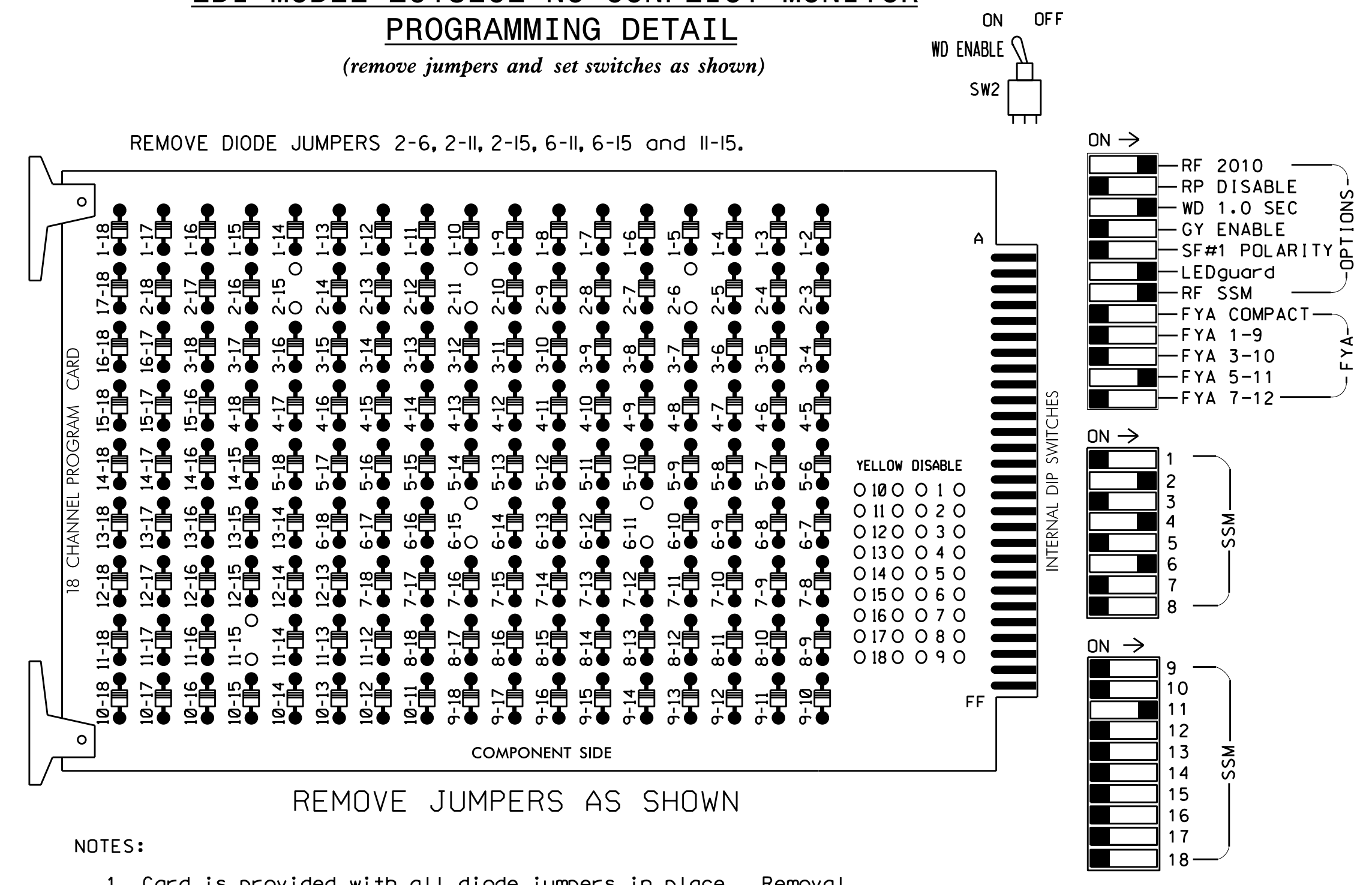


EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL
(remove jumpers and set switches as shown)



- NOTES:**
- Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
 - 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. Verify that signal heads flash in accordance with the signal plans.
 - Program controller to Start Up in phases 2 and 6 green.
 - Set power-up flash time to 0 seconds within the controller programming. The conflict monitor will govern startup flash. Ensure STARTUP "RED START" is set to 0 seconds.
 - Enable Simultaneous Gap-Out feature for all phases.
 - Program all timing information into phase banks 1, 2, and 3 unless otherwise noted.
 - Set phase bank 3 maximum limit to 250 seconds for phases used.
 - Ensure start up flash phases are coordinated with flash program block assignments.
 - Program Startup Ped Calls for phase 6.
 - Set the Red Revert interval on the controller to 1 second.
 - This cabinet and controller are part of the Durham Signal System.

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.	NU	22,23	NU	NU	42,43	NU	NU	62,63	P61, P62	NU	NU	NU	NU	NU	NU	21	NU	NU	
RED		128			101			134											
YELLOW		129			102			135											
GREEN		130			103			136											
RED ARROW																		A114	
YELLOW ARROW																			A115
FLASHING YELLOW ARROW																			A116
GREEN ARROW																			
Hand icon									119										
Person icon										121									

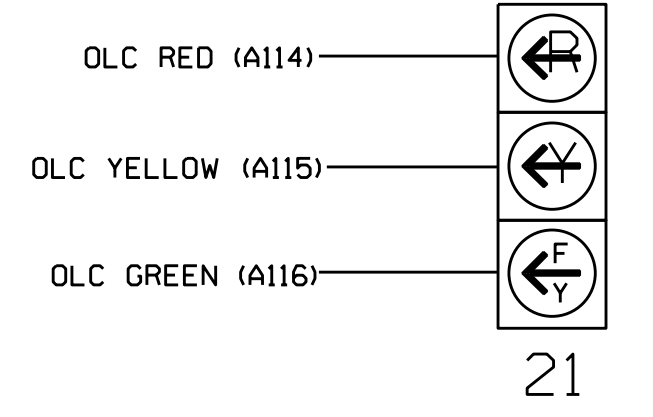
NU = Not Used
 * Denotes install load resistor. See load resistor installation detail this sheet.
 * See pictorial of head wiring in detail below.

EQUIPMENT INFORMATION

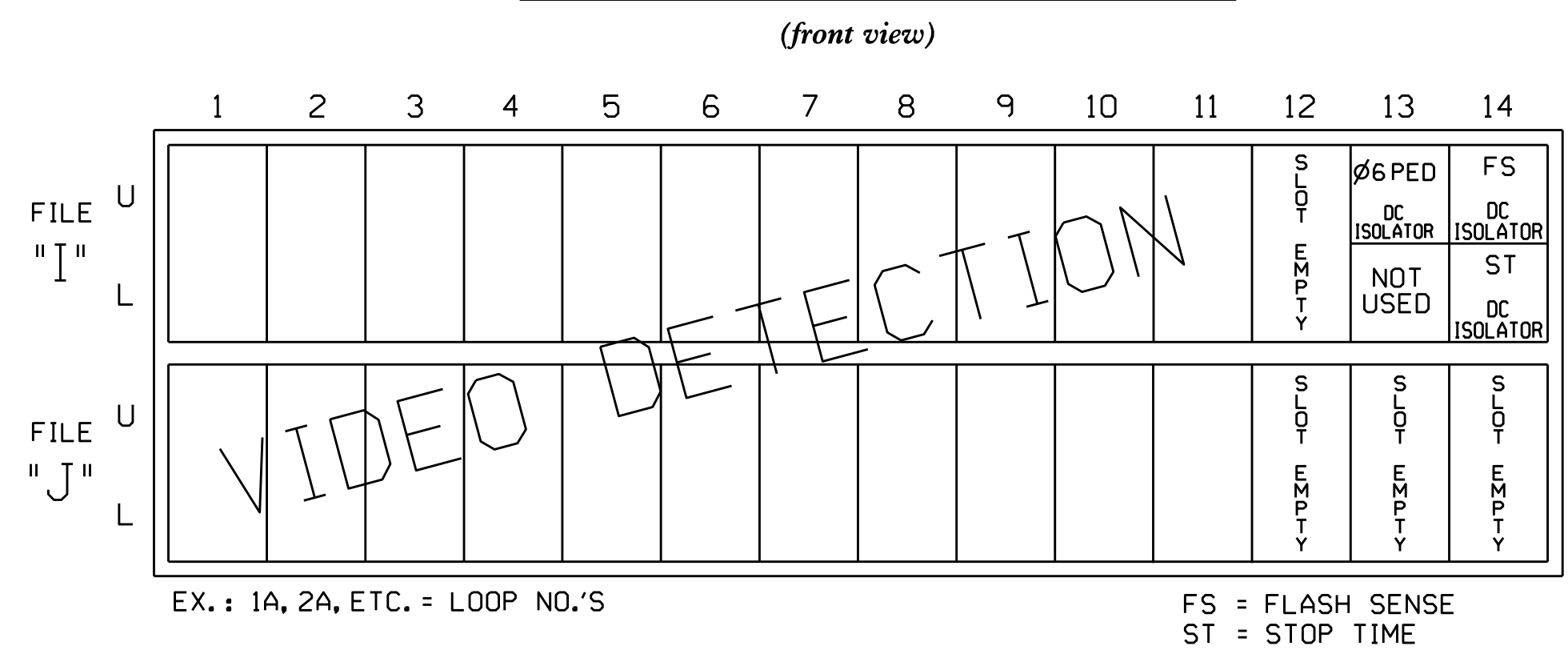
CONTROLLER.....2070E
 CABINET.....332 W/ AUX
 SOFTWARE.....McCain 2033
 CABINET MOUNT.....BASE
 OUTPUT FILE POSITIONS...18 WITH AUX FILE
 LOAD SWITCHES USED.....S2,S5,S8,S9,AUX S4
 PHASES USED.....2,4,6,6 PED
 OVERLAP 1.....NOT USED
 OVERLAP 2.....NOT USED
 OVERLAP 3.....6
 OVERLAP 4.....NOT USED

3 SECTION FYA PPLT SIGNAL WIRING DETAIL

(wire signal heads as shown)



INPUT FILE POSITION LAYOUT



INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	DETECTOR NO.	PIN NO.	ATTRIBUTES	NEMA PHASE
PED PUSH BUTTONS						
P61,P62	TB8-7,9	I13U	26	68	2	6 PED

- INPUT FILE POSITION LEGEND:** J2L
 FILE J
 SLOT 2
 LOWER
- DETECTOR ATTRIBUTES LEGEND:**
- FULL TIME DELAY
 - PED CALL
 - RESERVED
 - COUNTING
 - EXTENSION
 - TYPE 3
 - CALLING
 - ALTERNATE

SPECIAL DETECTOR NOTE

Install a video 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.

OVERLAPS [3] PROGRAMMING DETAIL

Program overlaps as follows:
 Main Menu - 4) OVERLAP

PRESS '+' TWO TIMES

OVERLAP [3]:

LOADSWITCH = 11
 VEH SET 1 = 6
 YELLOW CLEARANCE = 4.1
 RED CLEARANCE = 2.1

NOTE: FOR SIGNAL HEAD 21

OVERLAP GREEN FLASH PROGRAMMING FOR 3 SECTION FYA

The following will cause the overlap green outputs to flash, which are wired to the flashing yellow arrow. Program as follows:

Main Menu - 1) PHASE - 2) PHASE FUNCTIONS PAGE TWO
 OLAP G FL = 3

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 05-1027T3
 DESIGNED: September 2014
 SEALED: 4-02-15
 REVISED: N/A

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.

Electrical Detail

Prepared in the Offices of:

 750 N. Greenfield Pkwy, Garner, NC 27529

ELECTRICAL AND PROGRAMMING DETAILS FOR:
 NC 55 (North Alston Avenue) at US 70 - NC 98 (Holloway Street)

Division 5 Durham County, Durham
 PLAN DATE: November 2014 REVIEWED BY: JTR
 PREPARED BY: James Peterson REVIEWED BY:

REVISIONS INIT. DATE

DocuSigned by:
 John T. Rowe, Jr. 4/2/2015
 641860C145EE4F5 DATE

SEAL

 SEAL 008453
 JOHN T. ROWE, JR.
 ENGINEER
 STATE OF NORTH CAROLINA

SIG. INVENTORY NO. 05-1027T3

31-JAN-2015 1:44:17 S:\IT\SSD\115-Sigma\work\p040551027_sm.ele_20150106.dgn J.peterson