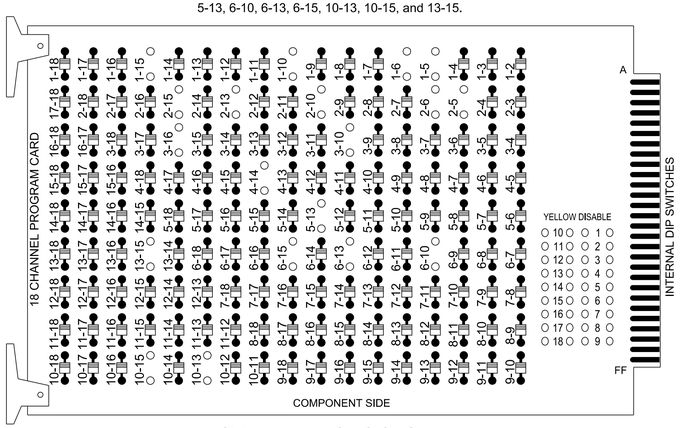
DocuSign Envelope ID: 8C90EBC1-5FD4-4085-9731-8E59F8511462

PROJECT REFERENCE NO.	SHEET NO.
R-5799	Sig. 8.1

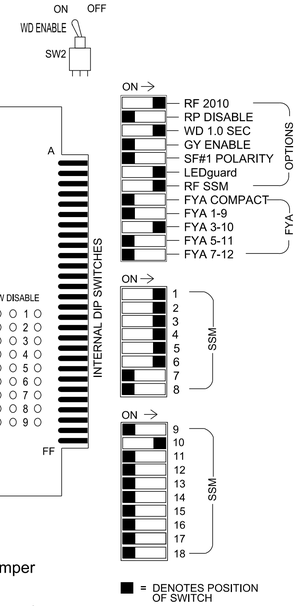
18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-5, 1-6, 1-10, 1-15, 2-5, 2-6, 2-10, 2-13, 2-15, 3-10, 3-16, 4-14, 5-13, 6-10, 6-13, 6-15, 10-13, 10-15, and 13-15.



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. 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 plan.

2. Return controller to Factory Defaults before programming per this electrical detail.

3. Program controller to start up in phase 2 Green Walk and 6 Green 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 a Time Based Coordination System.

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, S3, S4, S5, S6, S7, S8, S9, S12, AUX S2
Phases Used.....1, 2, 2PED, 3, 3PED, 4, 4PED, 5, 6, 6PED
Overlap "1".....NOT USED
Overlap "2".....*

*See overlap programming detail on sheet 2

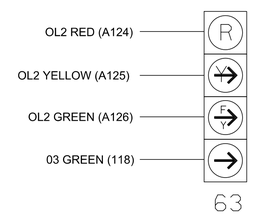
SIGNAL HEAD HOOK-UP CHART

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	3 PED	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	11,12	21, 22,23	P21, P22	31	32	63★	41	42,43	P41, P42	51	32	61,62	P61, P62	NU	NU	P31, P32	NU	63★	NU	NU	NU	NU
RED		128		116	116		101	101				134						A124				
YELLOW		129		117	117		102	102				135										
GREEN		130		118	118		103	103				136										
RED ARROW	125									131												
YELLOW ARROW	126									132	132							A125				
FLASHING YELLOW ARROW																		A126				
GREEN ARROW	127			118		118	103			133	133											
✋			113						104				119			110						
🚶			115						106				121			112						

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

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	---	---	X	-	X	-
1B	TB2-5,6	I2U	39	1	2	1	---	---	X	-	X	-
2A	TB2-9,10	I3U	63	29	4	2	---	---	X	X	X	-
2B	TB2-11,12	I3L	76	42	5	2	---	---	X	X	X	-
3A	TB4-5,6	I5U	58	20	7	3	3.0	---	X	-	X	-
4A	TB4-9,10	I6U	41	3	8	4	---	---	X	-	X	-
5A	TB3-1,2	J1U	55	17	15	5	---	---	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	-
PED PUSH BUTTONS												
P21,P22	TB8-4,6	I12U	67	33	2	PED 2						
P31,P32	TB8-8,9	I13L	70	36	8	PED 3						
P41,P42	TB8-5,6	I12L	69	35	4	PED 4						
P61,P62	TB8-7,9	I13U	68	34	6	PED 6						

NOTE:
INSTALL DC ISOLATORS IN INPUT FILE SLOTS 112 AND 113.

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 14-0798
DESIGNED: May 2023
SEALED: May 4, 2023
REVISED: N/A

Final Signal Design
Electrical Detail - Sheet 1 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Electrical and Programming Details For:

US 64-276 (Asheville Highway)
at
SR 1512 (Ecusta Road) /
Bank Driveway

Division 14 Transylvania County Brevard

PLAN DATE: May 2023 REVIEWED BY: V. Kaiser
PREPARED BY: S.G. Haynie REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 029531 ENGINEER STEVEN G. HAYNIE

DocuSigned by: Steven G. Haynie 5/4/2023
D633DCC9A5D4486...
DATE

SIG. INVENTORY NO. 14-0798

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

RS&H
NC FIRM LICENSE No: F-0493
1520 SOUTH BOULEVARD, SUITE 200
CHARLOTTE, NC 28203
(704) 752-0610

5/4/2023
R:\Traffic\Signals\Designs\Plan Sheets\R5799_sig_psh_8-1_140798_elec.dgn
11:26:01 AM