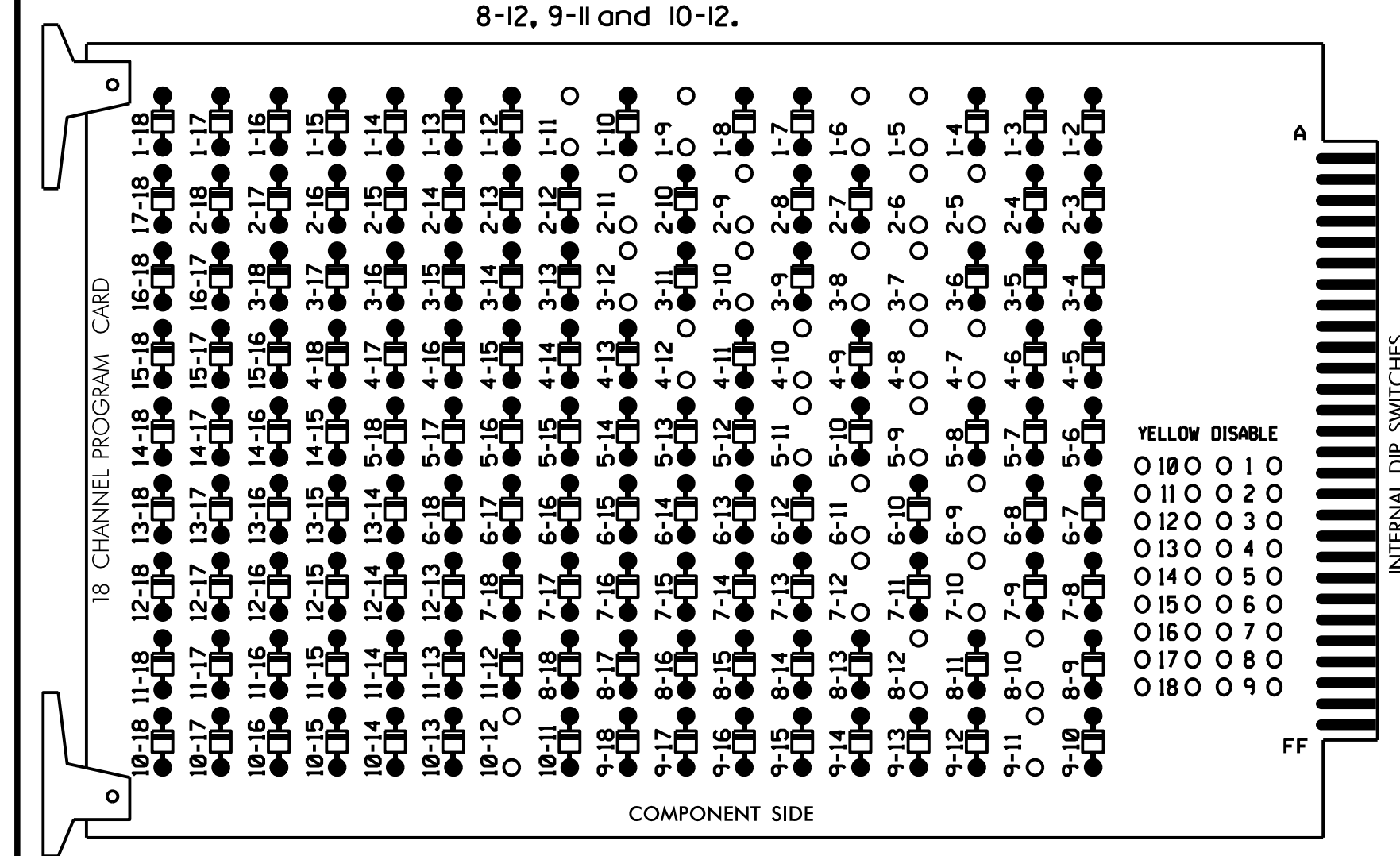


18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-11, 2-5, 2-6, 2-9, 2-11, 3-7, 3-8, 3-10, 3-12, 4-7, 4-8, 4-10, 4-12, 5-9, 5-11, 6-9, 6-11, 7-10, 7-12, 8-10, 8-12, 9-11 and 10-12.



REMOVE JUMPERS 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 and SEL9 are present on the monitor board.
 - Ensure that Red Enable is active at all times during normal operation.
 - Integrate monitor with Ethernet network in cabinet.

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.
- Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all enabled detectors.
- The cabinet and controller are part of the Old Hollow Road Closed Loop System.
Signal System #: D09-29_Walkertown

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,S10,S11,
 AUX S1,AUX S2,AUX S4,AUX S5
 PHASES USED.....1,2,3,4,5,6,7,8
 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.	11	82	21,22	22	31	41,42, 43	51	61,62	62	71	81,82, 83	91	11	31	NU	51	71	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						123			A122	A125		A115	A102	
FLASHING YELLOW ARROW													A123	A126		A116	A103	
GREEN ARROW	127	127		118	118		133		124	124								

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

INPUT FILE POSITION LAYOUT

(front view)

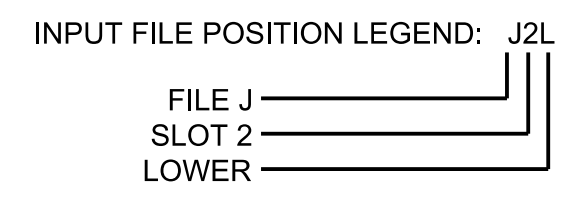
FILE "I"	1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	∅ 1	∅ 1	∅ 2	S	∅ 3	∅ 4	∅ 4	S	SYS. DET. S7	S	S	S	S	FS
L	NOT USED	∅ 1	NOT USED	Y	NOT USED	∅ 4	NOT USED	Y	SYS. DET. S8	E	E	E	E	DC ISOLATOR
U	∅ 5	∅ 6	S	∅ 7	∅ 8	S	S	S	SYS. DET. S9	S	S	S	S	ST
L	NOT USED	NOT USED	Y	NOT USED	∅ 8	Y	Y	Y	SYS. DET. S10	E	E	E	E	DC ISOLATOR

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

INPUT FILE CONNECTION & PROGRAMMING CHART

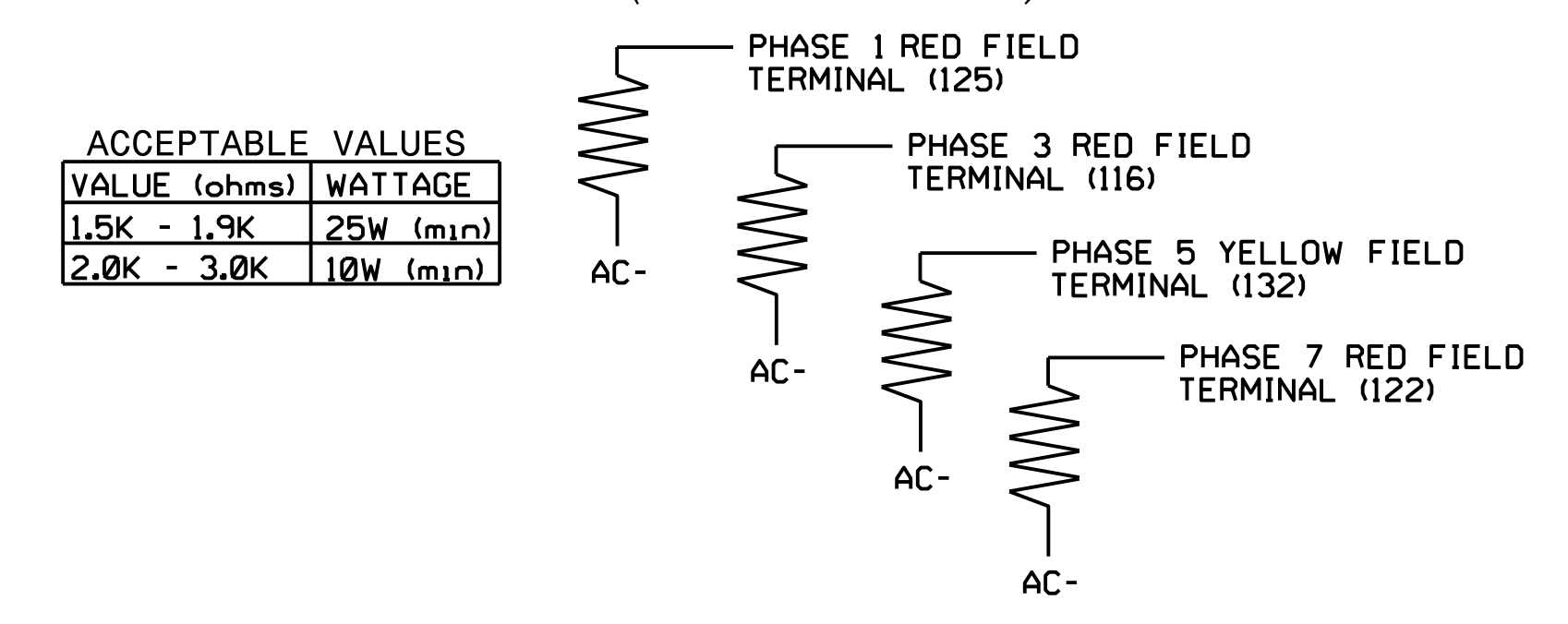
LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN
1A	TB2-1,2	I1U	56	18	1	1	15.0		X		X	
1B	TB2-5,6	I2U	39	-	29	6	3.0		X		X	X
1C	TB2-7,8	I2L	43	5	3	1	15.0		X		X	
2A	TB2-9,10	I3U	63	29	4	2			X	X	X	
3A	TB4-5,6	I5U	58	20	7	3	15.0		X		X	
4A	TB4-9,10	I6U	41	3	8	4			X		X	
4B	TB4-11,12	I6L	45	7	9	4	5.0		X		X	
4C	TB6-1,2	I7U	65	31	10	4	10.0		X		X	
5A	TB3-1,2	J1U	55	17	15	5	15.0		X		X	
6A	TB3-5,6	J2U	40	2	16	6			X	X	X	X
7A	TB5-5,6	J5U	57	19	21	7	15.0		X		X	
8A	TB5-9,10	J6U	42	4	22	8			X		X	
8B	TB5-11,12	J6L	46	8	23	8			X		X	
* S7	TB6-9,10	I9U	60	22	13	SYS						
* S8	TB6-11,12	I9L	62	24	14	SYS						
* S9	TB7-9,10	J9U	59	21	27	SYS						
* S10	TB7-11,12	J9L	61	23	28	SYS						

* System detector only. Remove any assigned vehicle phase.
 * For the detectors to work as shown on the signal design plan, see the Vehicle Detector Setup Programming Detail for Alternate Phasing on Sheet 2.



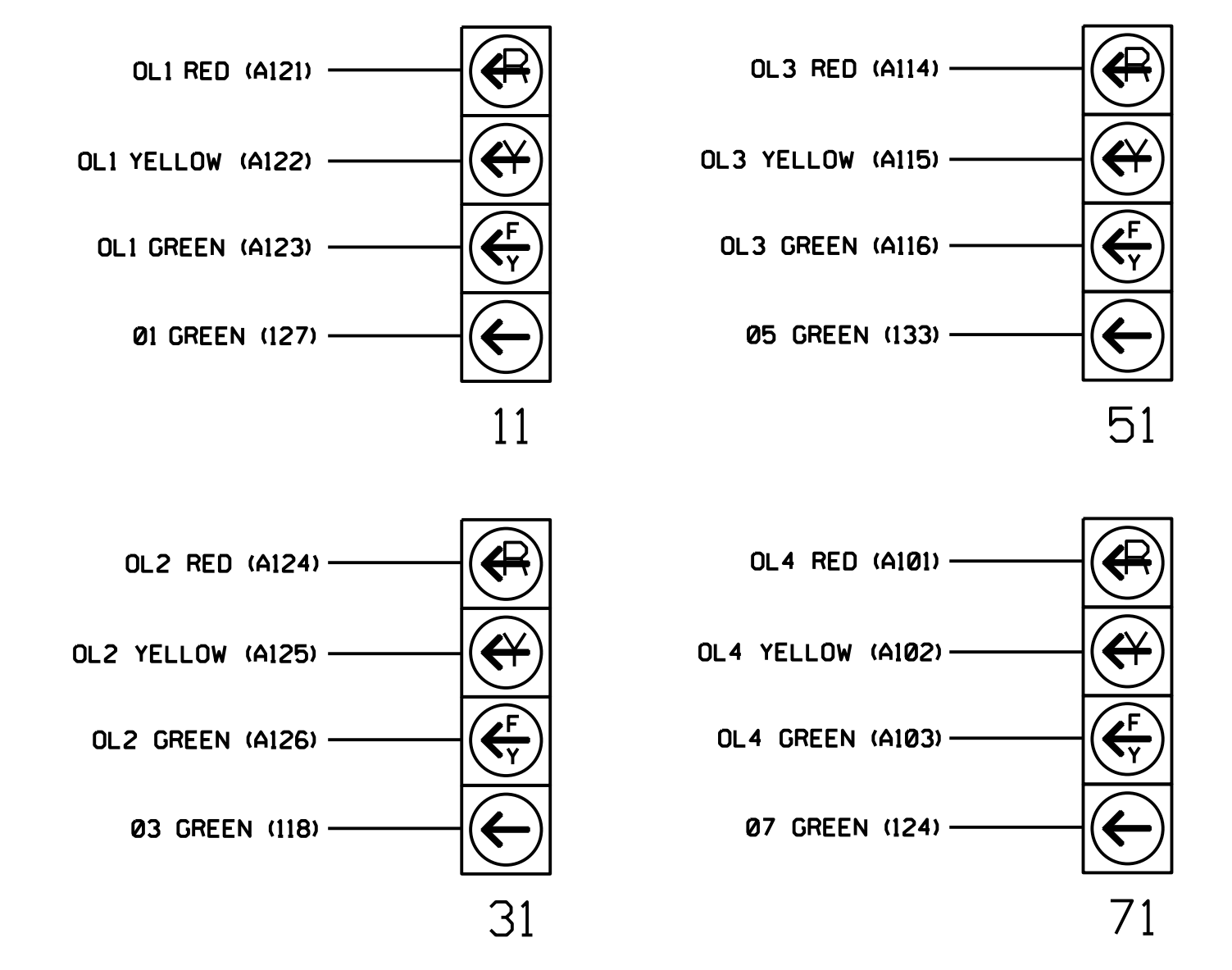
LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)



FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 09-0264
 DESIGNED: August 2023
 SEALED: 9/7/2023
 REVISED: N/A

Electrical Detail - Final Design - Sheet 1 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Office of:

SUMMIT
 DESIGN AND ENGINEERING SERVICES
 NC FIRM LICENSE No: P-0339
 320 Executive Court
 Hillsborough, NC 27278
 (919) 732-3883
 (919) 732-6676 (FAX)

Prepared For:
 North Carolina Department of Transportation
 Signal Management Section
 750 N. Greenfield Pkwy, Corner, NC 27529

US 158 (Reidsville Road) at NC 66 (Old Hollow Road)

Division 9 Forsyth County Walkertown
 PLAN DATE: August 2023 REVIEWED BY: E. Sirgany
 PREPARED BY: J. Smith REVIEWED BY:

REVISIONS	INIT.	DATE

Seal: Edward W. Sirgany, Professional Engineer, License No. 018174, State of North Carolina

DocuSigned by: Edward W. Sirgany 9/7/2023
 SIG. INVENTORY NO. 09-0264