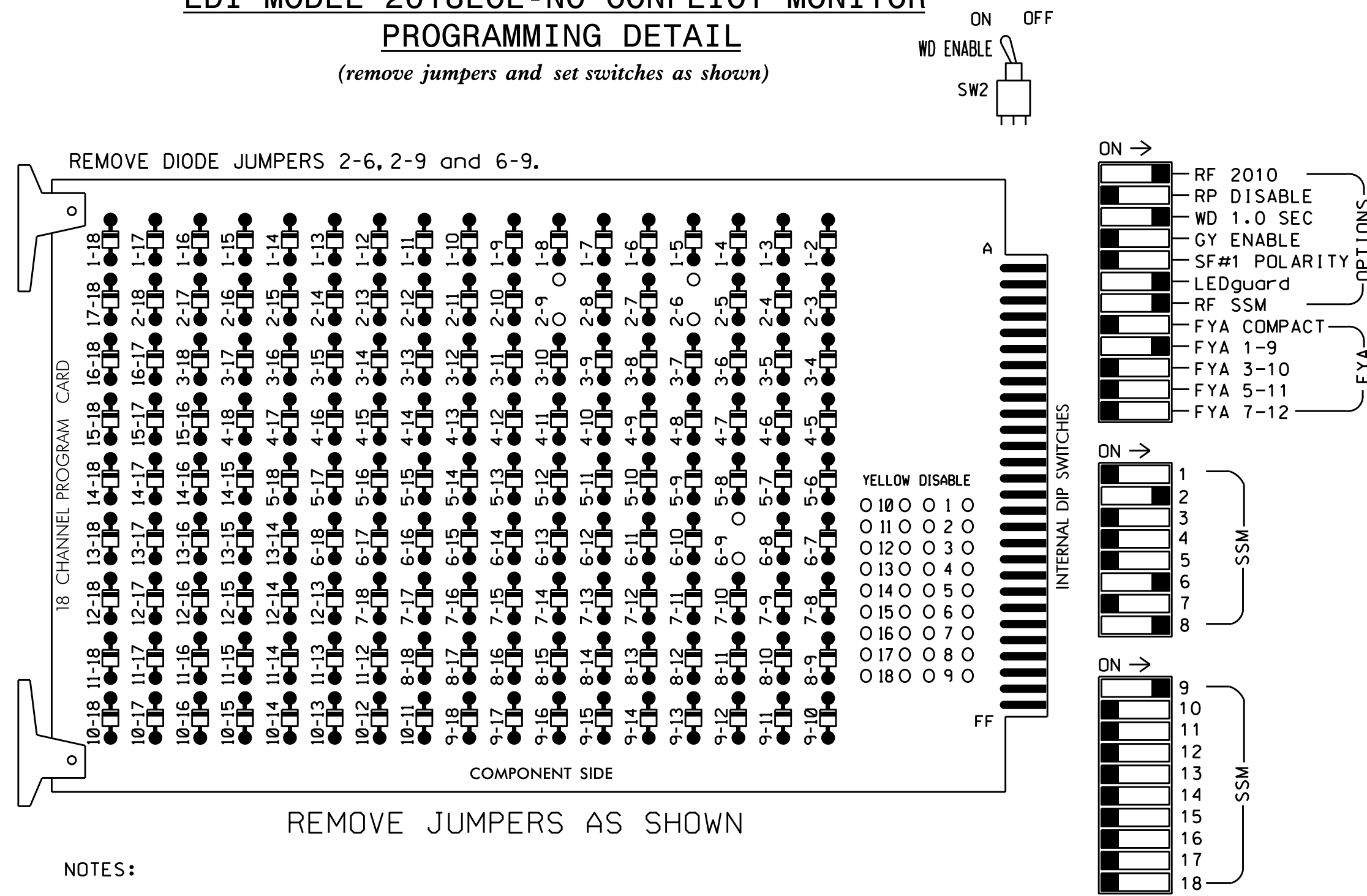


PROGRAMMING DETAIL

(remove jumpers and set switches 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. 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. Enable Simultaneous Gap-Out for all Phases.
3. Program phases 2 and 6 for Variable Initial and Gap Reduction.
4. Program phases 2 and 6 for Startup In Green.
5. Program phases 2 and 6 for Yellow Flash, and overlap 1 as Wag Overlaps.
6. The cabinet and controller are part of the Booker Dairy Road Closed Loop System.

EQUIPMENT INFORMATION

CONTROLLER.....2070  
 CABINET.....332 W/ AUX  
 SOFTWARE.....ECONOLITE OASIS  
 CABINET MOUNT.....BASE  
 OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE  
 LOAD SWITCHES USED.....S2,S8,S11,AUX S1  
 PHASES USED.....2,6,8  
 OVERLAP "A".....2  
 OVERLAP "B".....NOT USED  
 OVERLAP "C".....NOT USED  
 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.	NU	21,22	NU	NU	NU	NU	NU	62,63	NU	NU	81,82	NU	61	NU	NU	NU	NU	NU
RED		128						134			107							
YELLOW		129						135			108							
GREEN		130						136			109							
RED ARROW													A121					
YELLOW ARROW													A122					
FLASHING YELLOW ARROW													A123					
GREEN ARROW																		

NU = Not Used  
 \* See pictorial of head wiring in detail this sheet.

INPUT FILE POSITION LAYOUT

(front view)

FILE "I"	1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	∅2/SYS	∅2/SYS	∅2/SYS	∅2/SYS	∅2/SYS	∅2/SYS	∅2/SYS	∅2/SYS	∅2/SYS	∅2/SYS	∅2/SYS	∅2/SYS	∅2/SYS	FS
L	2A/S09	2B/S10												DC ISOLATOR
U	∅6/SYS	∅6/SYS	∅6	∅6	∅6	∅8	∅8	∅8	∅8	∅8	∅8	∅8	∅8	DC ISOLATOR
L	6A/S11	6B/S12	6C	NOT USED	8A	8B								ST

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

FS = FLASH SENSE  
 ST = STOP TIME

OVERLAP PROGRAMMING DETAIL

(program controller as shown below)

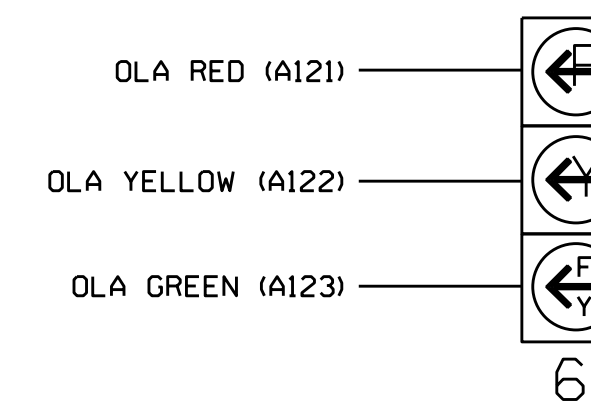
FROM MAIN MENU PRESS '8' (OVERLAPS), THEN '1' (VEHICLE OVERLAP SETTINGS).

PAGE 1: VEHICLE OVERLAP 'A' SETTINGS  
 PHASE: 12345678910111213141516  
 VEH OVL PARENTS: X  
 VEH OVL NOT VEH: X  
 VEH OVL NOT PED: X  
 VEH OVL GRN EXT: X  
 STARTUP COLOR: \_ RED \_ YELLOW \_ GREEN  
 FLASH COLORS: \_ RED \_ YELLOW X GREEN  
 SELECT VEHICLE OVERLAP OPTIONS: (Y/N)  
 FLASH YELLOW IN CONTROLLER FLASH?...Y  
 GREEN EXTENSION (0-255 SEC)...0.0  
 YELLOW CLEAR (0=PARENT,3-25.5 SEC)...0.0  
 RED CLEAR (0=PARENT,0.1-25.5 SEC)...0.0  
 OUTPUT AS PHASE # (0=NONE, 1-16)...0

OVERLAP PROGRAMMING COMPLETE

FYA SIGNAL WIRING DETAIL

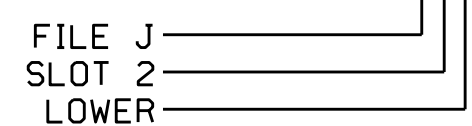
(wire signal heads as shown)



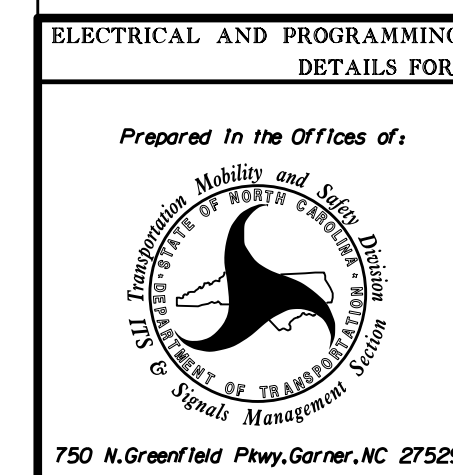
INPUT FILE CONNECTION & PROGRAMMING CHART

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
2A/S09	TB2-5,6	I2U	39	1	2	2/SYS	Y	Y			
2B/S10	TB2-7,8	I2L	43	5	12	2/SYS	Y	Y			
6A/S11	TB3-5,6	J2U	40	2	6	6/SYS	Y	Y			
6B/S12	TB3-7,8	J2L	44	6	16	6/SYS	Y	Y			
6C	TB3-9,10	J3U	64	26	36	6	Y	Y	Y		3
8A	TB5-9,10	J6U	42	4	8	8	Y	Y			
8B	TB5-11,12	J6L	46	8	18	8	Y	Y			15

INPUT FILE POSITION LEGEND: J2L



Electrical Detail - Final Design



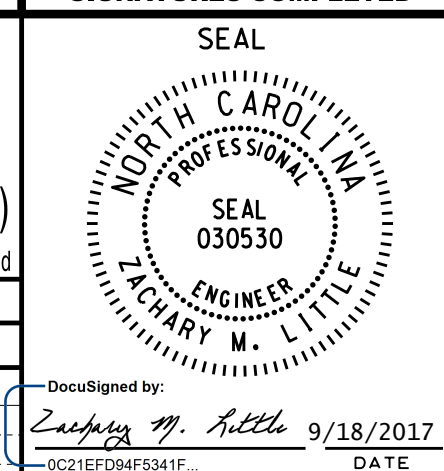
SR 1923 (Booker Road Extension)  
 at  
 SR 1923 (Existing Booker Dairy Road)

Division 4 Johnston County Smithfield

PLAN DATE: August 2017 REVIEWED BY:  
 PREPARED BY: James Peterson REVIEWED BY:

REVISIONS INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



DocuSigned by: Cary M. Little 9/18/2017

SIG. INVENTORY NO. 04-1417