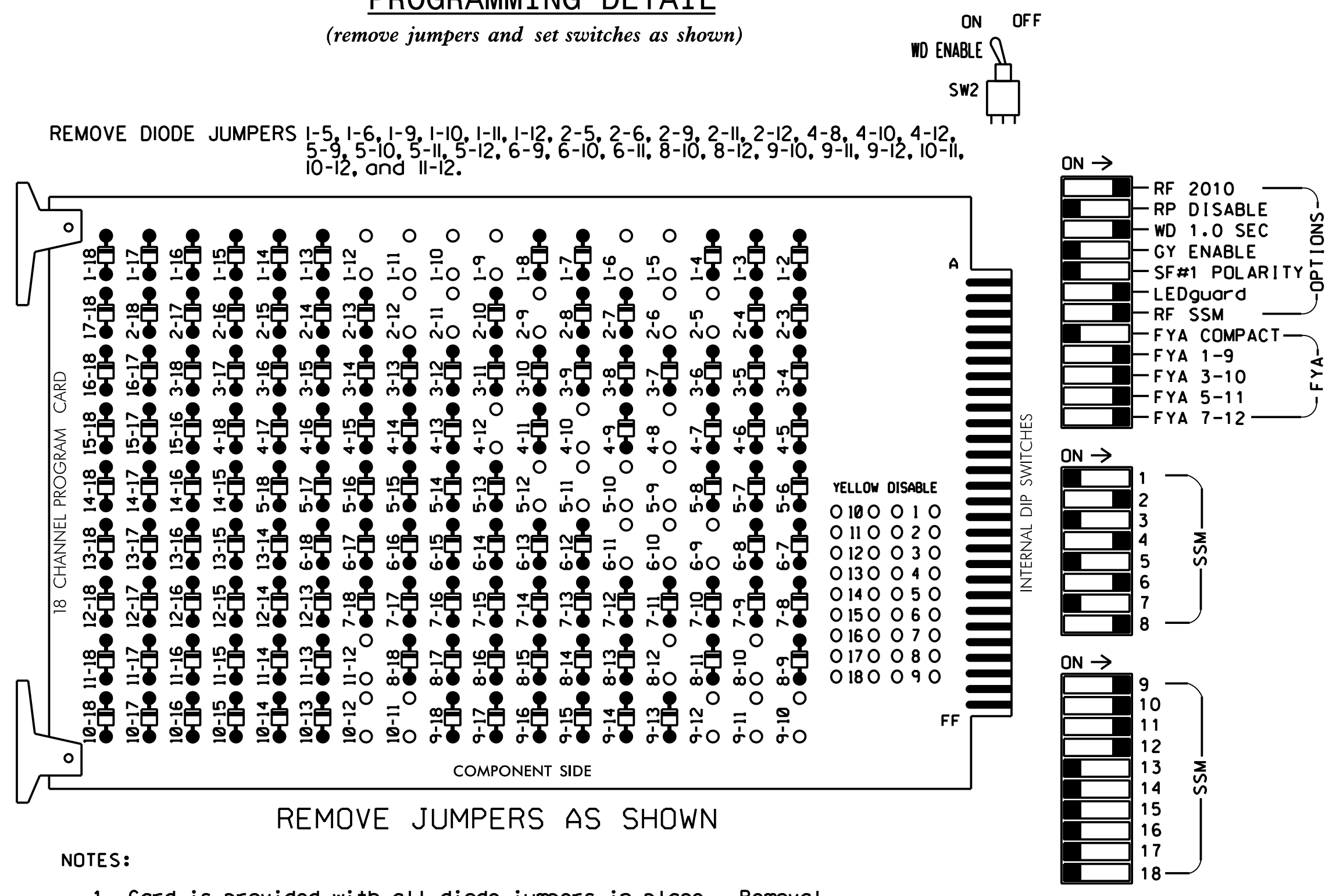


### EDI MODEL 2018ECLip-NC CONFLICT MONITOR PROGRAMMING DETAIL

(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 Red Enable is active at all times during normal operation.
4. Integrate monitor with Ethernet network in cabinet.

#### NOTES

1. 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.
2. Program phases 4 and 8 for Dual Entry.
3. Enable Simultaneous Gap-Out for all Phases.
4. Program phases 2 and 6 for Variable Initial and Gap Reduction.
5. Program phases 2 and 6 for Startup In Green.
6. Program phases 2 and 6 for Yellow Flash, and overlaps 1 and 2 as Wag Overlap.
7. The cabinet and controller are part of the Wilmington Signal System.

#### EQUIPMENT INFORMATION

CONTROLLER.....2070E  
 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 S2  
 AUX S4,AUX S5  
 PHASES USED.....1,2,4,5,6,8  
 OVERLAP "A".....1+2  
 OVERLAP "B".....1+8  
 OVERLAP "C".....5+6  
 OVERLAP "D".....4+5

#### 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	PED	3	4	PED	5	6	PED	7	8	PED	OLA	OLB	SPARE	OLC	OLD	SPARE
SIGNAL HEAD NO.	11	21,22	NU	NU	41,42	NU	51	61,62	NU	NU	81,82	NU	11	83	NU	51	43	NU
RED		128			101			134			107			A124			A101	
YELLOW	*	129			102		*	135			108							
GREEN		130			103			136			109							
RED ARROW														A121			A114	
YELLOW ARROW														A122	A125		A115	A102
FLASHING YELLOW ARROW														A123	A126		A116	A103
GREEN ARROW	127							133										

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)

FILE "I"	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
U	∅ 1 ZONE 1A	∅ 1 ZONE 1B	∅ 2 ZONE 2A	∅ 3 ZONE 3A	∅ 4 ZONE 4A	∅ 5 ZONE 5A	∅ 6 ZONE 6A	∅ 7 ZONE 7A	∅ 8 ZONE 8A	∅ 9 ZONE 9A	∅ 10 ZONE 10A	∅ 11 ZONE 11A	∅ 12 ZONE 12A	∅ 13 ZONE 13A	FS DC ISOLATOR
L	NOT USED	NOT USED	∅ 2 ZONE 2B	∅ 3 ZONE 3B	NOT USED	∅ 5 ZONE 5B	∅ 6 ZONE 6B	∅ 7 ZONE 7B	∅ 8 ZONE 8B	∅ 9 ZONE 9B	∅ 10 ZONE 10B	∅ 11 ZONE 11B	∅ 12 ZONE 12B	∅ 13 ZONE 13B	DC ISOLATOR
U	∅ 5 ZONE 5A	∅ 5 ZONE 5B	∅ 6 ZONE 6A	∅ 7 ZONE 7A	∅ 8 ZONE 8A	∅ 9 ZONE 9A	∅ 10 ZONE 10A	∅ 11 ZONE 11A	∅ 12 ZONE 12A	∅ 13 ZONE 13A	∅ 14 ZONE 14A	∅ 15 ZONE 15A	∅ 16 ZONE 16A	∅ 17 ZONE 17A	∅ 18 ZONE 18A
L	NOT USED	NOT USED	∅ 6 ZONE 6B	∅ 7 ZONE 7B	NOT USED	∅ 9 ZONE 9B	∅ 10 ZONE 10B	∅ 11 ZONE 11B	∅ 12 ZONE 12B	∅ 13 ZONE 13B	∅ 14 ZONE 14B	∅ 15 ZONE 15B	∅ 16 ZONE 16B	∅ 17 ZONE 17B	∅ 18 ZONE 18B

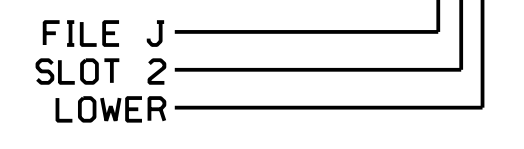
EX.: 1A, 2A, ETC. = LOOP NO.'S  
 FS = FLASH SENSE  
 ST = STOP TIME  
 ⊗ Wired Input - Do not populate slot with detector card

#### 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
ZONE 1A <sup>1</sup>	**	I1U	56	18	1	1	Y	Y			10
	-	J4U	48	10★	26	6	Y	Y	Y		3
	-	I1U	56	18★	51	1	Y	Y			3
ZONE 1B	**	I2U	39	1	2	1	Y	Y			15
ZONE 2A	**	I3U	63	25	32	2	Y	Y			
ZONE 2B	**	I3L	76	38	42	2	Y	Y			
ZONE 4A	**	I6U	41	3	4	4	Y	Y			
ZONE 5A <sup>2</sup>	**	J1U	55	17	5	5	Y	Y			10
	-	I4U	47	9★	22	2	Y	Y	Y		3
	-	J1U	55	17★	55	5	Y	Y			3
ZONE 5B	**	J2U	40	2	6	5	Y	Y			15
ZONE 6A	**	J3U	64	26	36	6	Y	Y			
ZONE 6B	**	J3L	77	39	46	6	Y	Y			
ZONE 8A	**	J6U	42	4	8	8	Y	Y			

- <sup>1</sup>Add jumper from I1-W to J4-W, on rear of input file.
  - <sup>2</sup>Add jumper from J1-W to I4-W, on rear of input file.
- \* See Input Page Assignment programming details on sheets 3 and 4.  
 \*\* Multizone Microwave Detector Zone. See Special Detector Note.

#### INPUT FILE POSITION LEGEND: J2L



#### SPECIAL DETECTOR NOTE

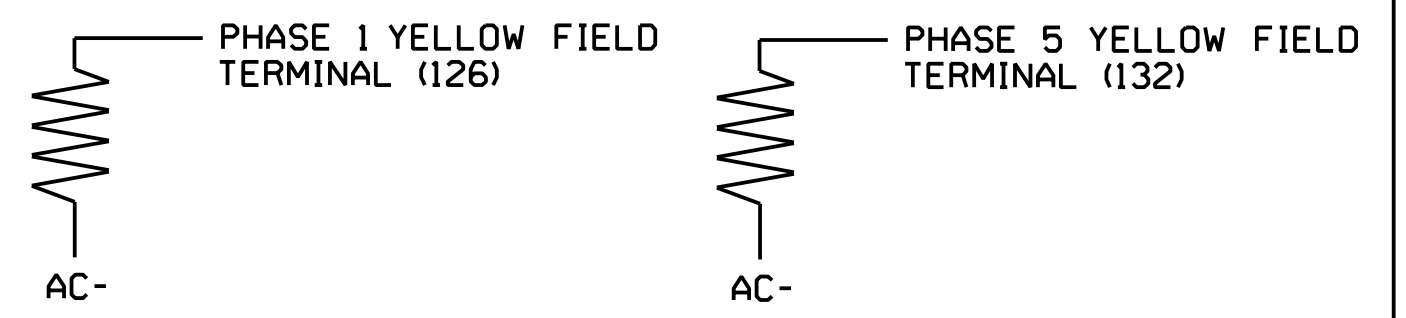
Install a microwave detection system for vehicle detection. Perform installation according to manufacturer's directions and NCDOT engineer-approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

See vehicle detector setup programming detail for alternate phasing on sheets 3, 4, and 5.

#### LOAD RESISTOR INSTALLATION DETAIL

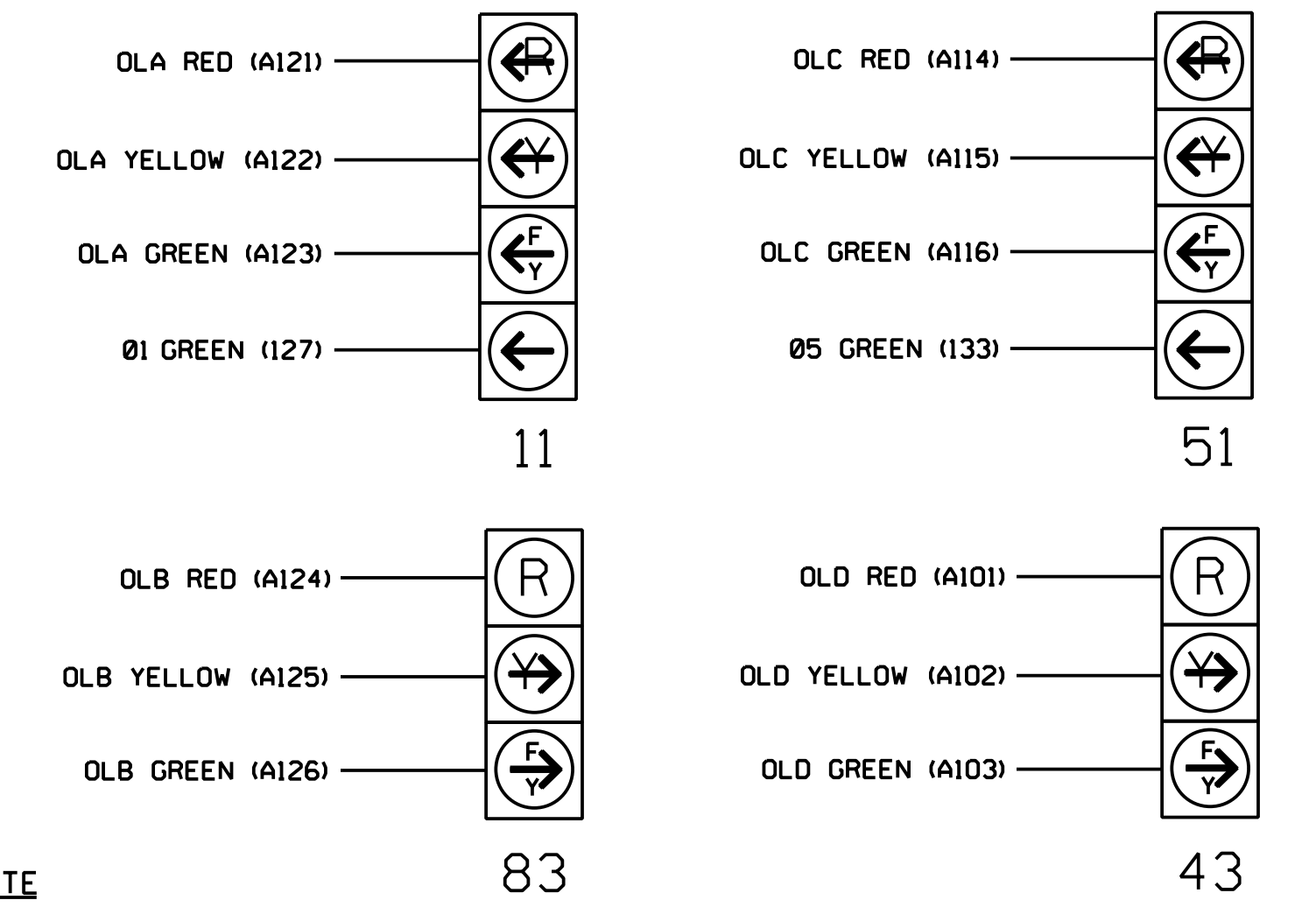
(install resistors as shown)

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



#### FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



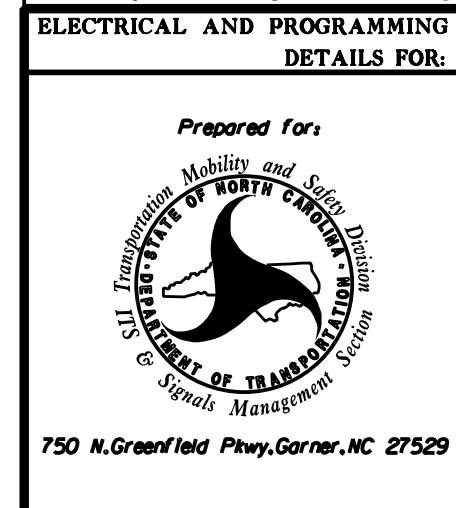
#### NOTE

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

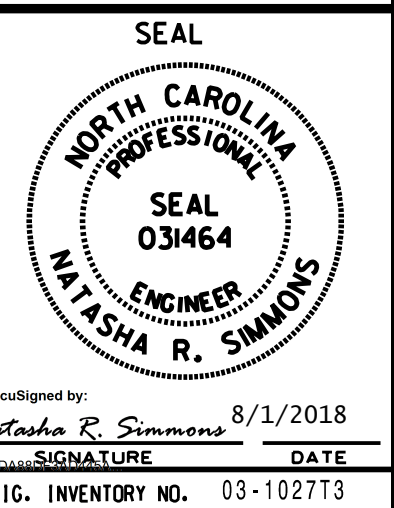
THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 03-1027T3  
 DESIGNED: February 2018  
 SEALED: 8-1-18  
 REVISED: N/A

Electrical Detail - Sheet 1 of 5  
 Signal Upgrade  
 Temporary Design 3

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



REVISIONS	INIT.	DATE



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DocuSigned by:  
 W. Tasha R. Simmons  
 8/1/2018  
 SIGNATURE DATE  
 SIG. INVENTORY NO. 03-1027T3