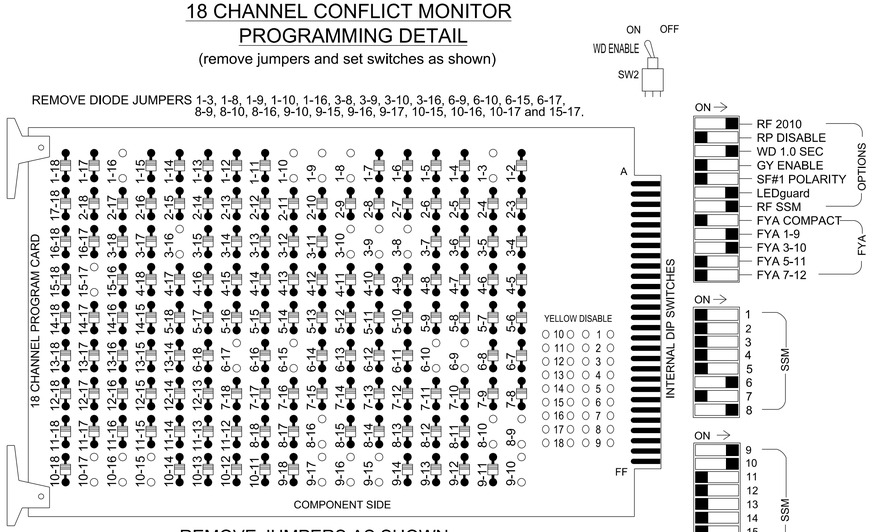
PROJECT REFERENCE NO.	SHEET NO.
U-5312	Sig.6.6

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 plan.
2. Program phases 3 and 8 for Dual Entry.
3. Program controller to start up in phase 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 Wilkesboro Closed Loop 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,S4,S8,S9,S11,S16,AUX S1,AUX S2, AUX S3
Phases Used.....3,6,6 PED,8,8 PED
Overlap "1".....*
Overlap "2".....*
Overlap "3".....NOT USED
Overlap "4".....NOT USED
Overlap "5".....*
Overlap "7".....*

*See overlap programming detail on sheet 2.

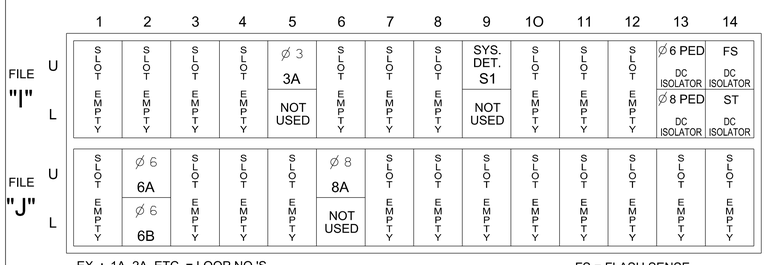
SIGNAL HEAD HOOK-UP CHART

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	OL7	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	OL1	OL2	OL5	OL3	OL4	SPARE
SIGNAL HEAD NO.	32★	NU	NU	31★	NU	NU	NU	61,62	P61, P62	NU	81,82	P81, P82	32★	31★	63★	NU	NU	NU
RED								134			107				A111			
YELLOW	*			*				135										
GREEN																		
RED ARROW													A121	A124				
YELLOW ARROW											108		A122	A125	A112			
FLASHING YELLOW ARROW													A123	A126	A113			
GREEN ARROW	127			118				136			109							
✋									119			104						
🚶									121			106						

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

INPUT FILE POSITION LAYOUT

(front view)



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	QUEUE	CALL	DELAY DURING GREEN
3A	TB4-5,6	I5U	58	20	7	3	15		X			X	
*S1	TB6-9,10	I9U	60	22	13	SYS			X			X	
6A	TB3-5,6	J2U	40	2	16	6			X	X		X	
6B	TB3-7,8	J2L	44	6	17	6			X	X		X	
8A	TB5-9,10	J6U	42	4	22	8	15		X			X	
PED PUSH BUTTONS													
P61,P62	TB8-7,9	I13U	68	34	6	PED 6							
P81,P82	TB8-8,9	I13L	70	36	8	PED 8							

NOTE:
INSTALL DC ISOLATOR IN INPUT FILE SLOT I13.

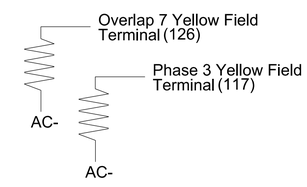
*System detector only. Remove any assigned vehicle phase.

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

LOAD RESISTOR INSTALLATION DETAIL

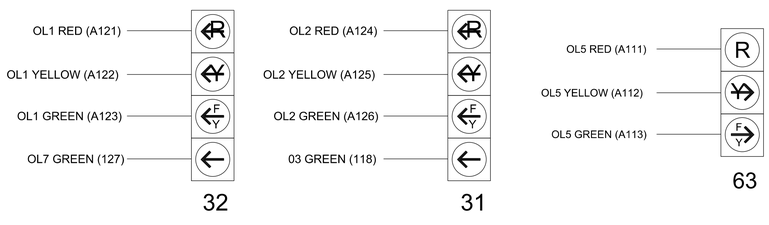
(install resistors as shown)

ACCEPTABLE VALUES	
Value (ohms)	Wattage
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)



FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 11-1463
DESIGNED: May 2023
SEALED: 5/24/2023
REVISED: N/A

VHB Engineering NC, P.C. (C-3705)
940 Main Campus Drive, Suite 500
Raleigh, NC 27606
919.829.0328

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Electrical Detail - Sheet 1 of 2

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared for the Offices of:
Traffic Engineering, Mobility and Safety Division
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
Signals Management Section
750 N.Greenfield Pkwy,Garner,NC 27529

US 421-NC 16
at
Addison Ave/Big Lots Entrance

Division 11 Wilkes County Wilkesboro

PLAN DATE: May 2023	REVIEWED BY: J. Ma
PREPARED BY: M.L. Stygles	REVIEWED BY: S.R. Chiluka

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 046057 ENGINEER MATTHEW L. STYGLES

DocuSigned by:
Matthew Stygles
SIGNATURE 5/24/2023 DATE

SIG. INVENTORY NO. 11-1077

5/23/2023 3:15:01 PM
mlstygles
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schiluka