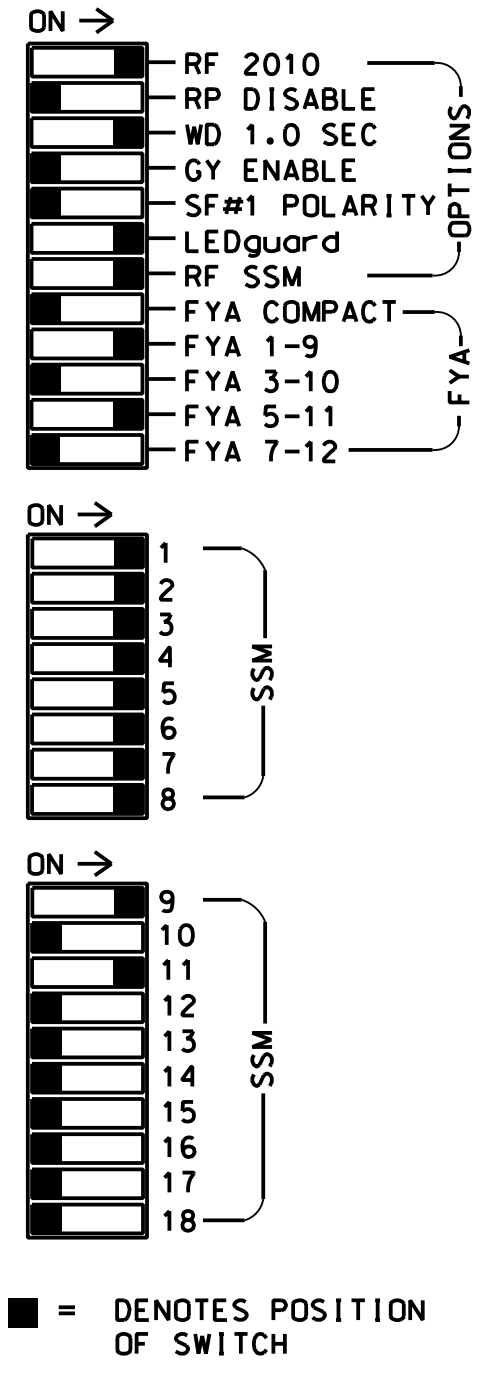
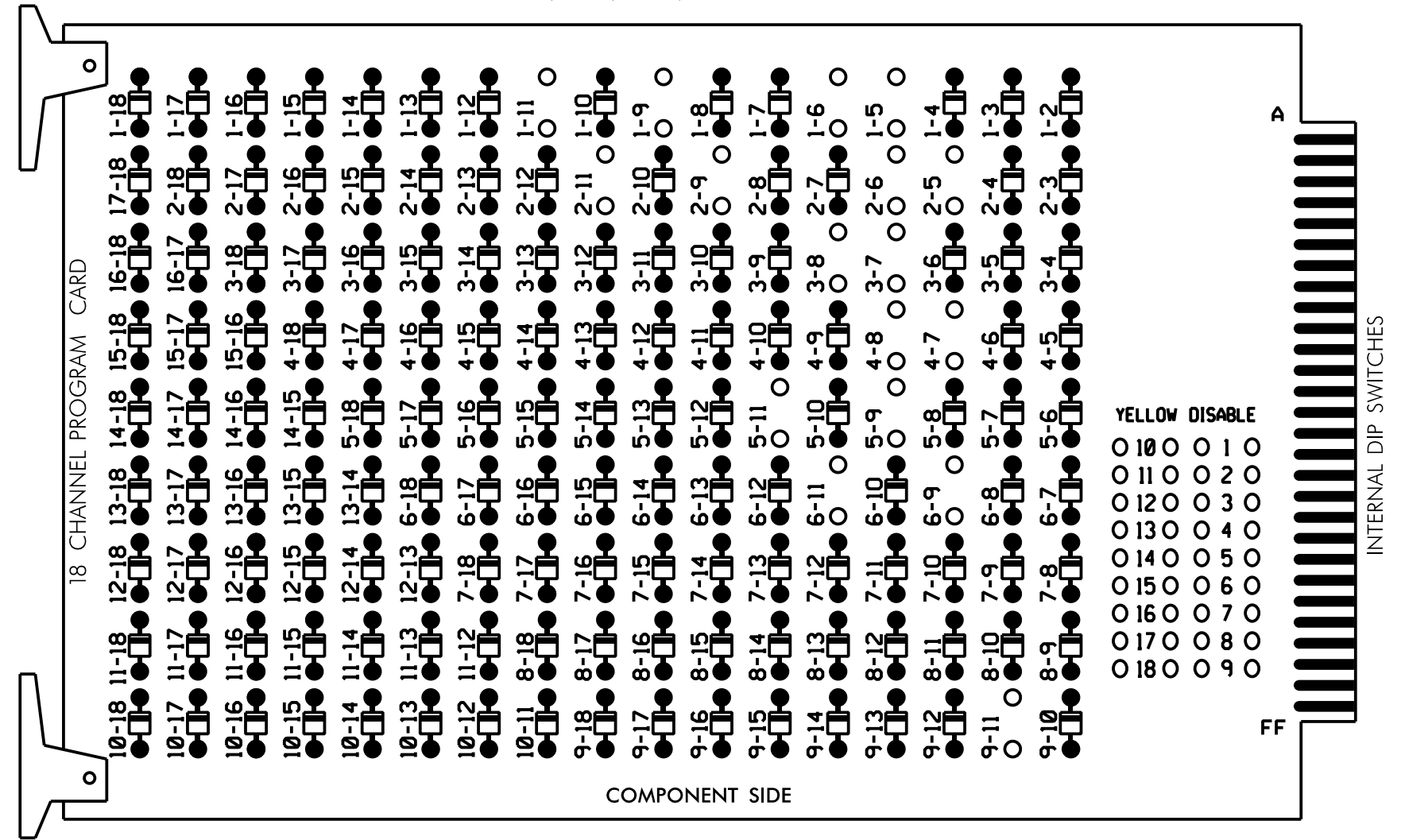


EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-11, 2-5, 2-6, 2-9, 2-11, 3-7, 3-8, 4-7, 4-8, 5-9, 5-11, 6-9, 6-11 and 9-11.



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 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 unused vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the Signal Plans.
- Enable Simultaneous Gap-Out for all Phases.
- Program phases 2 and 6 for Variable Initial and phases 2,4,6, and 8 for Gap Reduction.
- Program phases 2 and 6 for Startup In Green.
- Program phases 2 and 6 for Yellow Flash, and overlap 1 as Wag Overlaps.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.

EQUIPMENT INFORMATION

CONTROLLER.....2070E
 CABINET.....332 W/ AUX
 SOFTWARE.....ECONOLITE OASIS
 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 "A".....1+2
 OVERLAP "B".....NOT USED
 OVERLAP "C".....5+6
 OVERLAP "D".....NOT USED

SIGNAL HEAD HOOK-UP CHART

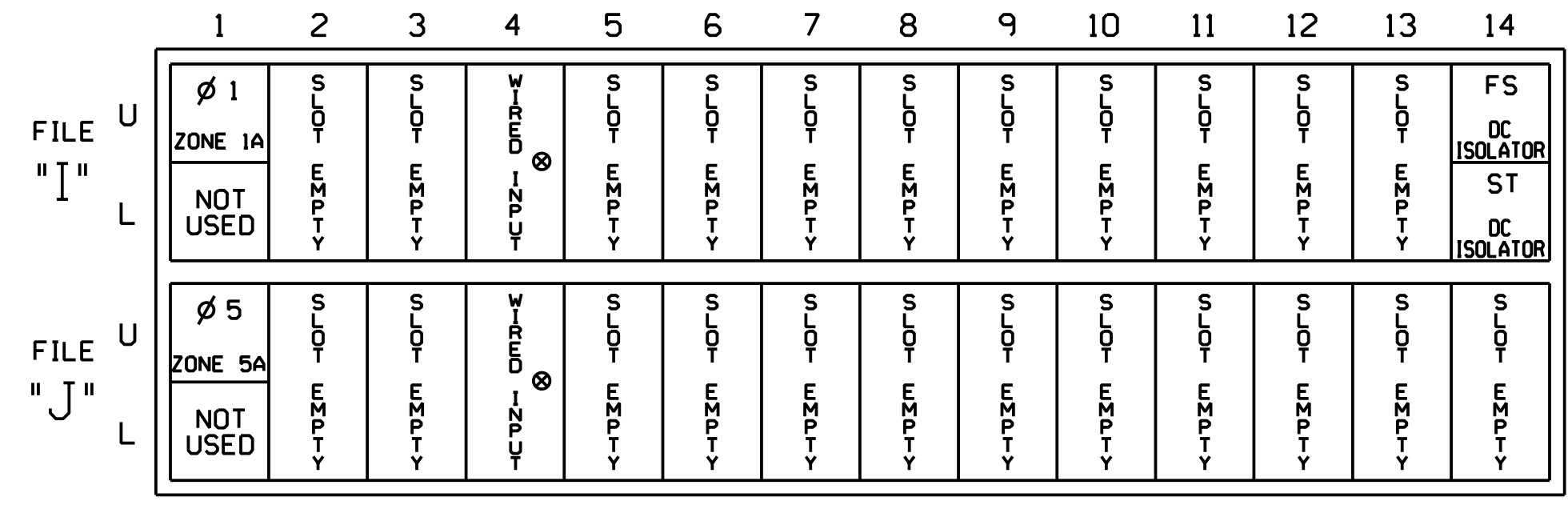
| LOAD SWITCH NO. | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 | S11 | S12 | AUX S1 | AUX S2 | AUX S3 | AUX S4 | AUX S5 | AUX S6 | | | | |
|-----------------------|-----|-----|-------|----|-----|-------|-------|----|-------|-----|-------|-------|--------|--------|--------|--------|--------|--------|------|----|----|--|
| 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 | OLA | OLB | SPARE | OLC | OLD | SPARE | | | | |
| SIGNAL HEAD NO. | 11 | 82 | 21,22 | NU | 22 | 31 | 41,42 | NU | 42 | 51 | 61,62 | NU | 62 | 71,72 | 81,82 | NU | 11 | NU | 51 | NU | NU | |
| RED | | * | 128 | | | 101 | | * | | 134 | | | 107 | | | | | | | | | |
| YELLOW | | | 129 | | | 102 | | | | 135 | | | 108 | | | | | | | | | |
| GREEN | | | 130 | | | 103 | | | | 136 | | | 109 | | | | | | | | | |
| RED ARROW | | | | | 116 | | | | | | | | 122 | | | A121 | | | A114 | | | |
| YELLOW ARROW | | 126 | | | 117 | 117 | | | 132 | | | | 123 | 123 | | A122 | | | A115 | | | |
| FLASHING YELLOW ARROW | | | | | | | | | | | | | | | | A123 | | | A116 | | | |
| GREEN ARROW | 127 | 127 | | | 118 | 118 | | | 133 | 133 | | | 124 | 124 | | | | | | | | |

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)



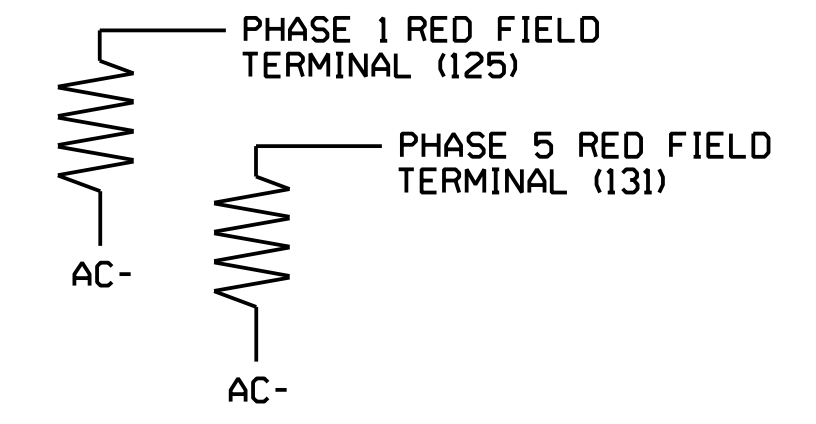
EX.: 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
 ST = STOP TIME

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)

| VALUE (ohms) | WATTAGE |
|--------------|-----------|
| 1.5K - 1.9K | 25W (min) |
| 2.0K - 3.0K | 10W (min) |

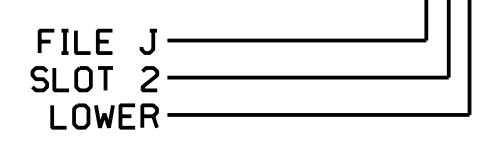


INPUT FILE CONNECTION & PROGRAMMING CHART

| LOOP NO. | LOOP TERMINAL | INPUT FILE POS. | PIN NO. | INPUT ASSIGNMENT NO. | DETECTOR NO. | NEMA PHASE | CALL | EXTEND | FULL TIME DELAY | STRETCH TIME | DELAY TIME |
|----------------------|---------------|-----------------|---------|----------------------|--------------|------------|------|--------|-----------------|--------------|------------|
| ZONE 1A ¹ | ** | I1U | 56 | 18 | 1 | 1 | Y | Y | | | 15 |
| | - | J4U | 48 | 10★ | 26 | 6 | Y | Y | Y | | 3 |
| | - | I1U | 56 | 18★ | 51 | 1 | Y | Y | | | 3 |
| ZONE 5A ² | ** | J1U | 55 | 17 | 5 | 5 | Y | Y | | | 15 |
| | - | I4U | 47 | 9★ | 22 | 2 | Y | Y | Y | | 3 |
| | | | J1U | 55 | 17★ | 55 | 5 | Y | Y | | 3 |

- ¹Add jumper from I1-W to J4-W, on rear of input file.
- ²Add jumper from J1-W to I4-W, on rear of input file.
- * See Input Page Assignment programming details on sheets 3 and 4.
- ** Multizone Microwave Detector Zone. See Special Detector Note.

INPUT FILE POSITION LEGEND: J2L



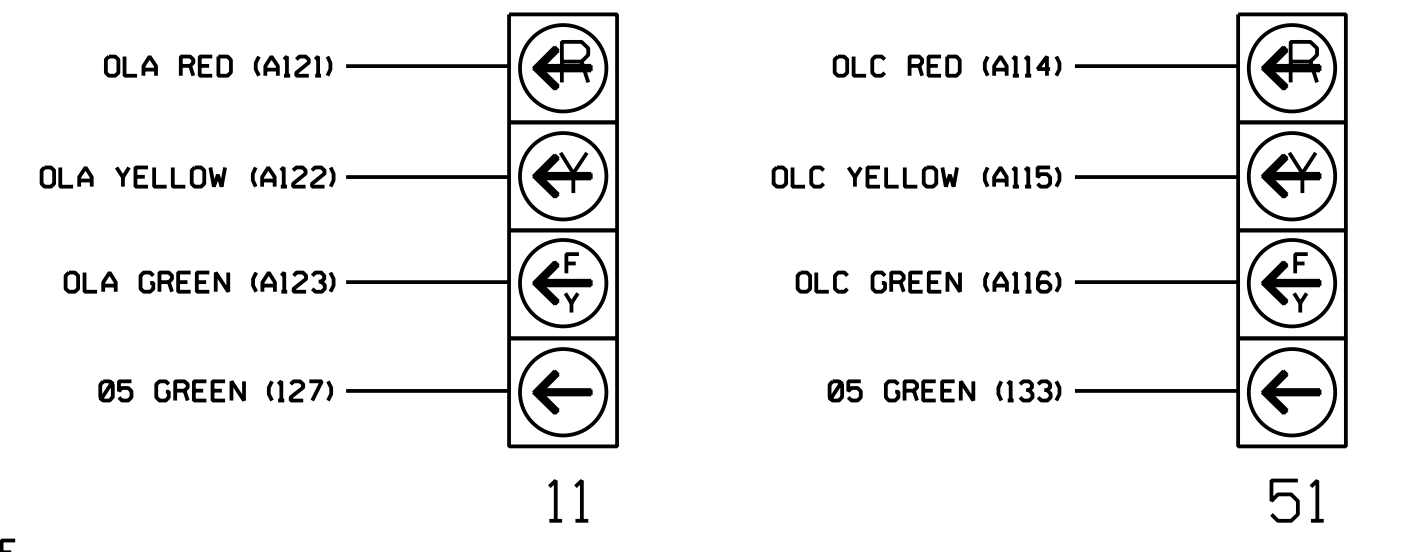
SPECIAL DETECTOR NOTE

Install a 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.

For loops 1A and 5A detector card placement and slots reserved for wired inputs are typical for a NCDOT installation. Inputs associated with these slots are compatible with the time of day instructions located on sheets 3, 4, and 5 of this electrical detail.

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



NOTE

The sequence display for signal heads 11 and 51 requires special logic programming. See sheet 2 for programming instructions.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 03-0901T1
 DESIGNED: June 2017
 SEALED: 9/10/2021
 REVISED: N/A

Electrical Detail - Sheet 1 of 5
 Signal Upgrade
 Temporary Design 1

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

| | | | |
|--|--|---|----------|
| | NC 211 (Southport-Supply Road) at NC 906 (Midway Road/ Middleton Boulevard) Division 03 Brunswick Co. Southport | | SEAL |
| | Prepared for: HNTB NORTH CAROLINA, P.C. 343 E. Six Forks Road, Suite 200 Raleigh, North Carolina 27609 NC License No: C-1564 (919) 546-8997 | PLAN DATE: June 2017 PREPARED BY: A.H. Thornburg REVIEWED BY: A.D. Klinksiek REVIEWED BY: N.R. Simmons | |