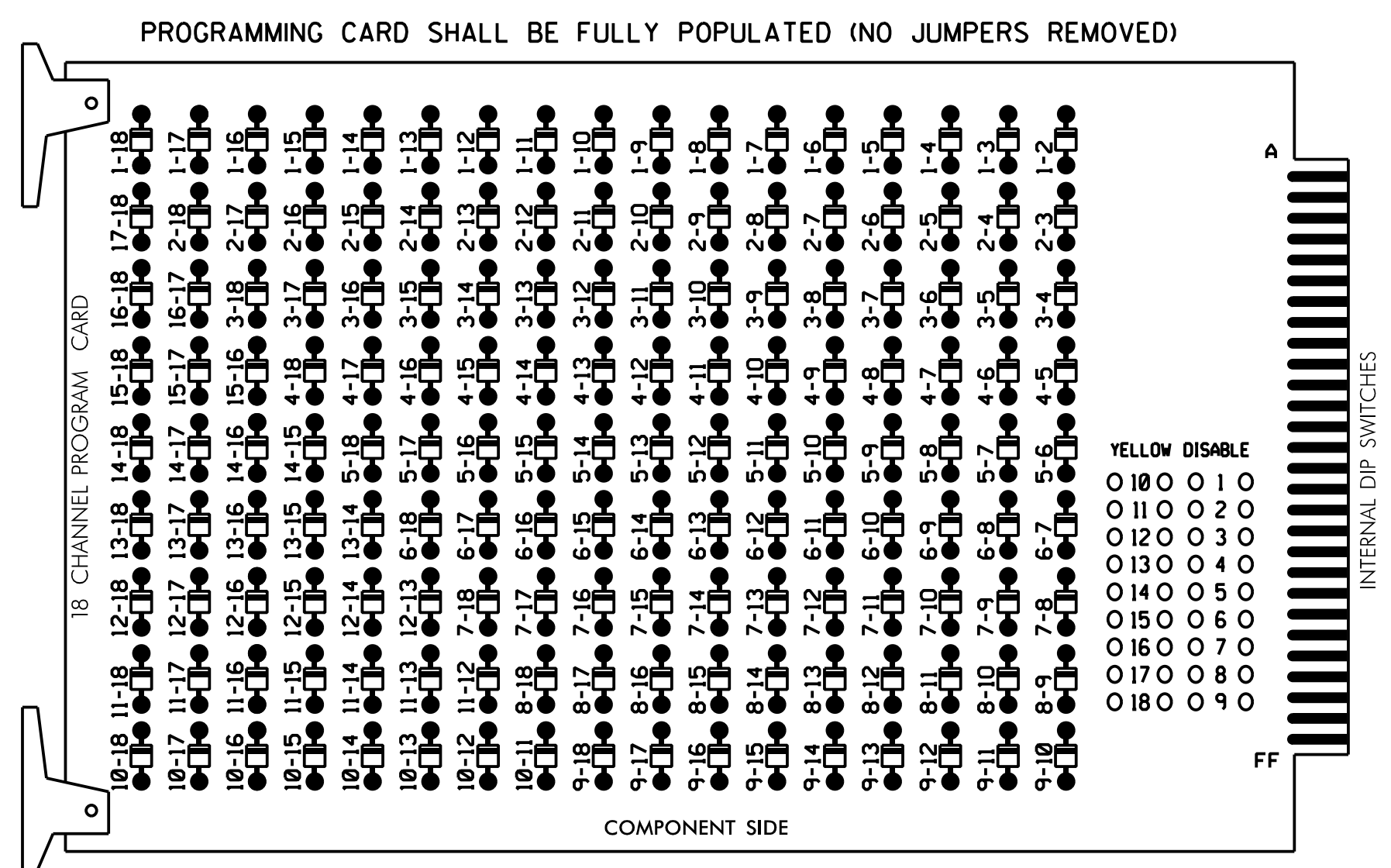


EDI MODEL 2018ECLip-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



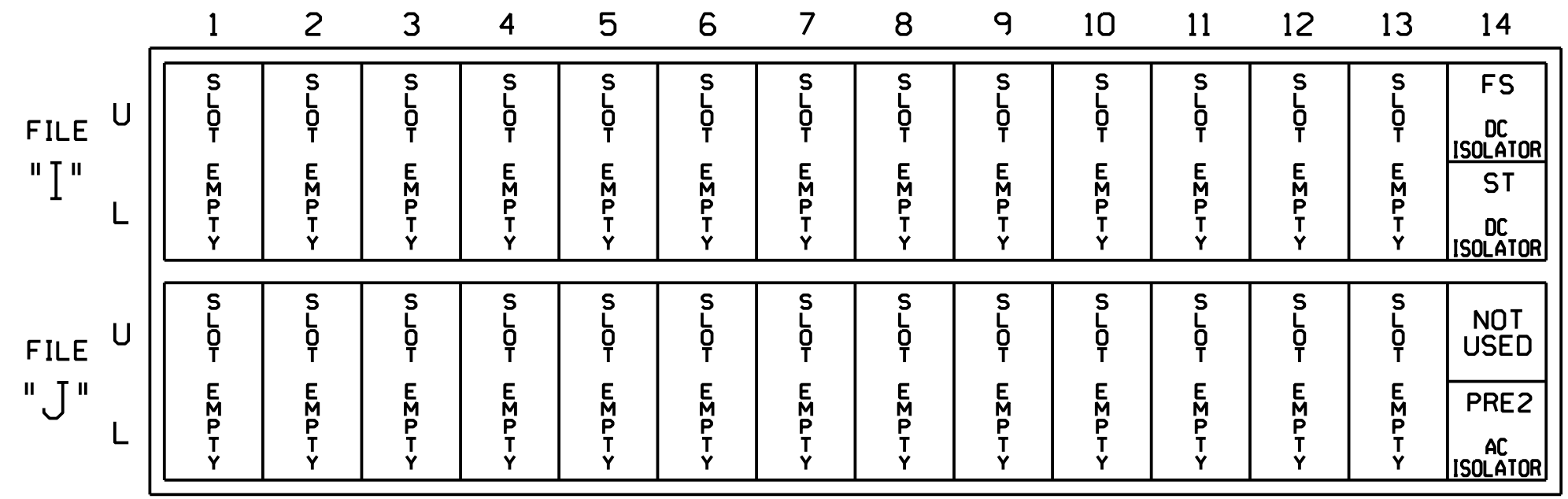
REMOVE JUMPERS AS SHOWN

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 Red Enable is active at all times during normal operation.
4. Integrate monitor with Ethernet network in cabinet.

INPUT FILE POSITION LAYOUT

(front view)



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

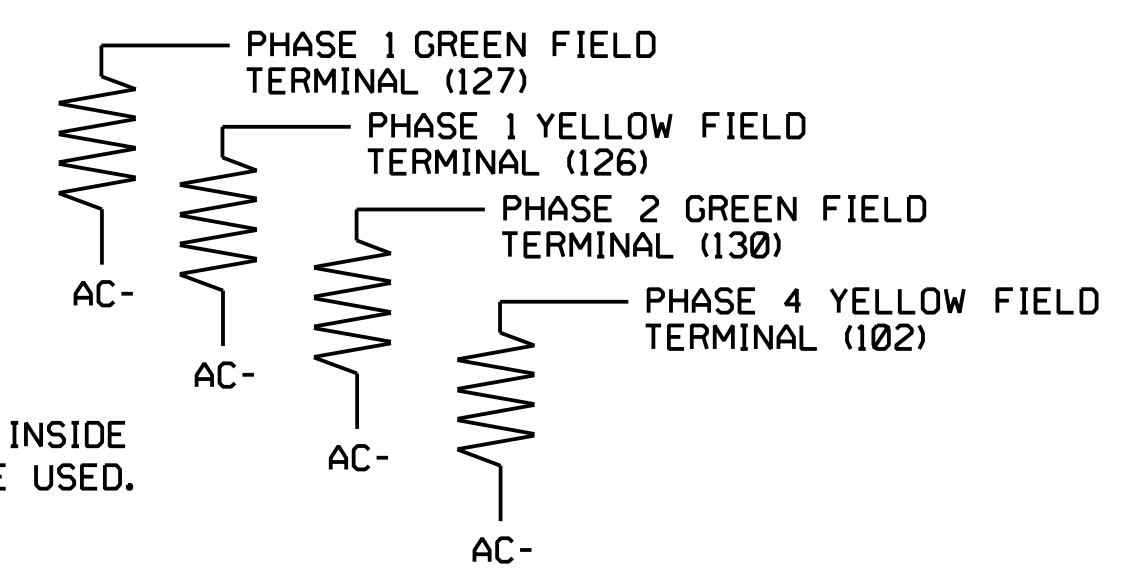
FS = FLASH SENSE
ST = STOP TIME
PRE = PREEMPT

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown below)

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

NOTE: FACTORY INSTALLED RESISTORS, LOCATED INSIDE OUTPUT FILE, MAY BE USED.



NOTES

1. Insert yellow flash program blocks for phases 1 and 2. Insert red flash program blocks for all remaining unused vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the Signal Plans.
2. Program phase 2 for Startup In Green.
3. Program phase 2 for Yellow Flash.
4. Program phase 2 for Startup Calls.
5. The cabinet and controller are part of the Wilmington Signal System.

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,S3*,S5
 PHASES USED.....2,4
 OVERLAP "A".....2**
 OVERLAP "B".....NOT USED
 OVERLAP "C".....NOT USED
 OVERLAP "D".....NOT USED
 * USED FOR PILOT LIGHT ONLY
 ** DENOTES PHASE USED TO CONTROL CLEARANCE INTERVALS.

OPERATIONAL NOTES

1. In order for controller to perform the "Emergency Veh. Hybrid Beacon" (aka. HAWK signal) sequence, special logic and output programming is necessary. See programming details on sheet 2 and 3 of this electrical detail.
2. This sequence uses PHASE 2 YELLOW to produce "flashing yellow clearance" and also uses overlap "A" assigned as phase 2 to provide "steady yellow" clearance interval. Time for this interval shall be implemented in "OL A YELLOW CLEAR" timing. See signal plan for timing.
3. Phase 2 YELLOW CLEARANCE and OLA GREEN EXTENSION times must be equal. This is necessary so that when flashing yellow clear ends, the steady yellow clear begins.

OVERLAP PROGRAMMING DETAIL

(program controller as shown below)

FROM MAIN MENU PRESS '8' (OVERLAPS), THEN '1' (VEHICLE OVERLAP SETTINGS).

```
PAGE 1: VEHICLE OVERLAP 'A' SETTINGS
PHASE: :12345678910111213141516
VEH OVL PARENTS: X
VEH OVL NOT VEH:
VEH OVL NOT PED:
VEH OVL GRN EXT: X
STARTUP COLOR: - RED - YELLOW - GREEN
FLASH COLORS: - RED - YELLOW - GREEN
SELECT VEHICLE OVERLAP OPTIONS: (Y/N)
FLASH YELLOW IN CONTROLLER FLASH?...Y
GREEN EXTENSION (0-255 SEC).....5
YELLOW CLEAR (0=PARENT,3-25.5 SEC)...4.6
RED CLEAR (0=PARENT,0.1-25.5 SEC)...2.2
OUTPUT AS PHASE # (0=NONE, 1-16)....0
```

NOTICE
TIMING
INTERVALS

OVERLAP PROGRAMMING COMPLETE

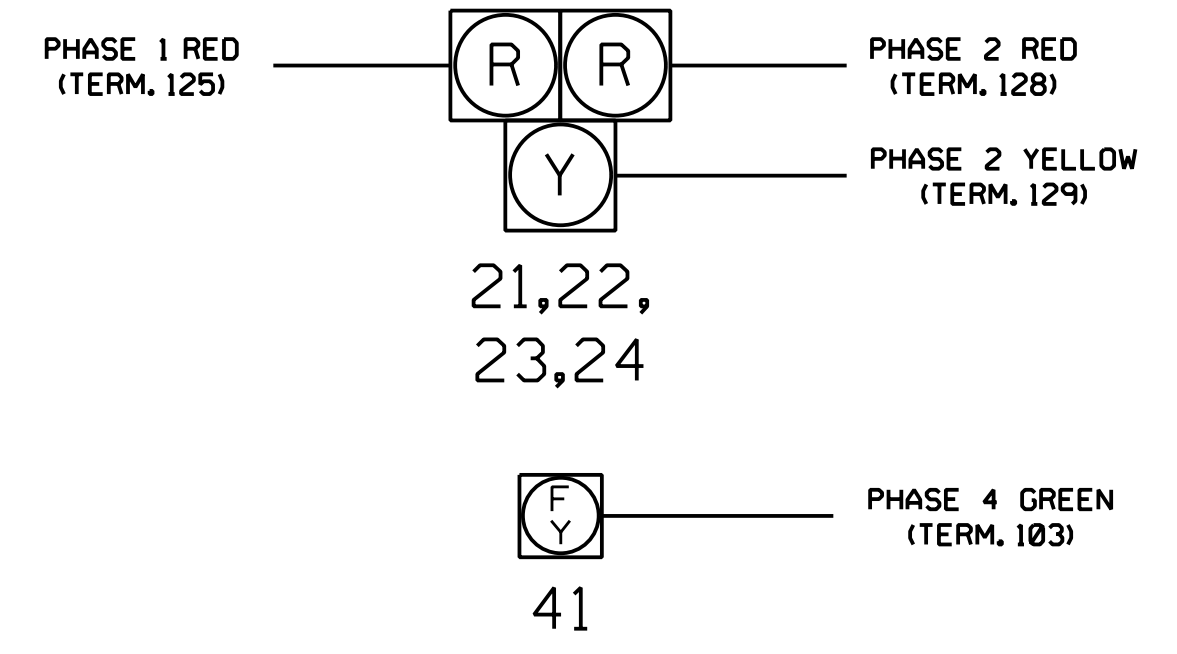
SIGNAL HEAD HOOK-UP CHART

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.	21,22, 23,24	21,22, 23,24	**	NU	41	NU	NU	NU	NU	NU	NU	NU	NU	NU	NU	NU	NU	NU
RED	125	128																
YELLOW	*	129			*													
GREEN	*	*			103													
RED ARROW																		
YELLOW ARROW																		
GREEN ARROW																		
Hand icon																		
Walking person icon																		

NU = Not Used
 * Denotes install load resistor. See load resistor installation detail this sheet.
 ** See Lamp Notes (Sheet 2 of 3)

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



TIMING INTERVAL SCHEDULE

PHASE 2 YELLOW CLEAR TIME = FLASHING YELLOW CLEARANCE INTERVAL
 OVERLAP "A" YELLOW CLEAR TIME = STEADY YELLOW CLEARANCE INTERVAL
 OVERLAP "A" RED CLEAR TIME = ALL RED CLEARANCE INTERVAL

NOTE: Phase 2 YELLOW CLEARANCE and OLA GREEN EXTENSION times must be equal.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 03-0635
 DESIGNED: February 2018
 SEALED: 8-1-18
 REVISED: N/A

Electrical Detail - Sheet 1 of 3
 Signal Upgrade - Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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	HNTB NORTH CAROLINA, P.C. 343 E. Six Forks Road, Suite 200 Raleigh, North Carolina 27609 NC License No: C-1554 (919) 546-8997	PLAN DATE: February 2018 PREPARED BY: A.H. Thornburg	REVIEWED BY: A.D. Klinksiek REVIEWED BY: N.R. Simmons