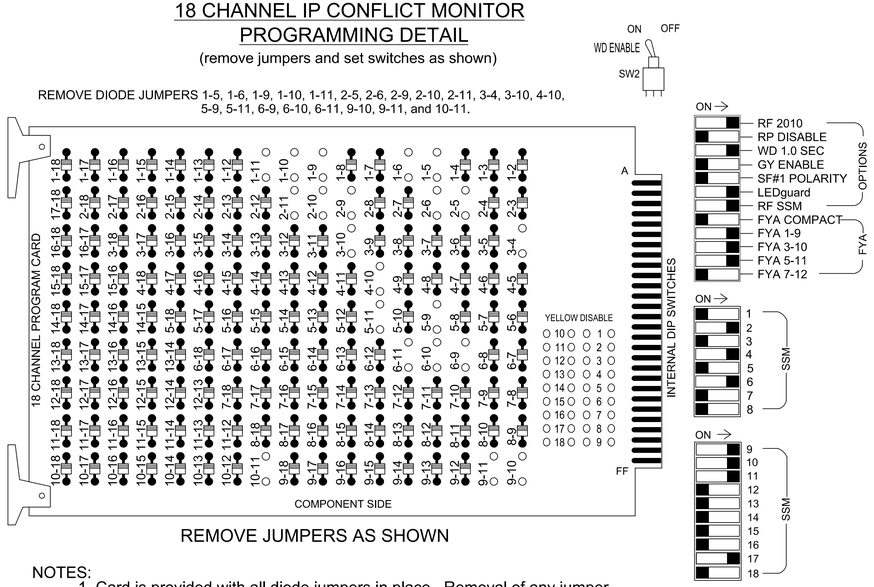
Docusign Envelope ID: 48DAEC8C-50C9-4AB8-8F5C-8A8D31055D39

PROJECT REFERENCE NO.	SHEET NO.
U-5797	Sig. 15.1

18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

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



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. Program controller to start up in phase 2 Green No Walk, 6 Green No Walk, 39 Phase Not On, and 40 Green No Walk.
3. Program Phase 39 for No Startup Veh Call.
4. Program phases 2, 6, and 40 for Min Recall.
5. If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
6. The cabinet and controller are part of the #D06-17 Lumberton US 301 and SR 1997 (Fayetteville Road).

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, AUX S1, AUX S2, AUX S3, AUX S4
Phases Used.....1, 2, 3, 4, 5, 6
Overlap "1".....*
Overlap "2".....*
Overlap "3".....*
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	1	2	2 PED	OL7	4			4 PED	5	6	6 PED	7	8	8 PED	OL1	OL2	OL5		OL3	OL4	SPARE
SIGNAL HEAD NO.	11★	21.22	NU	63	41	42	43	NU	51★	61,62	NU	NU	NU	NU	11★	63★	31	32	51★	NU	NU
RED		128				101	101			134						124	A111	A111			
YELLOW	*	129		*		102	102		*	135							A112	A112			
GREEN		130				103	103			136							A113	A113			
RED ARROW					101										A121				A114		
YELLOW ARROW					102										A122	A125			A115		
FLASHING YELLOW ARROW															A123	A126			A116		
GREEN ARROW	127			118	103	103			133								A113				
✋																					
🚶																					

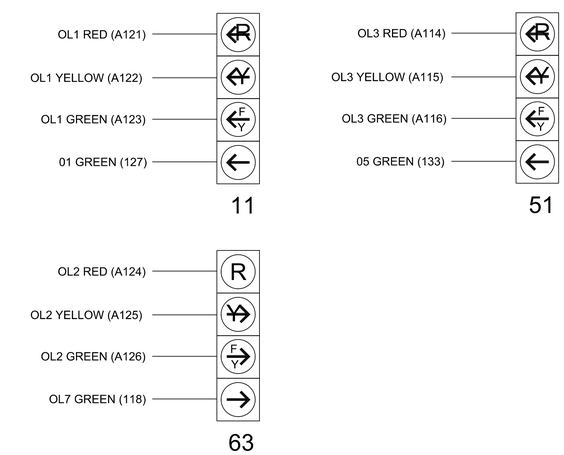
NU = Not Used

*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*	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	FS DC ISOLATOR
	L	NOT USED													ST DC ISOLATOR
FILE "J"	U	Ø 5 5A*	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	PRE1 AC ISOLATOR
	L	NOT USED													NOT USED

MULTIZONE DETECTION

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

FS = FLASH SENSE
ST = STOP TIME
PRE = PREEMPT

* Reflects the detector utilized in the "MAXTIME DETECTOR PROGRAMMING DETAIL FOR ALTERNATE PHASING LOOPS 1A & 5A" on Sheet 2.

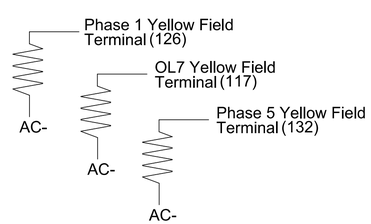
SPECIAL DETECTOR NOTE

Install a multizone microwave 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.

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)



THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 06-1387T1
DESIGNED: Feb 2025
SEALED: 3/19/2025
REVISED:

Temporary Design 1 - TMP Phase III, Step 3
Electrical Detail - Sheet 1 of 4

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
(704) 372-1885
NC License Number F-0991

Electrical and Programming Details For:

NC 211 (N. Roberts Avenue) at Boomerang Drive / Restaurant Driveway

Prepared for the Offices of:

Transportation Mobility and Safety Division, Traffic Engineering & Signals Management Section, State of North Carolina, Department of Transportation

750 N. Greenfield Pkwy, Garner, NC 27529

Division 6 | Robeson County | Lumberton

PLAN DATE:	Feb 2025	REVIEWED BY:	H.M. Surti
PREPARED BY:	J.C. Grimm	REVIEWED BY:	T.M. Moody

REVISIONS	INIT.	DATE

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 040329 ENGINEER TRENT M. MOODY

DocuSigned by: Trent Moody 45EA1D4B3670AE0...

SIGNATURE | DATE 3/19/2025

SIG. INVENTORY NO. 06-1387T1

2/21/2025
Workspaces:#018560#018560_00014#06_Deliverables & Submittals#U-5797#Traffic#Signals#Temporary Signals#06-1387 (Roberts-Boomerang)#06138711_sm_ele_2024xxxx.dgn
LeonarR