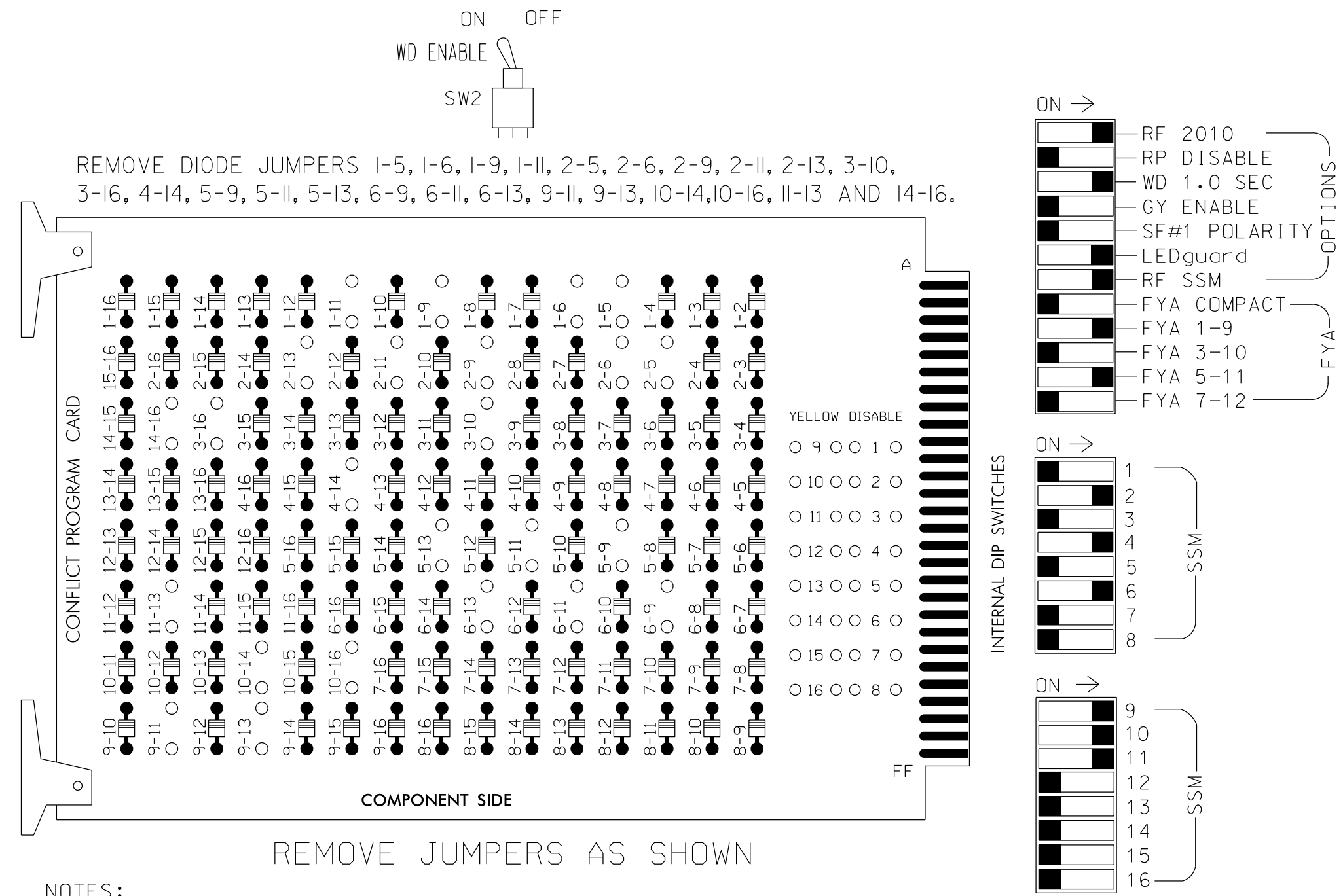


EDI MODEL 2010ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



NOTES:

- Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
- Make sure jumpers SEL2-SEL5 are present on the monitor board.

PREEMPT ONLY PHASE OMIT NOTE

(program controller as shown below)

From MAIN MENU press '2' (PHASE CONTROL), then '1' (PHASE CONTROL FUNCTIONS). Program phases 9, 10 for 'OMIT PHASE' and phases 1, 2, 3, 4, 5, 6 for 'STARTUP CALLS'. This is to prevent phases 9 and 10 from being served when not in preempt.

- 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.
- Ensure that Red Enable is active at all times during normal operation. To prevent Red Failures on unused monitor channels, tie unused red monitor inputs 1,3,5,7,8,12,13,14,15 & 16 to load switch AC+ per the cabinet manufacturer's instructions.
- Enable Simultaneous Gap-Out for all phases.
- Program phases 1 and 6 for Start Up In Red Cir.
- Program phases 2 and 6 for First Phases.
- Program phases 2, 3 and 4 for 'STARTUP PED CALL'.
- Program overlap OL1 as WAG Overlaps.
- The cabinet and controller are part of the City of Fayetteville Signal System.

EQUIPMENT INFORMATION

CONTROLLER.....EXISTING SAFETRAN 2070L
 CABINET.....EXISTING SAFETRAN 332 w/ AUX. FILE SOFTWARE.....ECONOLITE OASIS ASC/3-2070
 CABINET MOUNT.....BASE
 OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE LOAD SWITCHES USED.....S1,S2,S3,S4,S5,S6,S7,S8, S12,AUX S1,AUX S2,AUX S4
 PHASES USED.....1,2,3,4,5,6,9*,10*,2PED,3PED, 4PED, 9PED
 OVERLAP "A".....1+2
 OVERLAP "B".....3+9
 OVERLAP "C".....5+6
 OVERLAP "D".....NOT USED
 PED OVERLAP A.....3+9
 PED OVERLAP B.....4+9

* PHASES USED ONLY IN PREEMPT

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	3 PED	OLA	OLB	SPARE	OLC	OLD	SPARE
SIGNAL HEAD NO.	11	21,22,23	P21 P22	31	41	42	P41 P42	51	61,62,63	NU	NU	NU	P31 P32	11	31,32	NU	51	NU
RED		128		101	101			134						A124				
YELLOW	*	129		*	102	102		*	135					A125				
GREEN		130		103	103			136						A126				
RED ARROW														A121				A114
YELLOW ARROW														A122				A115
FLASHING YELLOW ARROW														A123				A116
GREEN ARROW	127			118	103			133										
Hand				113				104										110
Walker				115				106										112

NU = Not Used

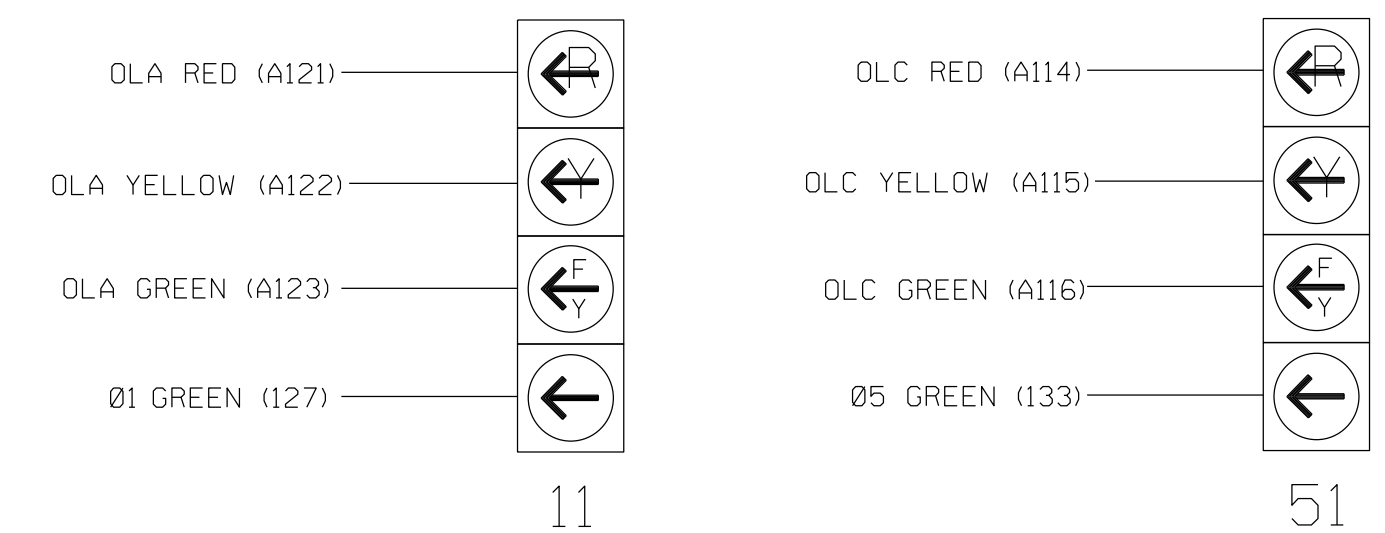
* Denotes install load resistor. See load resistor installation detail on this sheet.

** See Ped Overlap Programming Detail

★ See pictorial of head wiring in detail below.

4 SECTION FYA PPLT SIGNAL WIRING DETAIL

(wire signal heads as shown)



NOTE

- The sequence display for this signal requires special logic programming. See sheet 3 for programming instructions.

INPUT FILE POSITION LAYOUT

(front view)

FILE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	∅1	∅2	∅FS	∅3	∅4	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	∅2PED	NOT USED	FS
I	1A	2A	∅FS	3A	4A	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	∅4PED	∅3PED	∅FS
L	NOT USED	2B	∅FS	NOT USED	NOT USED	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	∅9PED	∅9PED	ST
U	∅5	∅6	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	NOT USED
J	5A	6A	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	RR2*
L	NOT USED	6B	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	∅FS	AC ISOLATOR

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

FS = FLASH SENSE
 ST = STOP TIME
 RR = RAILROAD PREEMPT

∅ Wired Input - Do not populate slot with detector card

* See AC Isolator Programming Detail sheet 2

INPUT FILE CONNECTION & PROGRAMMING CHART

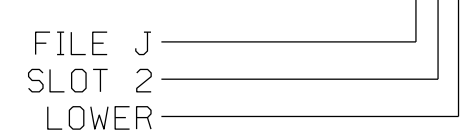
LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
1A ¹	TB2-1,2	I1U	56	18	1	1	Y	Y			15
	-	J4U	48	10	26	6	Y	Y			
2A	TB2-5,6	I2U	39	1	2	2	Y	Y			
2B	TB2-7,8	I2L	43	5	12	2	Y	Y			
3A	TB4-5,6	I5U	58	20	3	3	Y	Y			10
4A	TB4-9,10	I6U	41	3	4	4	Y	Y			10
5A ²	TB3-1,2	J1U	55	17	5	5	Y	Y			15
	-	I4U	47	9	22	2	Y	Y			
6A	TB3-5,6	J2U	40	2	6	6	Y	Y			
6B	TB3-7,8	J2L	44	6	16	6	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				
P31,P32	TB8-8,9	I13L	70	32	PED 8	3	PED				

NOTE:
 INSTALL DC ISOLATORS IN INPUT FILE SLOTS 112 AND 113.

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.

INPUT FILE POSITION LEGEND: J2L



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: C030
 DESIGNED: NOVEMBER 2016
 SEALED: 11/17/2016
 REVISED:

Electrical Detail Sheet 1 of 3

Hatch Mott MacDonald

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HATCH MOTT MACDONALD & E, LLC
 LICENSE NO. F4669

SR 1404 (Hay Street) at Winslow Street and Hillsboro Street

DIV 06 CUMBERLAND COUNTY FAYETTEVILLE

PLAN DATE: NOVEMBER 2016 REVIEWED BY: RWT

PREPARED BY: RTP REVIEWED BY:

REVISIONS	INIT.	DATE

DocuSign by: Richard T. Pate 11/22/2016

FSICHA:44882 DATE

SIG. INVENTORY NO. C030

SEAL