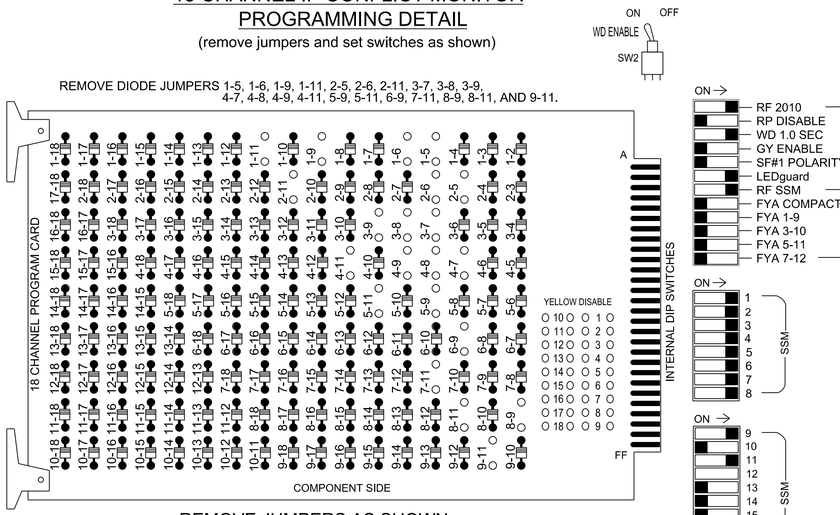
Docusign Envelope ID: CAB76B9D-839C-4E85-823A-B322CCC359A2

PROJECT REFERENCE NO.	SHEET NO.
R-5858	Sig. 3.1

18 CHANNEL IP 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. Integrate monitor with Ethernet network in cabinet.

NOTES

1. To prevent "flash-conflict" problems, insert red flash program blocks for all 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 No Walk and 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 D02-02_Cape Carteret Signal System.

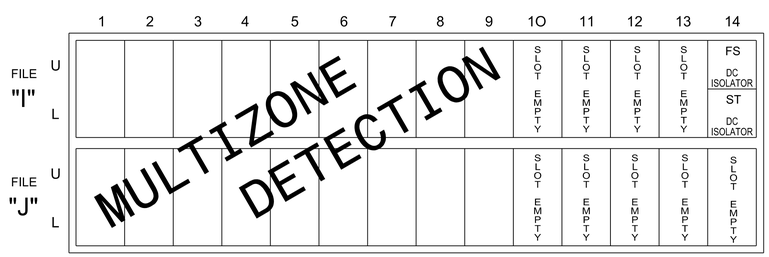
SIGNAL HEAD HOOK-UP CHART

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	OL5	OL3	OL4	OL6
SIGNAL HEAD NO.	11,12	21,22, 23	NU	31,32	41,42	NU	51,52	61,62, 63	NU	71,72	81,82	NU	83,84	NU	NU	43,44	NU	NU
RED	·	128	·	·	101	·	·	134	·	·	107	·	A121	·	·	A114	·	·
YELLOW	·	129	·	·	102	·	·	135	·	·	108	·	·	·	·	·	·	·
GREEN	·	130	·	·	103	·	·	130	·	·	109	·	·	·	·	·	·	·
RED ARROW	125	·	·	116	·	·	131	·	·	122	·	·	·	·	·	·	·	·
YELLOW ARROW	126	·	·	117	·	·	132	·	·	123	·	·	A122	·	·	A115	·	·
GREEN ARROW	127	·	·	118	·	·	133	·	·	124	·	·	A123	·	·	A116	·	·

NU = Not Used

INPUT FILE POSITION LAYOUT

(front view)



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

FS = FLASH SENSE
ST = STOP TIME

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.

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 S4
Phases Used.....1, 2, 3, 4, 5, 6, 7, 8
Overlap "1".....*
Overlap "2".....NOT USED
Overlap "3".....*
Overlap "4".....NOT USED
*See overlap programming detail on sheet 2

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 02-0247
DESIGNED: April 2026
SEALED: 04-08-2026
REVISED: N/A

GFT
GFT Infrastructure, Inc.
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Raleigh, NC 27603
919-420-7660
NC Lic. No. F-0270

Electrical Detail - Sheet 1 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Electrical and Programming Details For:

NC 24 (W.B. McClean Drive)
at
NC 58

Division 2 Carteret County Cape Carteret

PLAN DATE:	April 2026	REVIEWED BY:	D. Hartland
PREPARED BY:	JT Rowe	REVIEWED BY:	

REVISIONS	INIT.	DATE

Prepared in 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

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 008453 ENGINEER JOHN T. ROWE JR.

DocuSigned by:
John T. Rowe, Jr. 4/8/2026
SIGNATURE DATE
SIG. INVENTORY NO. 02-0247

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