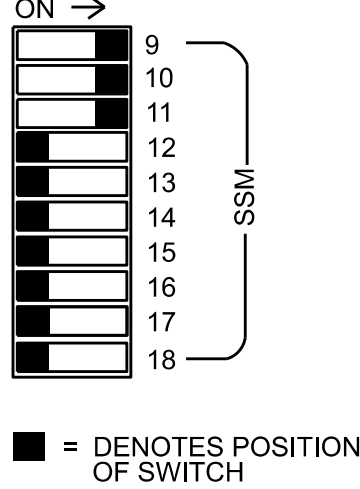
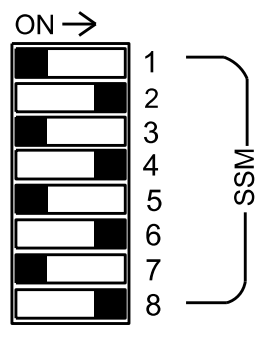
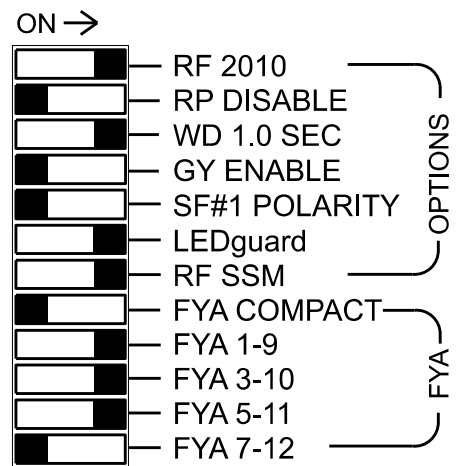
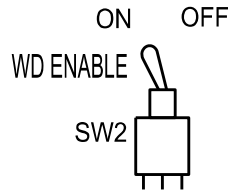
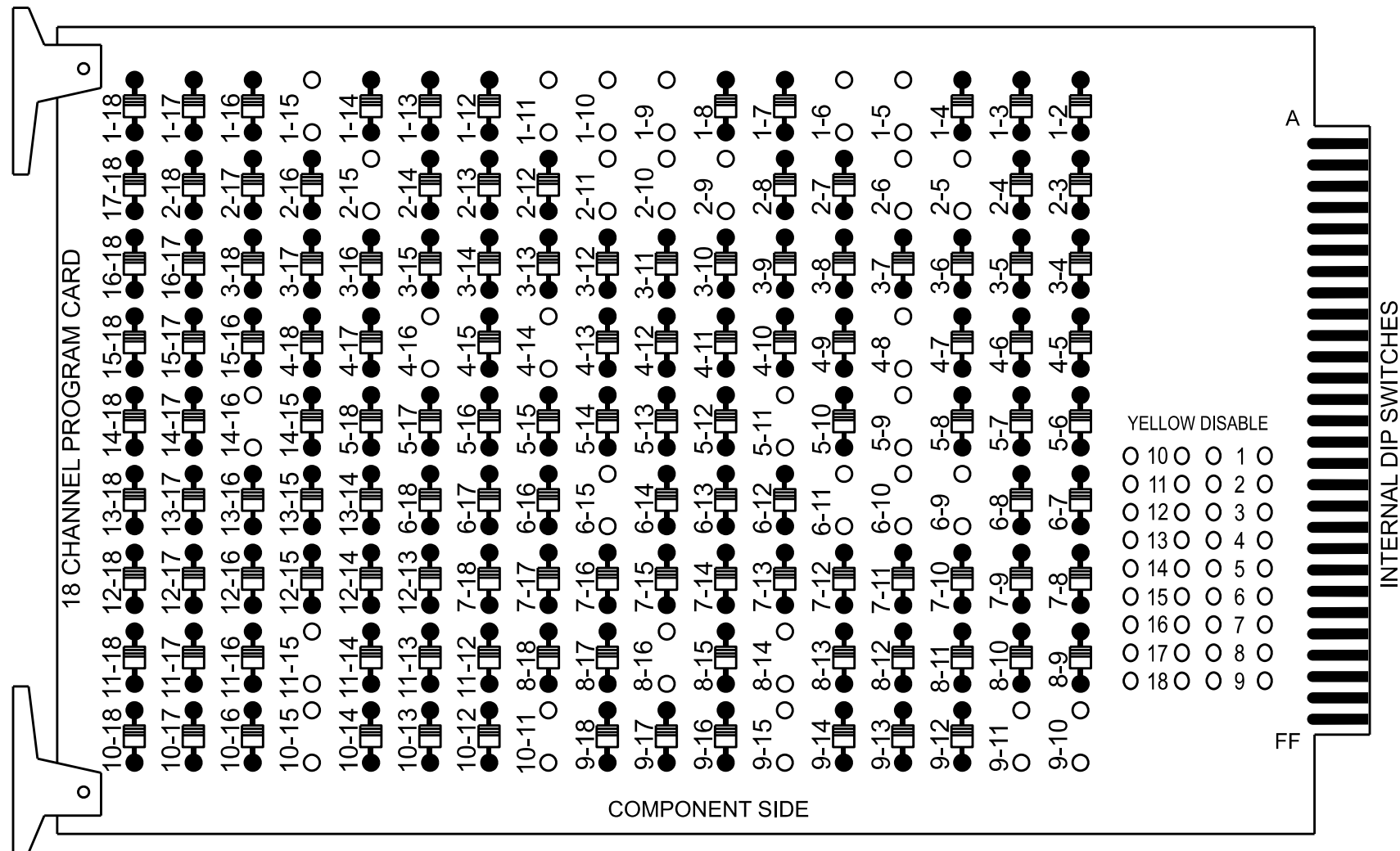


18 CHANNEL CONFLICT MONITOR
PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-10, 1-11, 1-15, 2-5, 2-6, 2-9, 2-10, 2-11, 2-15, 4-8, 4-14, 4-16, 5-9, 5-11, 6-9, 6-10, 6-11, 6-15, 8-14, 8-16, 9-10, 9-11, 9-15, 10-11, 10-15, 11-15, and 14-16.



REMOVE JUMPERS AS SHOWN

NOTES:

- Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
- Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
- Ensure that the Red Enable is active at all times during normal operation.
- Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

NOTES

- 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.
- Program phases 4 and 8 for Dual Entry and Simultaneous Start.
- Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
- The cabinet and controller are part of the Signal System US 158 (Croatan Hwy) South, D01-07_Kitty Hawk.

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, S5, S6, S7, S8, S9, S11, S12, AUX S1, AUX S2, AUX S4
Phases Used.....1, 2, 4, 4PED, 5, 6, 6PED, 8, 8PED
Overlap "1".....*
Overlap "2".....*
Overlap "3".....*
Overlap "4".....Not Used

*See overlap programming detail on Sheet 3

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	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	11★	21,22	NU	NU	41,42	P41, P42	51★	61,62	P61, P62	NU	81,82	P81, P82	11★	63★	NU	51★	NU	NU
RED		128			101			134			107			A124				
YELLOW	★	129			102		★	135			108							
GREEN		130			103			136			109							
RED ARROW													A121			A114		
YELLOW ARROW													A122	A125		A115		
FLASHING YELLOW ARROW													A123	A126		A116		
GREEN ARROW	127							133										
Hand icon							104			119		110						
Walking person icon							106			121		112						

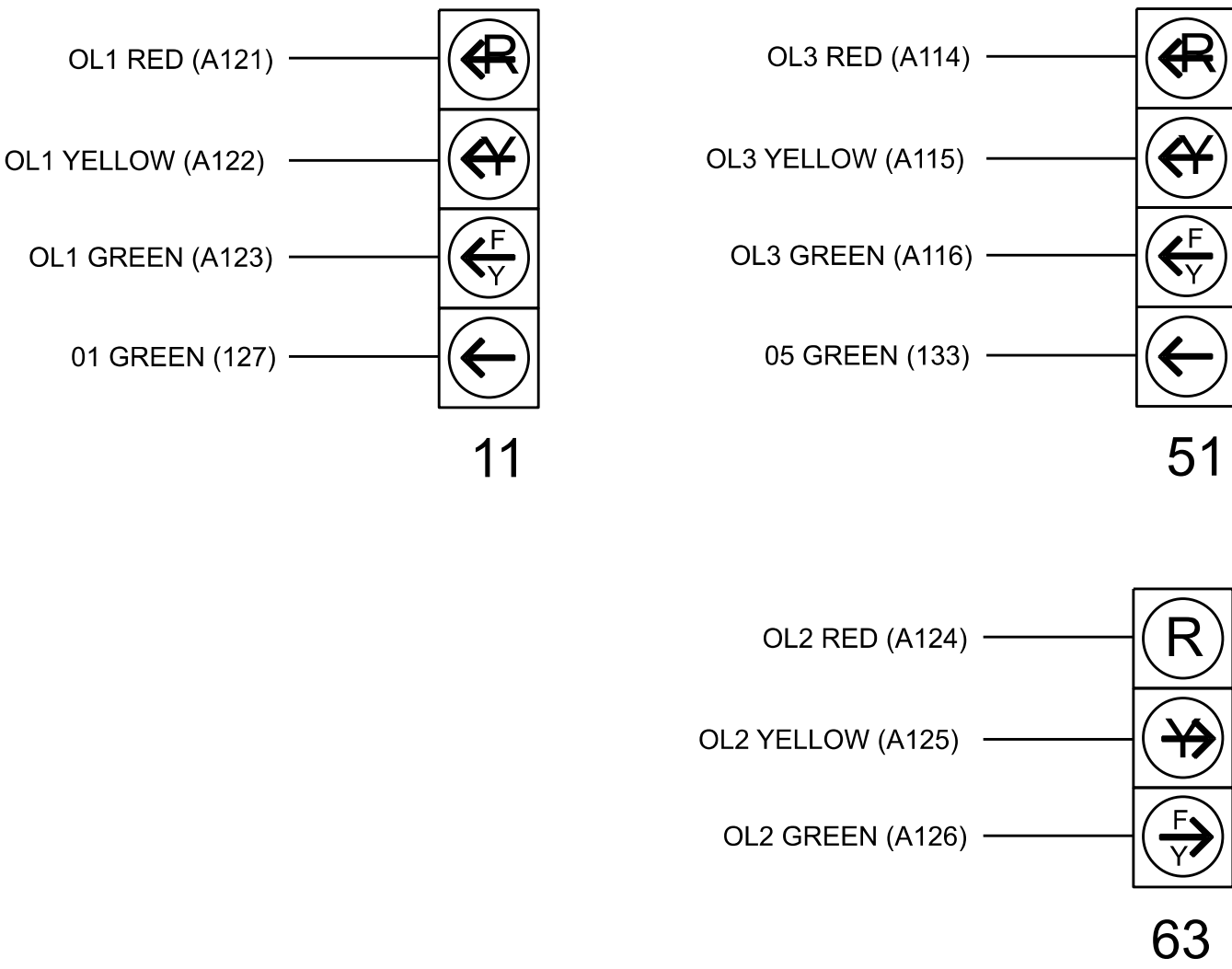
NU = Not Used

★ Denotes install load resistor. See load resistor installation detail this sheet.

★ See pictorial of head wiring in detail this sheet.

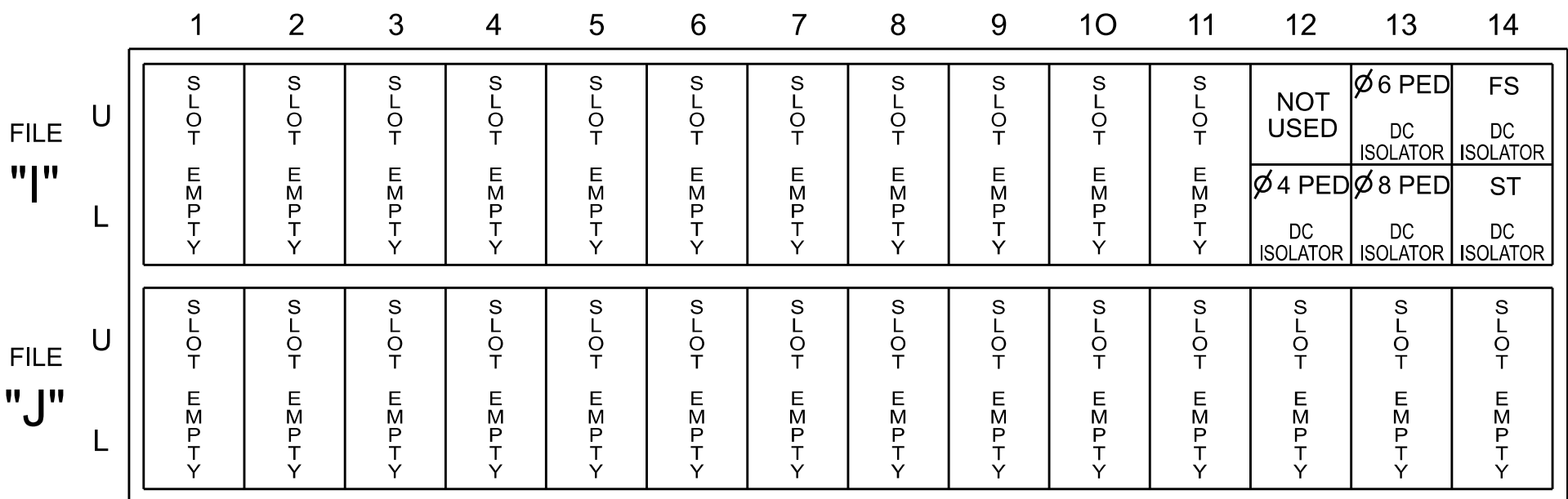
FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



INPUT FILE POSITION LAYOUT

(front view)



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	-	-	-	* -	33★ 125★	1 6	15		X		X	
2A	-	-	-	* -	38 44	2 4			X		X	
4A	-	-	-	* -	44 35★	4 5	5		X		X	
5A	-	-	-	* -	35★ 127★	5 2	15		X		X	
6A	-	-	-	* -	54 60	6 8			X		X	
8A	-	-	-	* -	60 8		5		X		X	
PED PUSH BUTTONS												
P41,P42	TB8-5,6	I12L	69	35	4	PED 4						
P61,P62	TB8-7,9	I13U	68	34	6	PED 6						
P81,P82	TB8-8,9	I13L	70	36	8	PED 8						

INPUT FILE POSITION LEGEND: J2L

FILE J
SLOT 2
LOWER

★ For the detectors to work as shown on the signal plan, see the Detector Programming Detail for Alternate Phase on Sheet 3.

* For Input Point Numbers, see SDLC Non-Intrusive Detection Chart detail on this sheet.

SDLC NON-INTRUSIVE DETECTION CHART

Input Point	Detector Rack #3		Detector Rack #4	
	Det # (Index)	Detector Zone	Det # (Index)	Detector Zone
1	33	1A	49	NU
2	34	NU	50	NU
3	35	5A	51	NU
4	36	NU	52	NU
5	37	NU	53	NU
6	38	2A	54	6A
7	39	NU	55	NU
8	40	NU	56	NU
9	41	NU	57	NU
10	42	NU	58	NU
11	43	NU	59	NU
12	44	4A	60	8A
13	45	NU	61	NU
14	46	NU	62	NU
15	47	NU	63	NU
16	48	NU	64	NU

NU = Not Used

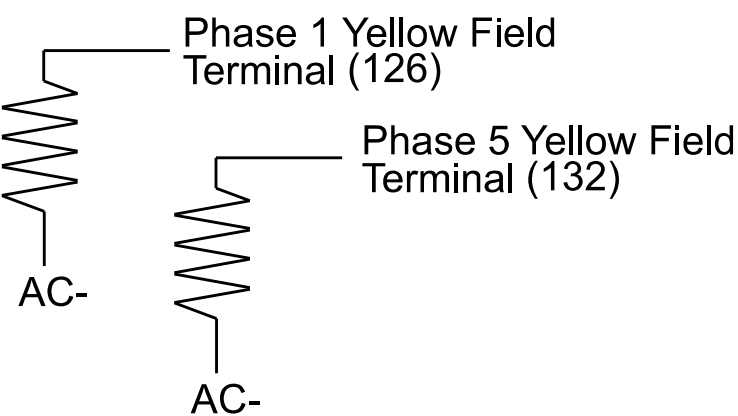
SPECIAL DETECTOR NOTE

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.

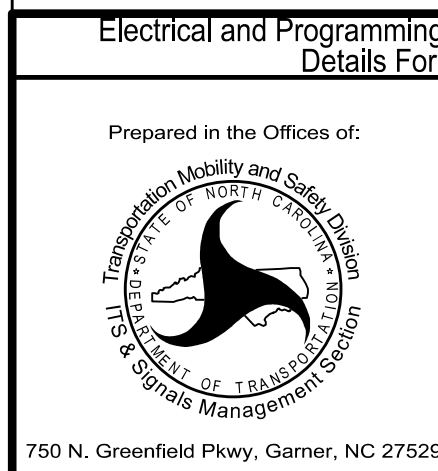
LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)

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



Electrical Detail - Sheet 1 of 3



US 158
(South Croatan Highway)
at
Grouse Street / Soundside Drive
Division 01 Dare County Nags Head
PLAN DATE: June 2026 REVIEWED BY: DJC
PREPARED BY: ELC REVIEWED BY:
REVISIONS
INIT. DATE
DocuSigned by: 08/03/2026
B. Jake Craddock
DATE
SIC INVENTORY NO. 01-0768

