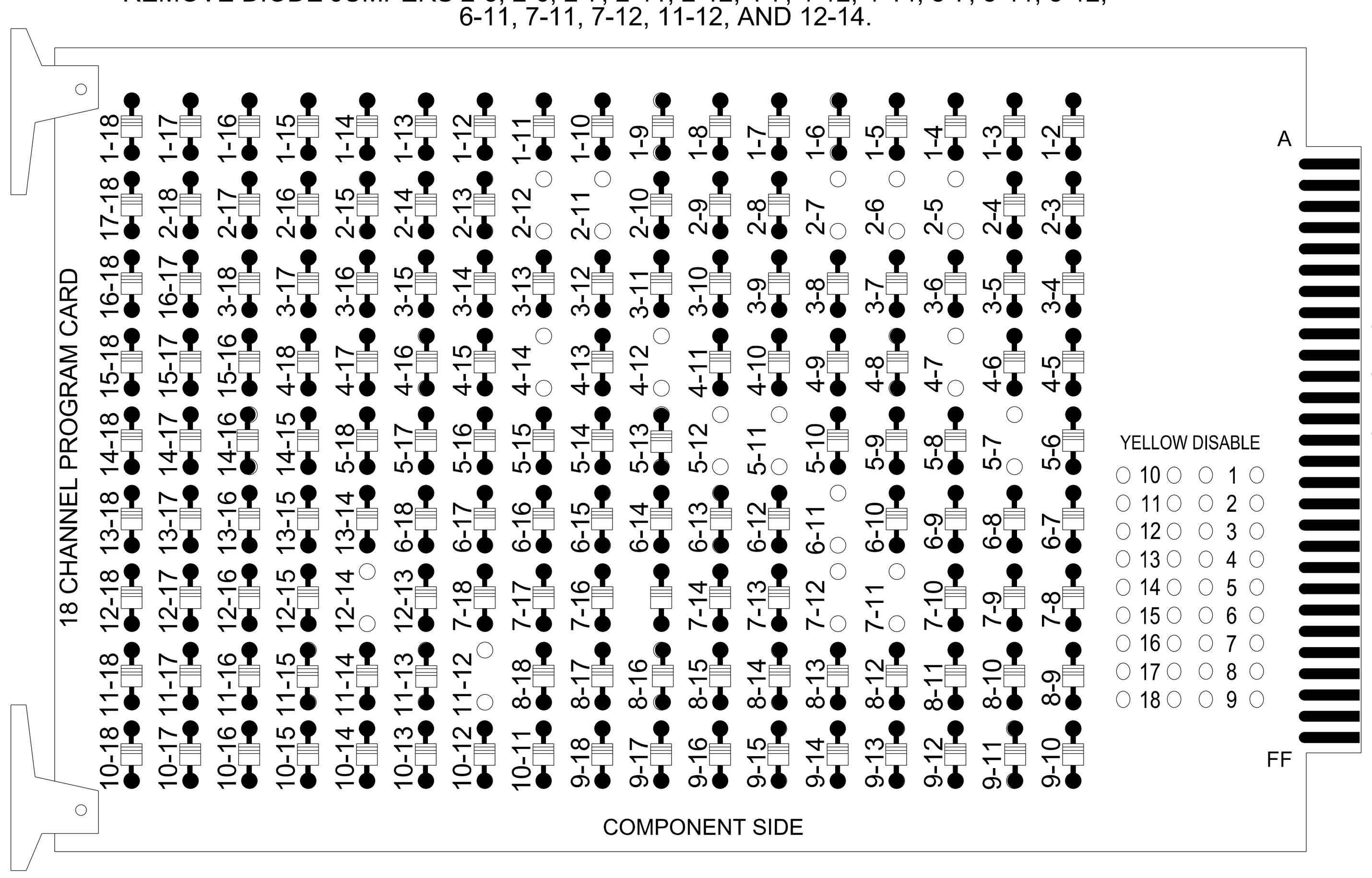
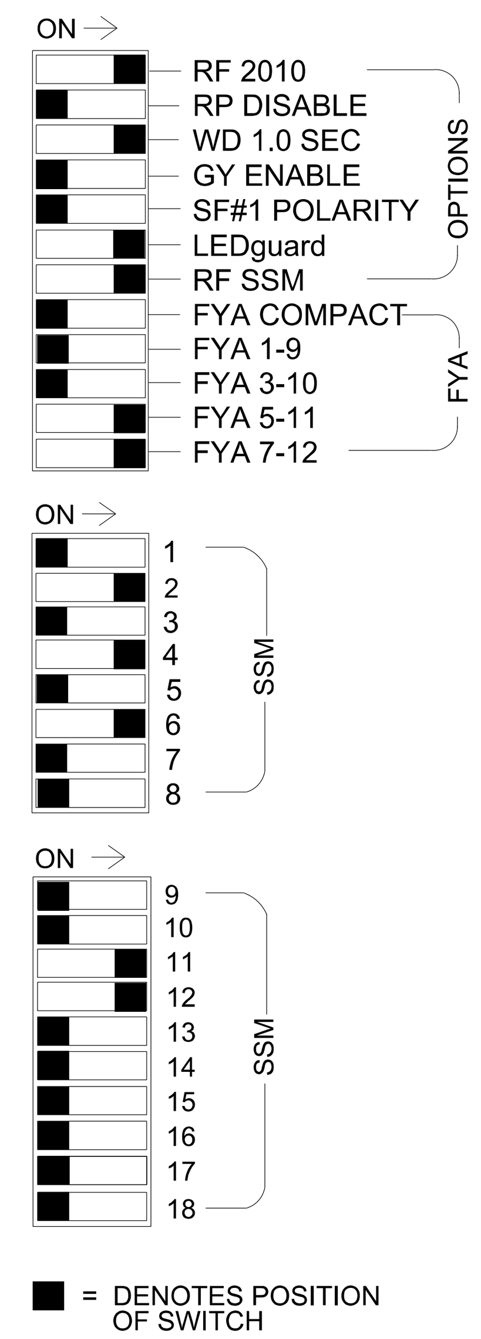
18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

ON OFF
WD ENABLE
SW2

REMOVE DIODE JUMPERS 2-5, 2-6, 2-7, 2-11, 2-12, 4-7, 4-12, 4-14, 5-7, 5-11, 5-12, 6-11, 7-11, 7-12, 11-12, AND 12-14.





REMOVE JUMPERS 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.

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 plan.
2. Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
3. If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
4. The cabinet and controller are part of the NC 8 (Winston Road) Closed Loop System (Signal System D09-19 Lexington).

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, S5, S6, S7, S8, S10, AUX S4, AUX S5
Phases Used..2, 4*, 4PED, 5, 6, 7*
Overlap "1"...Not Used
Overlap "2"...Not Used
Overlap "3"...**
Overlap "4"...**
Overlap "7"...**
Overlap "8"...**

*Timing Purposes only.
**See overlap programming detail on sheet 2.

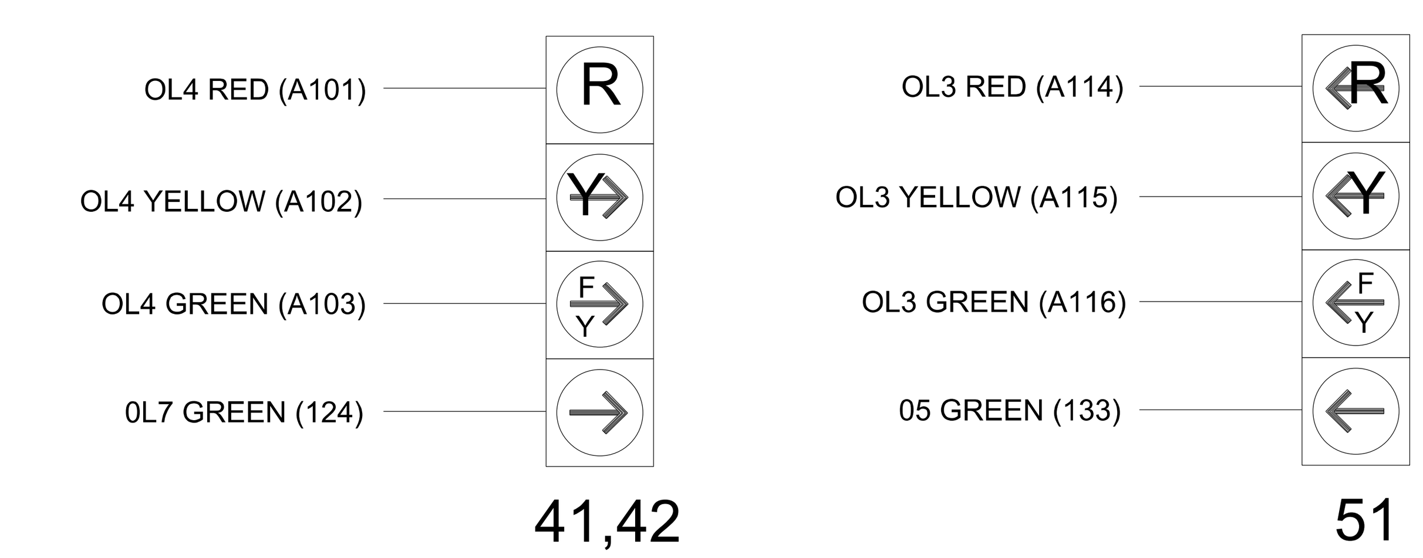
SIGNAL HEAD HOOK-UP CHART

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	OL8	4 PED	5	6	6 PED	OL7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	NU	21,22	NU	NU	71	P41, P42	51★	61,62	NU	41,42★★	NU	NU	NU	NU	NU	51★	41,42★★	NU
RED		128						134									A101	
YELLOW		129					*	135		*								
GREEN		130						136										
RED ARROW					101											A114		
YELLOW ARROW					102											A115	A102	
FLASHING YELLOW ARROW																A116	A103	
GREEN ARROW					103		133			124								
(hand)						104												
(walk)						106												

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 POSITION LAYOUT

(front view)

FILE		1	2	3	4	5	6	7	8	9	10	11	12	13	14
"I"	U	SLOT EMPTY	ø 2 2A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	NOT USED	SLOT EMPTY	FS DC ISOLATOR
"I"	L		ø 2 2B										ø 4 PED DC ISOLATOR		ST DC ISOLATOR
"J"	U	ø 5 5A	ø 5 5B	ø 6 6A	SLOT EMPTY	ø 7 7A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY
"J"	L	NOT USED	NOT USED	ø 6 6B		NOT USED									

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 POINT	DETECTOR NO.	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN
2A	TB2-5,6	I2U	39	1	2	2			X	X	X	
2B	TB2-7,8	I2L	43	5	3	2			X	X	X	
5A	TB3-1,2	J1U	55	17	15 ★	5	15.0		X		X	
				-	31 ★	2	3.0		X		X	X
5B	TB3-5,6	J2U	40	2	16	5	15.0		X		X	
6A	TB3-9,10	J3U	64	30	18	6			X	X	X	
6B	TB3-11,12	J3L	77	43	19	6			X	X	X	
7A	TB5-5,6	J5U	57	19	21	7	3.0		X		X	
PED PUSH BUTTONS												
P41,P42	TB8-5,6	I12L	69	35	4	PED 4						

NOTE:
INSTALL DC ISOLATORS IN INPUT FILE SLOT I12.

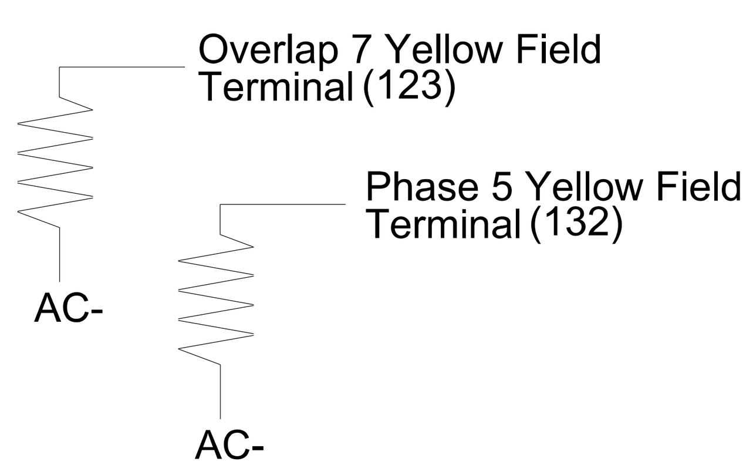
★ For the detectors to work as shown on the signal design plan, see the Vehicle Detector Programming Detail for Alternate Phasing Loop 5A on sheet 2.

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

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)



FLASHER CIRCUIT MODIFICATION DETAIL

IN ORDER TO INSURE THAT SIGNALS FLASH CONCURRENTLY ON THE SAME APPROACH, MAKE THE FOLLOWING FLASHER CIRCUIT CHANGES:

1. ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-4 AND TERMINATE ON T2-2.
2. ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-5 AND TERMINATE ON T2-3.
3. REMOVE FLASHER UNIT 2.

THE CHANGES LISTED ABOVE TIES ALL PHASES AND OVERLAPS TO FLASHER UNIT 1.

COUNTDOWN PEDESTRIAN SIGNAL OPERATION

Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual for instructions on selecting this feature.

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 09-0400
DESIGNED: May 2024
SEALED: 05-09-2024
REVISED: N/A

TRANSYSTEMS
1 Glenwood Avenue
Raleigh, NC 27603
Tel:919.789.9977
Fax:919.789.9591
License: F-0453

Electrical Detail - Sheet 1 of 3

Electrical and Programming Details For:

NC 8 (Winston Road)
at
SR 1406 (Biesecker Road)

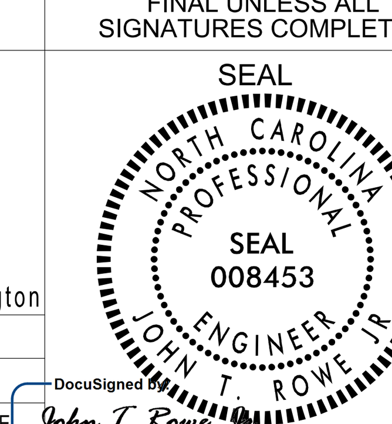
Prepared for the Offices of:
Transportation Mobility and Safety Division
ITS & Signals Management Section
750 N. Greenfield Pkwy, Garner, NC 27529

Division 9 Davidson County Lexington

PLAN DATE: May 2024 REVIEWED BY:
PREPARED BY: J.T. Rowe REVIEWED BY: G.G. Murr, Jr.

REVISIONS INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



DocuSigned by: D0847BADACA9400...
5/9/2024
DATE

SIG. INVENTORY NO. 09-0400

5/9/2024
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USER:default