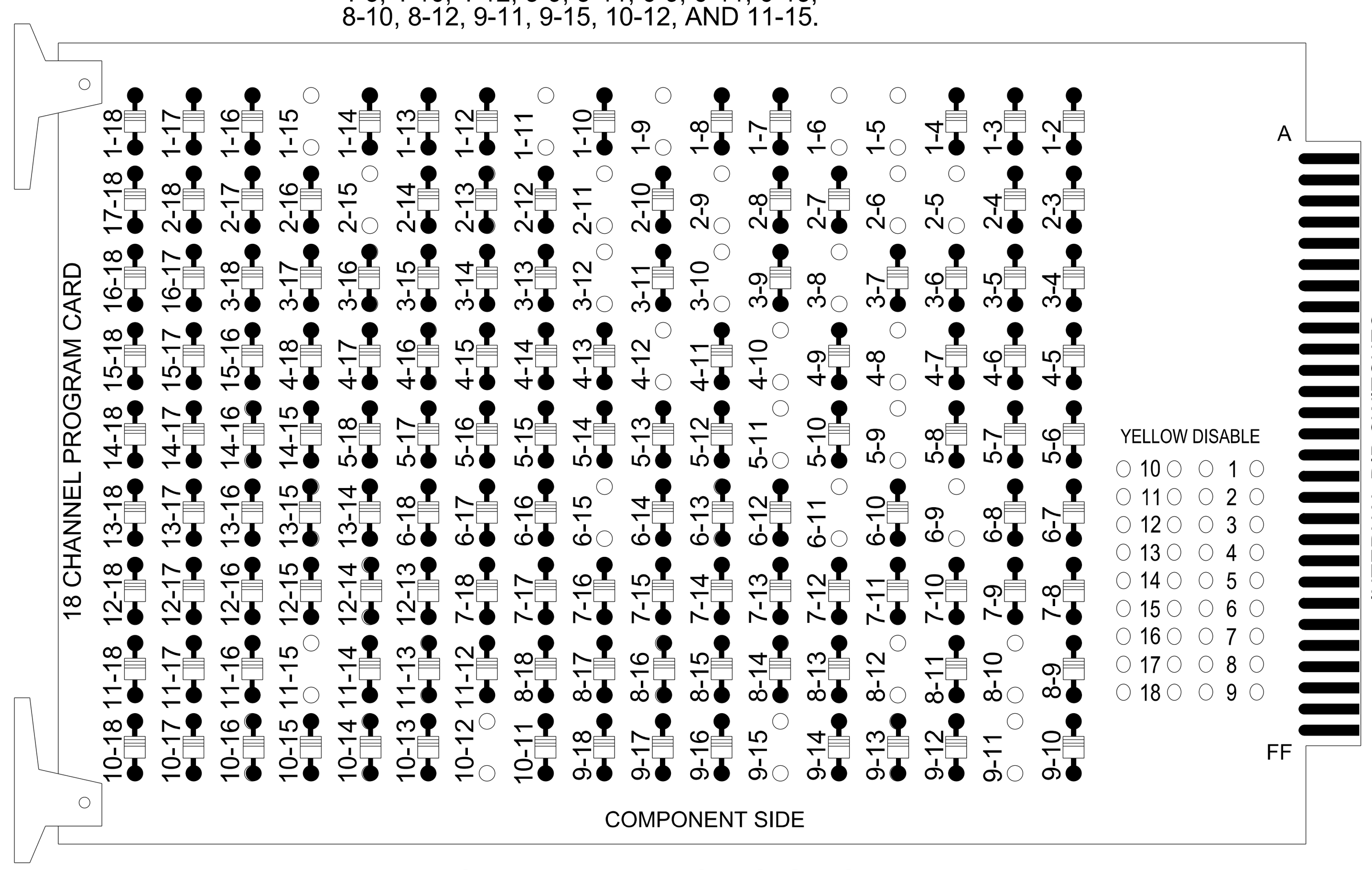
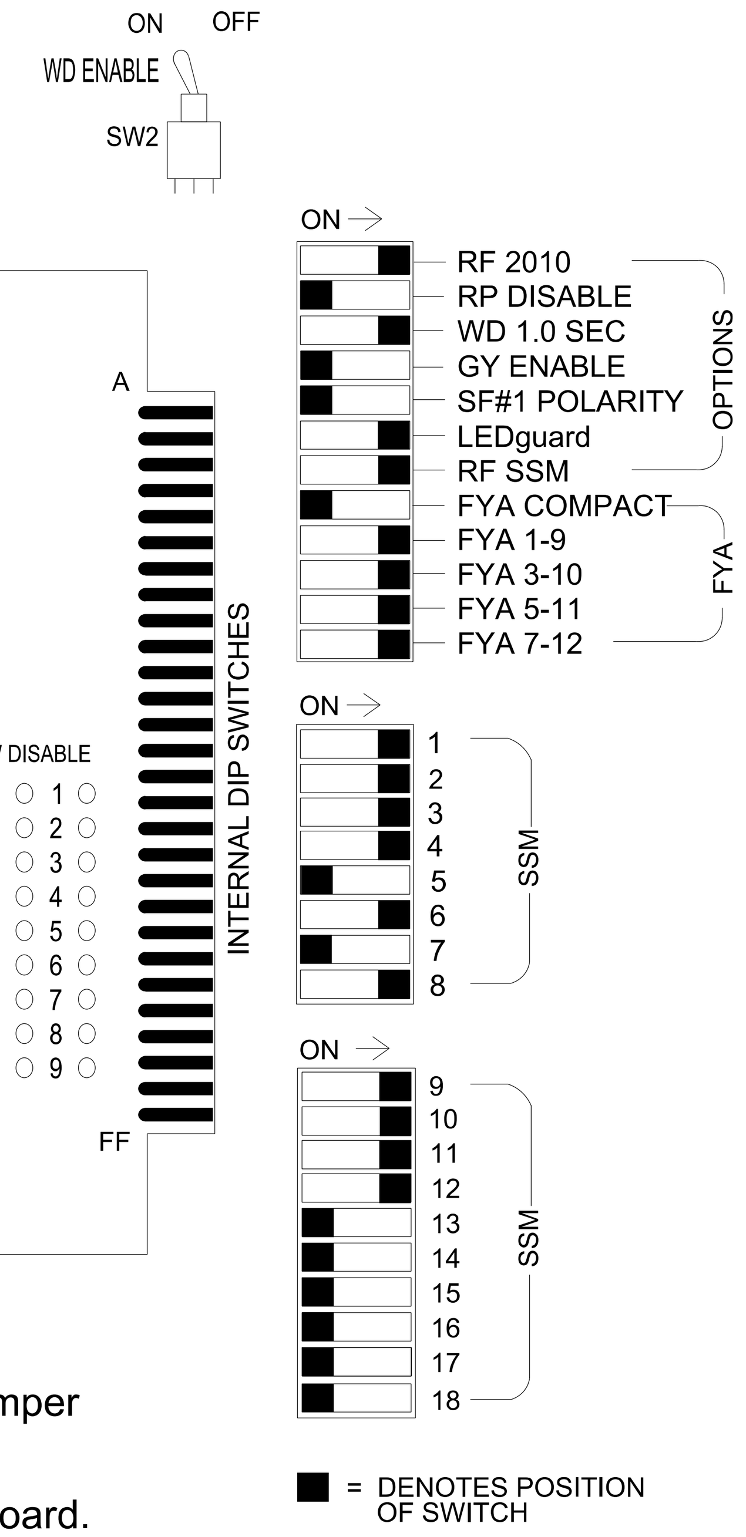
18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-11, 1-15, 2-5, 2-6, 2-9, 2-11, 2-15, 3-8, 3-10, 3-12, 4-8, 4-10, 4-12, 5-9, 5-11, 6-9, 6-11, 6-15, 8-10, 8-12, 9-11, 9-15, 10-12, AND 11-15.





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 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 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............................S1, S2, S4, S5, S7, S8, S9, S11, AUX S1, AUX S2, AUX S4, AUX S5
Phases Used..1, 2, 3, 4, 5, 6, 6 PED, 8
Overlap "1"..*
Overlap "2"..*
Overlap "3"..*
Overlap "4"..*

*See overlap programming detail on sheet 2

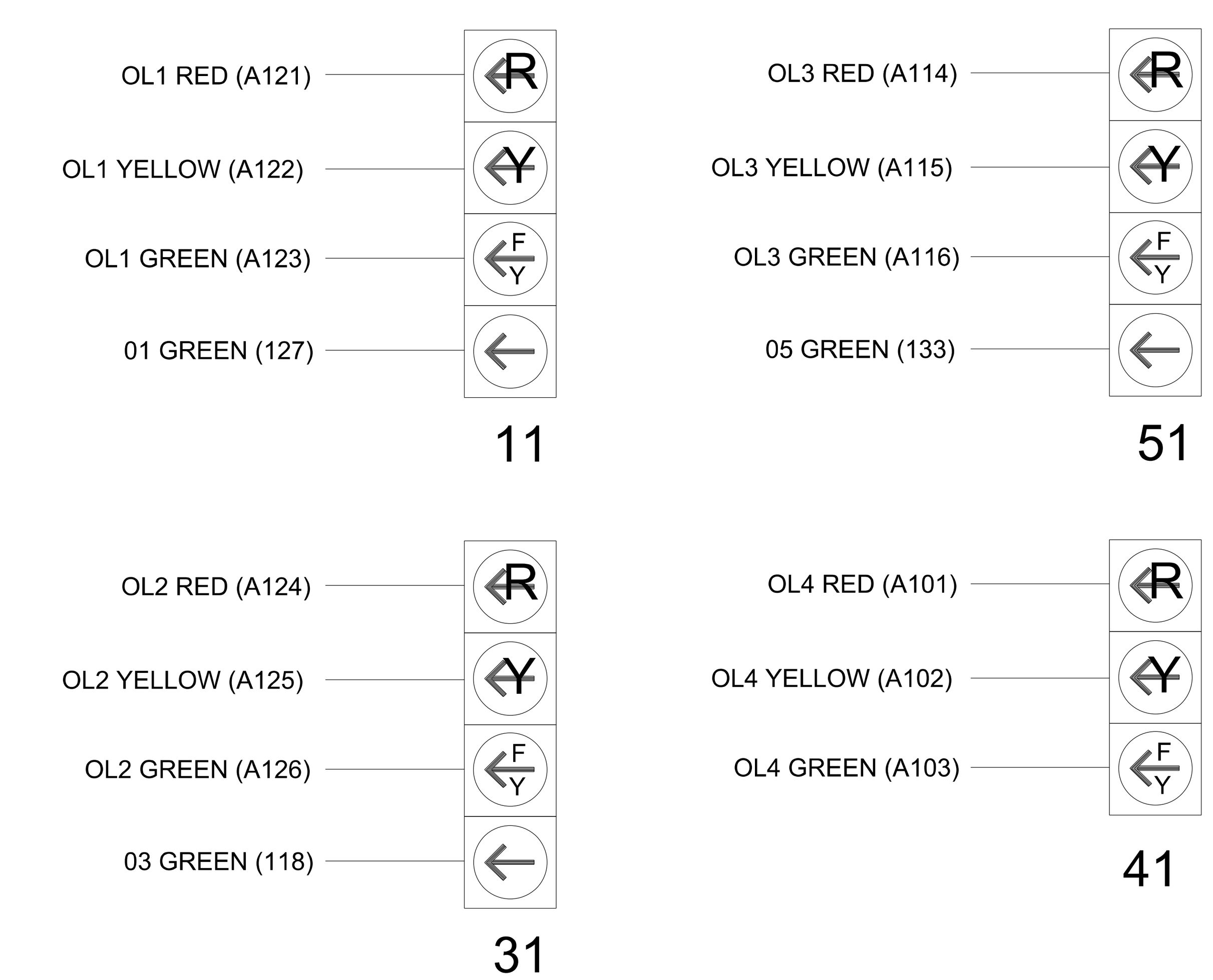
SIGNAL HEAD HOOK-UP CHART

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.	82	11★	21,22	NU	22	31★	42,43	NU	51★	61,62	P61, P62	NU	81,82	NU	11★	31★	NU	51★	41★	NU
RED		*	128			*	101			134			107							
YELLOW			129				102		*	135			108							
GREEN			130				103			136			109							
RED ARROW															A121	A124		A114	A101	
YELLOW ARROW	126				117										A122	A125		A115	A102	
FLASHING YELLOW ARROW															A123	A126		A116	A103	
GREEN ARROW	127	127			118	118			133											
(Don't Walk)											119									
(Walk)											121									

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)

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

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

FS = FLASH SENSE
ST = STOP TIME

Note:
If present, remove jumpers from I1-W to J4-W, I5-W to J8-W, and J1-W to I4-W on rear of Input File.

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
1A	TB2-1,2	I1U	56	18	1 ★	1	15.0	---	X	_	X	_
				-	29 ★	6	---	---	X	_	X	_
1B	TB2-5,6	I2U	39	1	2	1	15.0	---	X	_	X	_
2A,2B	TB2-7,8	I2L	43	5	3	2	---	---	X	_	X	_
3A	TB4-5,6	I5U	58	20	7	3	15.0	---	X	_	X	_
				-	30	8	---	---	X	_	X	_
4A	TB4-9,10	I6U	41	3	8	4	3.0	---	X	_	X	_
4B	TB4-11,12	I6L	45	7	9	4	10.0	---	X	_	X	_
4C	TB6-1,2	I7U	65	31	10	4	15.0	---	X	_	X	_
5A	TB3-1,2	J1U	55	17	15 ★	5	15.0	---	X	_	X	_
				-	31 ★	2	---	---	X	_	X	_
6A,6B	TB3-5,6	J2U	40	2	16	6	---	---	X	_	X	_
8A	TB5-9,10	J6U	42	4	22	8	---	---	X	_	X	_
PED PUSH BUTTONS												
P61,P62	TB8-7,9	I13U	68	34	6	PED 6						

NOTE:
INSTALL DC ISOLATORS IN INPUT FILE SLOT I13.

★ For the detectors to work as shown on the signal design plan, see the Vehicle Detector Programming Detail for Alternate Phasing Loops 1A & 5A on sheet 2.

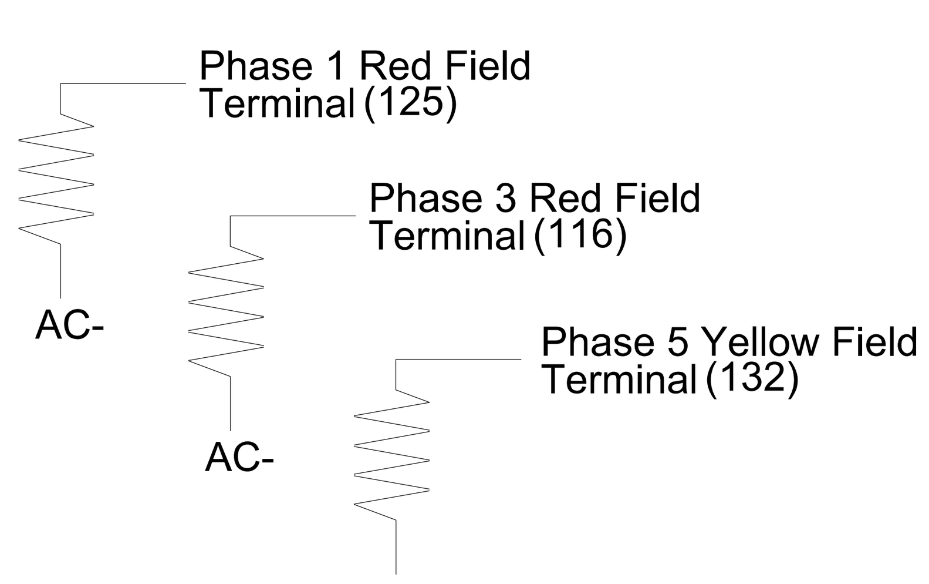
INPUT FILE POSITION LEGEND: J2L

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)



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: 09-0735T1
DESIGNED: May 2024
SEALED: 05-09-2024
REVISED: N/A

TRANSYSTEMS
1 Glenwood Avenue
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Tel:919.789.9977
Fax:919.789.9591
License: F-0453

Electrical Detail - Sheet 1 of 2

Electrical and Programming Details For:

NC 8 (Winston Road)
at
US 29 SB / US 64-70 WB Ramp

Division 9 Davidson County Lexington

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

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

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 008453 JOHN T. ROWE JR.
DocuSigned by: John T. Rowe, Jr. D0847BA0ACA9400...
5/9/2024
DATE

SIG. INVENTORY NO. 09-0735T1