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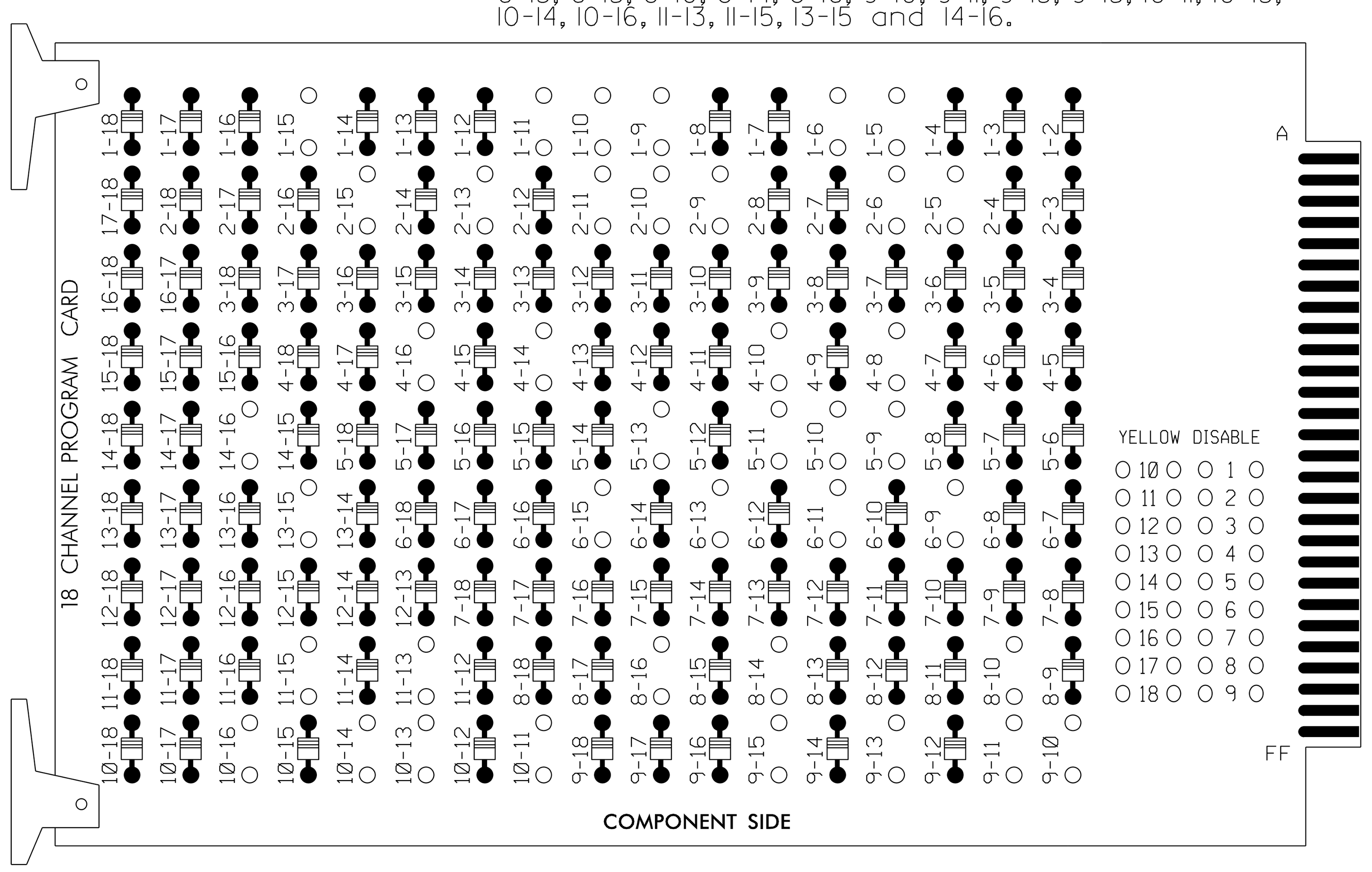
PROJECT REFERENCE NO.	SHEET NO.
U-3338B	Sig. 9.1

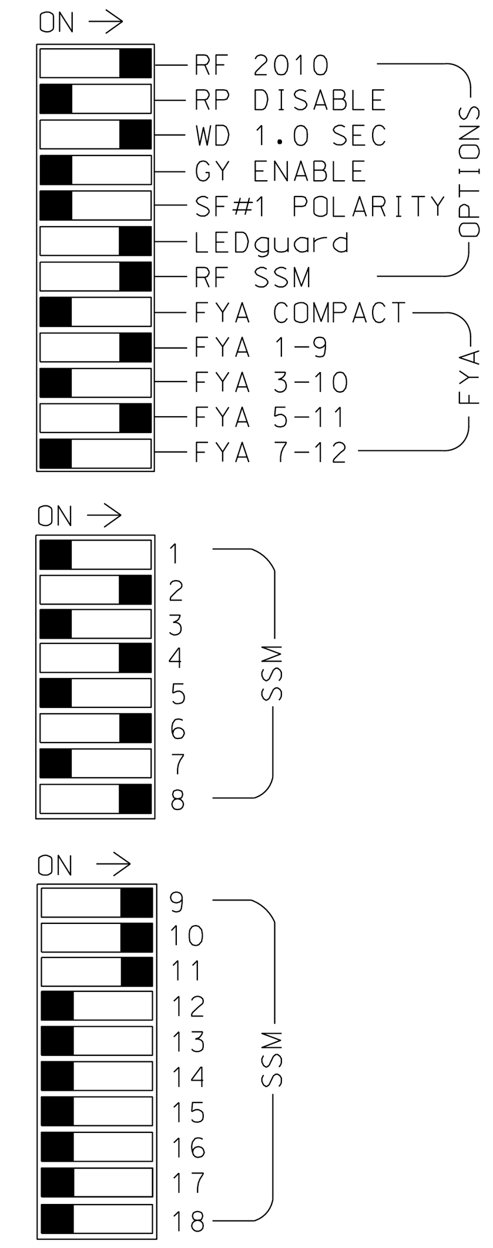
EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-10, 1-11, 1-15, 2-5, 2-6, 2-9, 2-10, 2-11, 2-13, 2-15, 4-8, 4-10, 4-14, 4-16, 5-9, 5-10, 5-11, 5-13, 6-9, 6-11, 6-13, 6-15, 8-10, 8-14, 8-16, 9-10, 9-11, 9-13, 9-15, 10-11, 10-13, 10-14, 10-16, 11-13, 11-15, 13-15 and 14-16.



REMOVE JUMPERS AS SHOWN



■ = DENOTES POSITION OF SWITCH

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. Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

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 Plans.
2. Program phases 4 and 8 for Dual Entry.
3. Enable Simultaneous Gap-Out for all phases.
4. Program phases 2 and 6 for Variable Initial and Gap Reduction.
5. Program phases 2 and 6 for Start Up In Green.
6. Program phases 2, 4, 6 and 8 for 'STARTUP PED CALL'.
7. Program phases 2 and 6 for Yellow Flash, and overlap 1 as Wag Overlaps.
8. 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,S6,S7,S8,S9,S11,S12, AUX S1,AUX S2,AUX S4.
PHASES USED.............1,2,2PED,4,4PED,5,6,6PED,8,8PED.
OVERLAP "A".............1+2
OVERLAP "B".............4+5
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★	21,22	P21, P22	NU	41,42	P41, P42	51★	61,62	P61, P62	NU	81,82	P81, P82	11★	43★	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											
✋ (DON'T WALK)			113			104			119			110						
🚶 (WALK)			115			106			121			112						

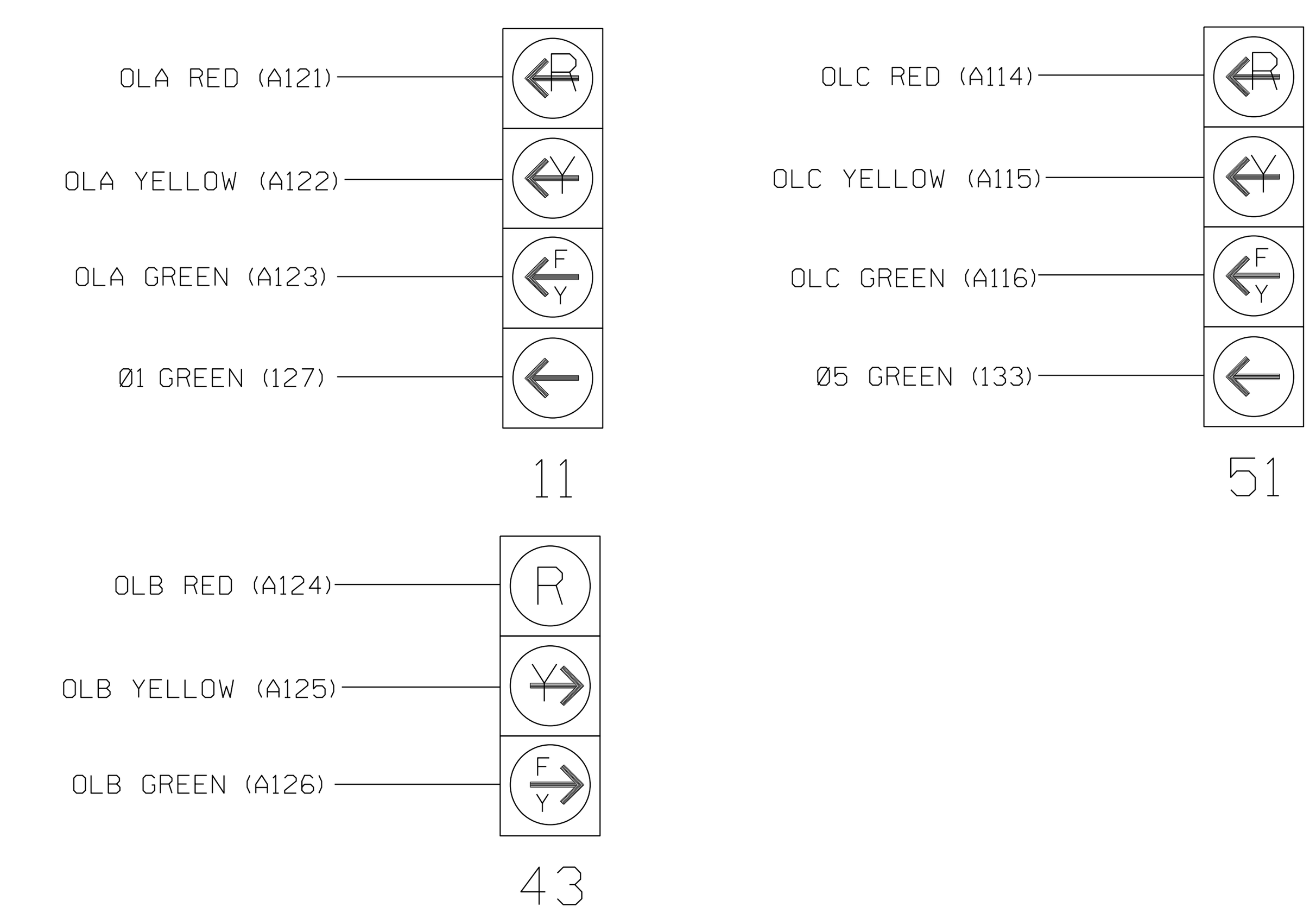
NU = Not Used

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

★ See pictorial of head wiring in detail below.

3 & 4 SECTION FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



NOTE

1. The sequence displays for signal heads 11 & 51 require special logic programming. See sheet 2 for programming instructions.

INPUT FILE POSITION LAYOUT

(front view)

FILE		1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	U	Ø1 1A	Ø2 2A	SLOT EMPTY	WIRED INPUT ⊗	SLOT EMPTY	Ø4 4A	SLOT EMPTY	SLOT EMPTY	SYS. DET. S1	SLOT EMPTY	SLOT EMPTY	Ø2 PED DC ISOLATOR	Ø6 PED DC ISOLATOR	FS DC ISOLATOR
	L	NOT USED	Ø2 2B				NOT USED			NOT USED			Ø4 PED DC ISOLATOR	Ø8 PED DC ISOLATOR	ST DC ISOLATOR
FILE "J"	U	Ø5 5A	Ø5 5B	Ø6 6A	WIRED INPUT ⊗	SLOT EMPTY	Ø8 8A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY
	L	NOT USED	NOT USED	Ø6 6B			NOT USED								

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

FS = FLASH SENSE
ST = STOP TIME

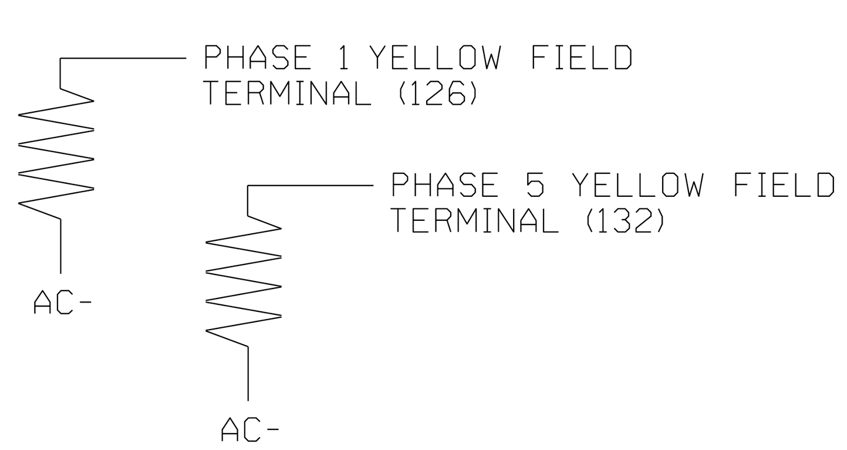
⊗ Wired Input - Do not populate slot with detector card

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown below)

ACCEPTABLE VALUES

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



COUNTDOWN PEDESTRIAN SIGNAL OPERATION

Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module User's manual for instructions on selecting this feature.

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
1A[1]	TB2-1,2	I1U	56	18	1	1	Y	Y			15
	-	J4U	48	10	26	6	Y	Y	Y		3
2A	TB2-5,6	I2U	39	1	2	2	Y	Y			
2B	TB2-7,8	I2L	43	5	12	2	Y	Y			
4A	TB4-9,10	I6U	41	3	4	4	Y	Y			
✳ S1	TB6-9,10	I9U	60	22	11	SYS					
5A[2]	TB3-1,2	J1U	55	17	5	5	Y	Y			15
	-	I4U	47	9	22	2	Y	Y	Y		3
5B	TB3-5,6	J2U	40	2	6	5	Y	Y			15
6A	TB3-9,10	J3U	64	26	36	6	Y	Y			
6B	TB3-11,12	J3L	77	39	46	6	Y	Y			
8A	TB5-9,10	J6U	42	4	8	8	Y	Y			
PED PUSH BUTTONS											
P21,P22	TB8-4,6	I12U	67	29	PED 2	2 PED					
P41,P42	TB8-5,6	I12L	69	31	PED 4	4 PED					
P61,P62	TB8-7,9	I13U	68	30	PED 6	6 PED					
P81,P82	TB8-8,9	I13L	70	32	PED 8	8 PED					

NOTE:
INSTALL DC ISOLATORS IN INPUT FILE SLOTS I12 AND I13.

✳ SYSTEM DETECTOR ONLY. REMOVE THE VEHICLE PHASE ASSIGNED TO THIS DETECTOR IN THE DEFAULT PROGRAMMING.

[1] Add jumper from I1-W TO J4-W, on rear of input file.

[2] Add jumper from J1-W TO I4-W, on rear of input file.

INPUT FILE POSITION LEGEND: J2L

FILE J
SLOT 2
LOWER

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 03-1082
DESIGNED: June 2014
SEALED: December 19, 2014
REVISED:

Signal Upgrade - Final Design (Electrical Detail Sheet 1 of 2)

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared for the Offices of: Transportation Mobility and Safety Division, Signals Management Section
750 N.Greenfield Pkwy,Garner,NC 27529

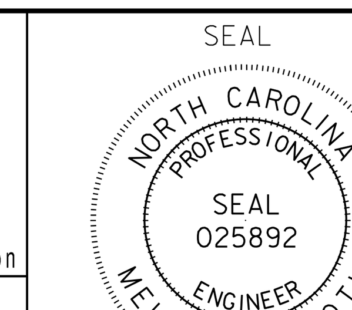
SR 1175 (Kerr Avenue) at Cinema Drive/ Shopping Center Driveway

Division 03 New Hanover County Wilmington

PLAN DATE: June 2014	REVIEWED BY: LM Moon
PREPARED BY: AM Encarnacion	REVIEWED BY: MB Toth

REVISIONS	INIT.	DATE

SEAL



DocuSigned by: Melissa B. Toth
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12/19/2014
DATE

SIG. INVENTORY NO. 03-1082

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