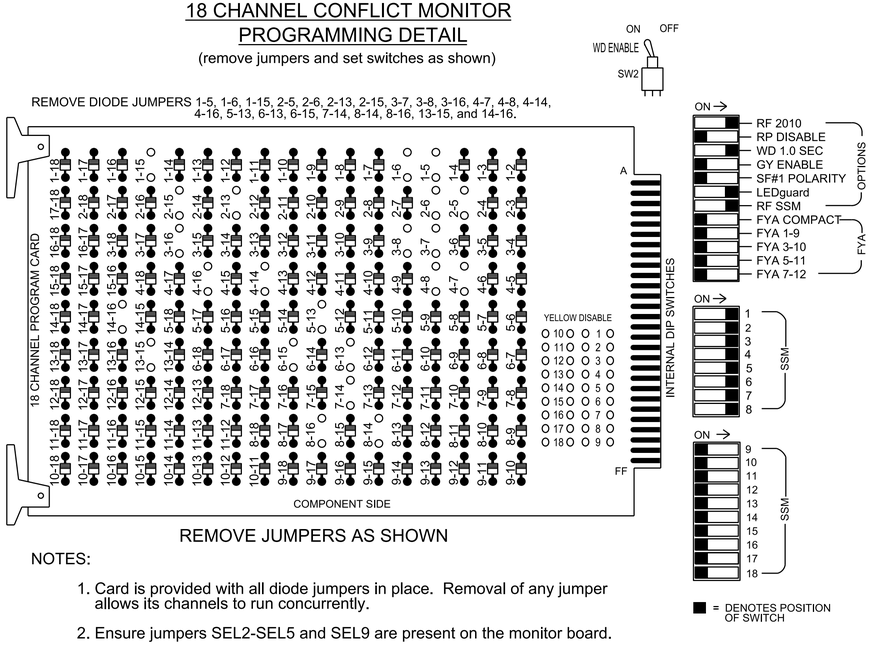
PROJECT REFERENCE NO.	SHEET NO.
P-5715	Sig. 2.1

18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



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 Plans.
2. Program controller to start up in phases 2 and 6 Green/Don't Walk.
3. Enable simultaneous gap-out feature for all phases.
4. The cabinet and controller are part of the Raleigh Signal System.

EQUIPMENT INFORMATION

```
CONTROLLER..............2070LX
CABINET.................332 w/ AUX
SOFTWARE................SE-PAC
CABINET MOUNT...........BASE
OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE
LOAD SWITCHES USED......S1,S2,S3,S4,S5,S6,S7,S8,
                        S9,S10,S11,S12
PHASES USED.............1,2,2 PED,3,4,4 PED,5,
                        6,6 PED,7,8,8 PED
OVERLAPS................NONE
```

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	82	21,22	P21, P22	22	31	41,42	P41, P42	51	61,62	P61, P62	62	71	81,82	P81, P82	NU	NU	NU	NU	NU	NU
RED			128				101			134				107							
YELLOW			129				102			135				108							
GREEN			130				103			136				109							
RED ARROW	125					116			131				122								
YELLOW ARROW	126	126			117	117			132			123	123								
GREEN ARROW	127	127			118	118			133			124	124								
✋				113				104			119				110						
🚶				115				106			121				112						

NU = Not Used

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.

INPUT FILE POSITION LAYOUT

(front view)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	U	Ø1 1A	Ø2 2A	SLOT EMPTY	SLOT EMPTY	Ø3 3A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	Ø2 PED DC ISOLATOR	Ø6 PED DC ISOLATOR	FS DC ISOLATOR
	L	NOT USED	Ø2 2B			NOT USED							Ø4 PED DC ISOLATOR	Ø8 PED DC ISOLATOR	ST DC ISOLATOR
FILE "J"	U	Ø5 5A	Ø6 6A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	Ø8 8A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY
	L	NOT USED	Ø6 6B				Ø8 8B								

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.	DETECTOR NO.	NEMA PHASE	DELAY TIME	EXTEND (STRETCH) TIME
1A	TB2-1,2	I1U	56	1	1	3	
2A	TB2-5,6	I2U	39	3	2		
2B	TB2-7,8	I2L	43	4	2		
3A	TB4-5,6	I5U	58	9	3	3	
5A	TB3-1,2	J1U	55	19	5	3	
6A	TB3-5,6	J2U	40	21	6		
6B	TB3-7,8	J2L	44	22	6		
8A	TB5-9,10	J6U	42	31	8		
8B	TB5-11,12	J6L	46	32	1	15	
PED PUSH BUTTONS							
P21,P22	TB8-4,6	I12U	67	PED 2	2 PED		
P41,P42	TB8-5,6	I12L	69	PED 4	4 PED		
P61,P62	TB8-7,9	I13U	68	PED 6	6 PED		
P81,P82	TB8-8,9	I13L	70	PED 8	8 PED		

NOTICE PHASE

NOTE:
INSTALL DC ISOLATORS IN INPUT FILE SLOTS I12 AND I13.

INPUT FILE POSITION LEGEND: J2L

FILE J
SLOT 2
LOWER

ADVANCE WALK PED PROGRAMMING DETAIL

(program controller as shown below)

1. From Main Menu select 3 - PHASE DATA
2. From PHASE DATA Submenu select 3 - PEDESTRIAN DATA
3. From PEDESTRIAN DATA Submenu select 3 - PED OFFSET+

```
PHASE......1...2...3...4...5...6...7...8
 WOFF/10   0  30   0  30   0  30   0  30
 MODE      0   0   0   0   0   0   0   0


CODES: * 0-ADVANCE  1-DELAY
```

Advance Walk PED programming complete.

INIT & N.A. RESP PROGRAMMING DETAIL

1. From Main Menu select 3 - PHASE DATA
2. From PHASE DATA Submenu select 4 - INIT & N.A RESP

```
PHASE......1...2...3...4...5...6...7...8
 INITIAL   1   6   1   1   1   6   1   1
 NA RESP   0   1   0   2   0   1   0   2


CODES.....0....1....2....3....4....5...6
 INITL  NONE INACT RED  YEL  GRN  DRK G/DW
 NA RSP NONE  NA1  NA2  1&2  ---  --- ---
                                      ***
```

INIT & N.A. RESP PROGRAMMING COMPLETE

SPECIAL DETECTOR NOTE

For zones 4A, 4B, and 7A install a video 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.

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: R-0434T1
DESIGNED: February 2023
SEALED: 8/30/2023
REVISED: N/A

Electrical Design - Temp. Design 1 (TMP Phase 1)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared in the Offices of:

Traffic Engineering Mobility and Safety Division
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
Signals Management Section

750 N.Greenfield Pkwy,Garner,NC 27529

Atlantic Avenue
at
New Hope Church Road

Division 5 | Wake County | Raleigh

PLAN DATE:	May 2023	REVIEWED BY:	D.T.J.
PREPARED BY:	D.J. Craddock	REVIEWED BY:	

REVISIONS	INIT.	DATE

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 031001 ENGINEER D. TODD JOYCE

DocuSigned by: D. Todd Joyce 08/31/2023
SIGNATURE DATE

SIG. INVENTORY NO. R-0434T1

31-AUG-2023 09:20
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