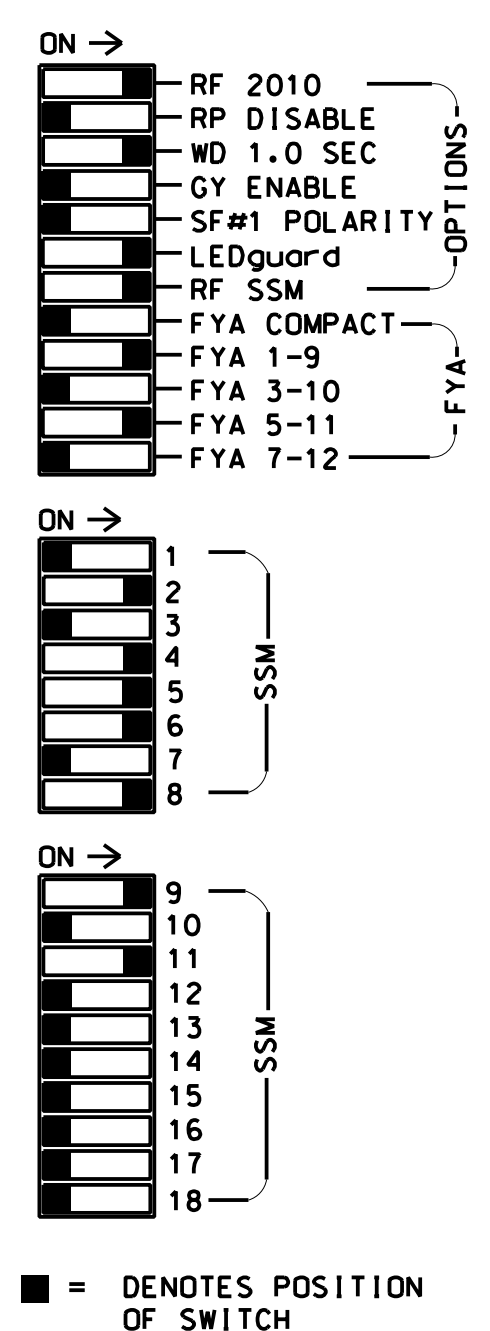


**18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL**  
(remove jumpers and set switches as shown)



- NOTES:**
- Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
  - Ensure jumpers SEL2-SEL5 are present on the monitor board.
  - Ensure that Red Enable is active all times during normal operation.
  - Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. 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. The installer shall verify that signal heads flash in accordance with the Signal Plans.
- Program phases 4 and 8 for Dual Entry.
- Enable Simultaneous Gap-Out for all Phases.
- Program phases 2 and 6 for Startup In Green.
- Program phases 2 and 6 for Yellow Flash, and overlap 1 as Wag Overlap.
- The cabinet and controller are part of the Wilmington Signal System.

**EQUIPMENT INFORMATION**

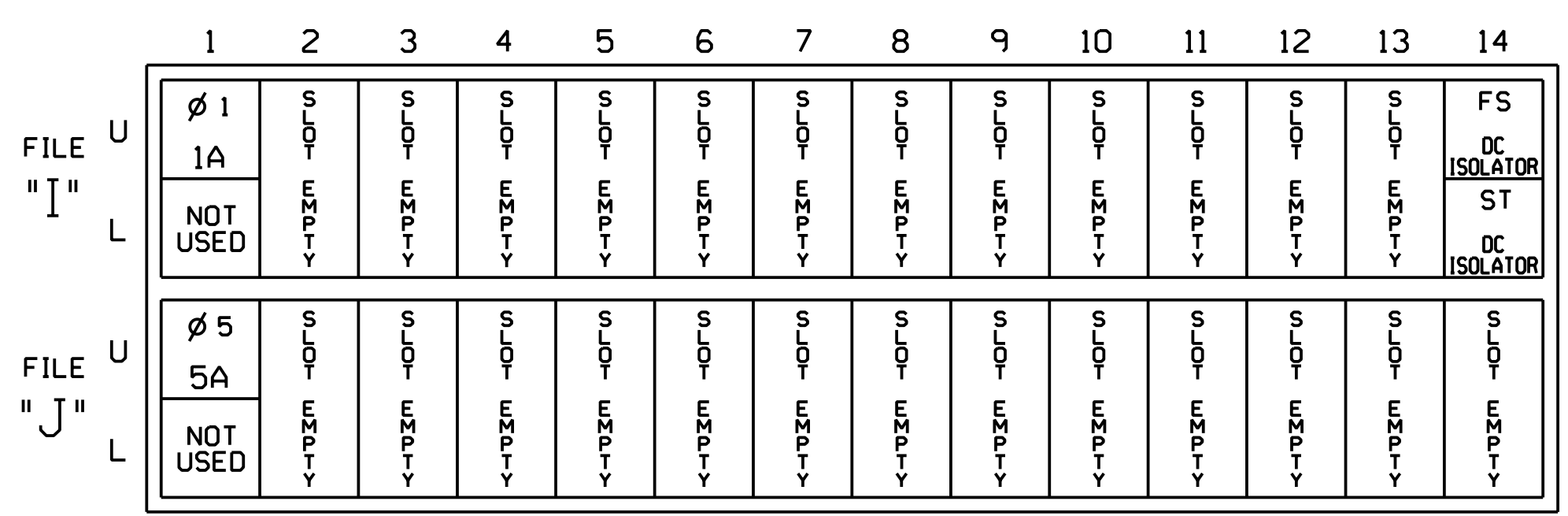
CONTROLLER.....2070  
 CABINET.....332 W/ AUX  
 SOFTWARE.....ECONOLITE OASIS  
 CABINET MOUNT.....BASE  
 OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE  
 LOAD SWITCHES USED.....S1,S2,S5,S7,S8,S11,AUX S1,  
 AUX S4  
 PHASES USED.....1,2,4,5,6,8  
 OVERLAP "A".....1+2  
 OVERLAP "B".....NOT USED  
 OVERLAP "C".....5+6  
 OVERLAP "D".....NOT USED

**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	OLA	OLB	SPARE	OLC	OLD	SPARE
SIGNAL HEAD NO.	11	21,22	NU	NU	41,42	NU	42	51	61,62	NU	NU	81,82	NU	11	NU	NU	51	NU
RED		128			101		*		134		107							
YELLOW	*	129			102				135		108							
GREEN		130			103				136		109							
RED ARROW													A121				A114	
YELLOW ARROW							132						A122				A115	
FLASHING YELLOW ARROW													A123				A116	
GREEN ARROW	127							133	133									
Hand icon																		
Person icon																		

NU = Not Used  
 \* Denotes install load resistor. See load resistor installation detail this sheet.  
 ★ See pictorial of head wiring in detail this sheet.

**INPUT FILE POSITION LAYOUT**  
(front view)

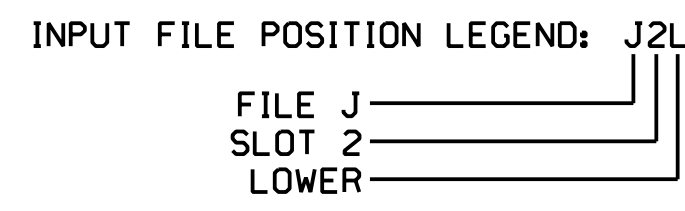


EX.: 1A, 2A, ETC. = LOOP NO.'S  
 FS = FLASH SENSE  
 ST = STOP TIME

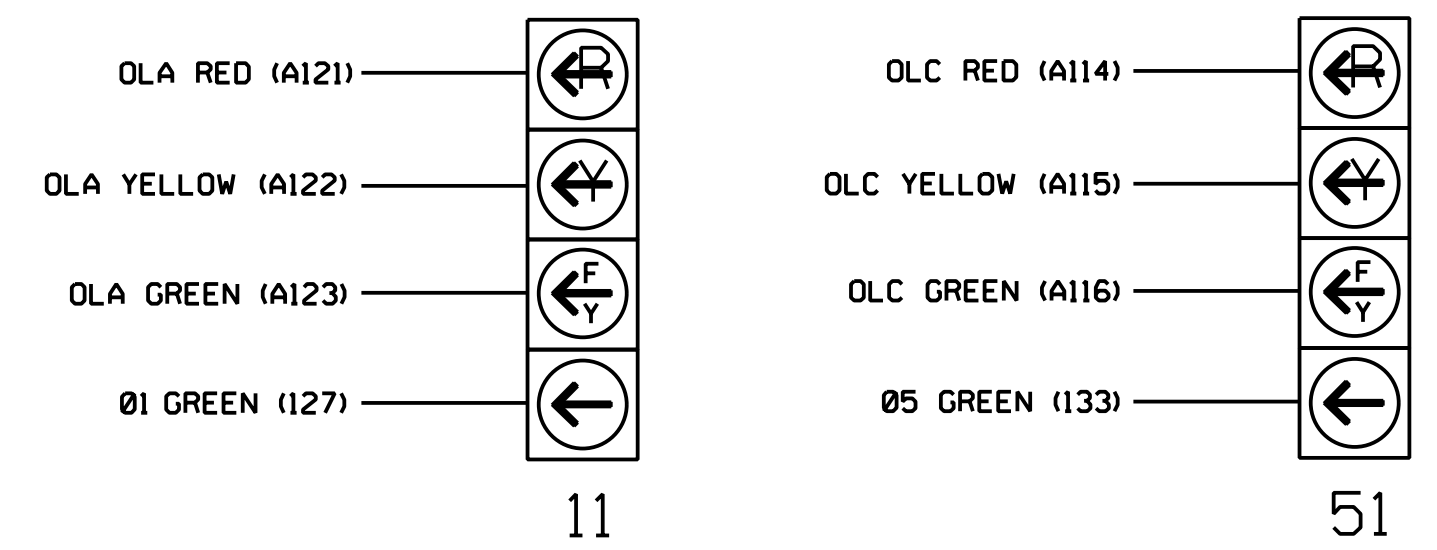
**INPUT FILE CONNECTION & PROGRAMMING CHART**

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
1A	TB2-1,2	I1U	56	18	1	1	Y	Y			15
	-	J4U	48	10 ★	26	6	Y	Y			
	-	I1U	56	18 ★	51	1	Y	Y			
5A	TB3-1,2	J1U	55	17	5	5	Y	Y			15
	-	14U	47	9 ★	22	2	Y	Y			
	-	J1U	55	17 ★	55	5	Y	Y			

\* See Input Page Assignment programming details on sheets 3 and 4.



**FYA SIGNAL WIRING DETAIL**  
(wire signal heads as shown)



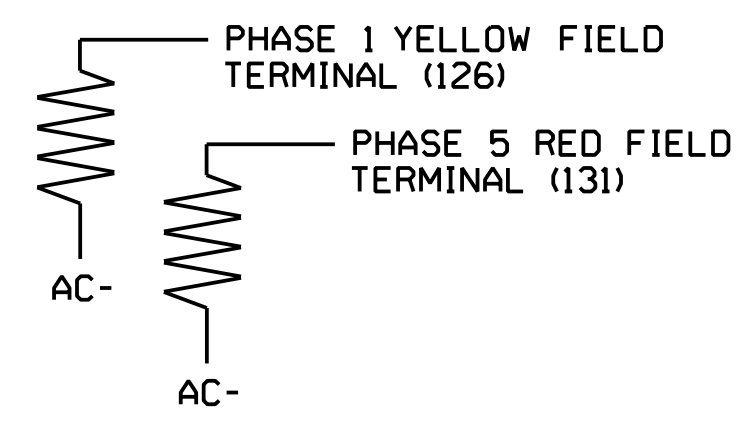
**NOTE**  
 The sequence display for signal heads 11 and 51 require special logic programming. See sheet 2 for programming instructions.

**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 detection schemes shown on the Signal Design Plans.

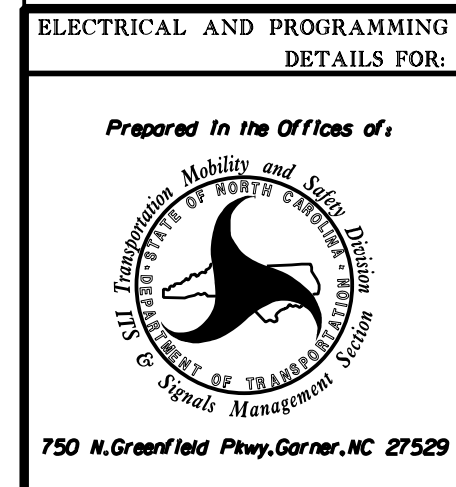
**LOAD RESISTOR INSTALLATION DETAIL**  
(install resistors as shown below)

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



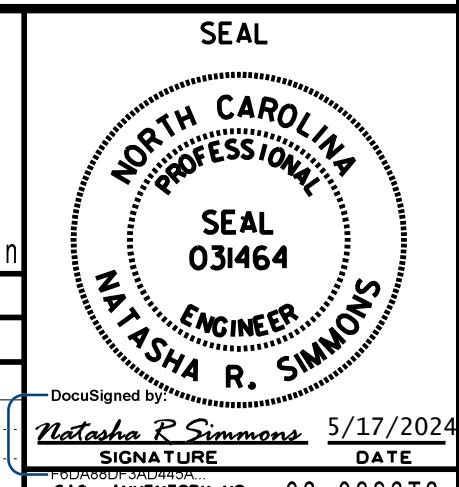
THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 03-0893T3  
 DESIGNED: May 2022  
 SEALED: 5/17/2024  
 REVISED:

**HNTB**  
 HNTB NORTH CAROLINA, P.C.  
 343 E. Six Forks Road, Suite 200  
 Raleigh, North Carolina 27609  
 NC License No: C-1554  
 (919) 546-8997



Electrical and Programming Details For:

SR 2048 (Gordon Rd) at SR 1328 (White Rd)	
Division 3	New Hanover County
Wilmington	
PLAN DATE: August 2023	REVIEWED BY: N.K. Vlanich
PREPARED BY: E.E. Tiller	REVIEWED BY: N.R. Simmons
REVISIONS	INIT. DATE



DocuSigned by:  
 Melisha R. Simmons 5/17/2024  
 SIGNATURE DATE  
 SIG. INVENTORY NO. 03-0893T3

Signal Upgrade-  
 Electrical Detail - Sheet 1 of 5  
 (Construction Phase 3)

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**