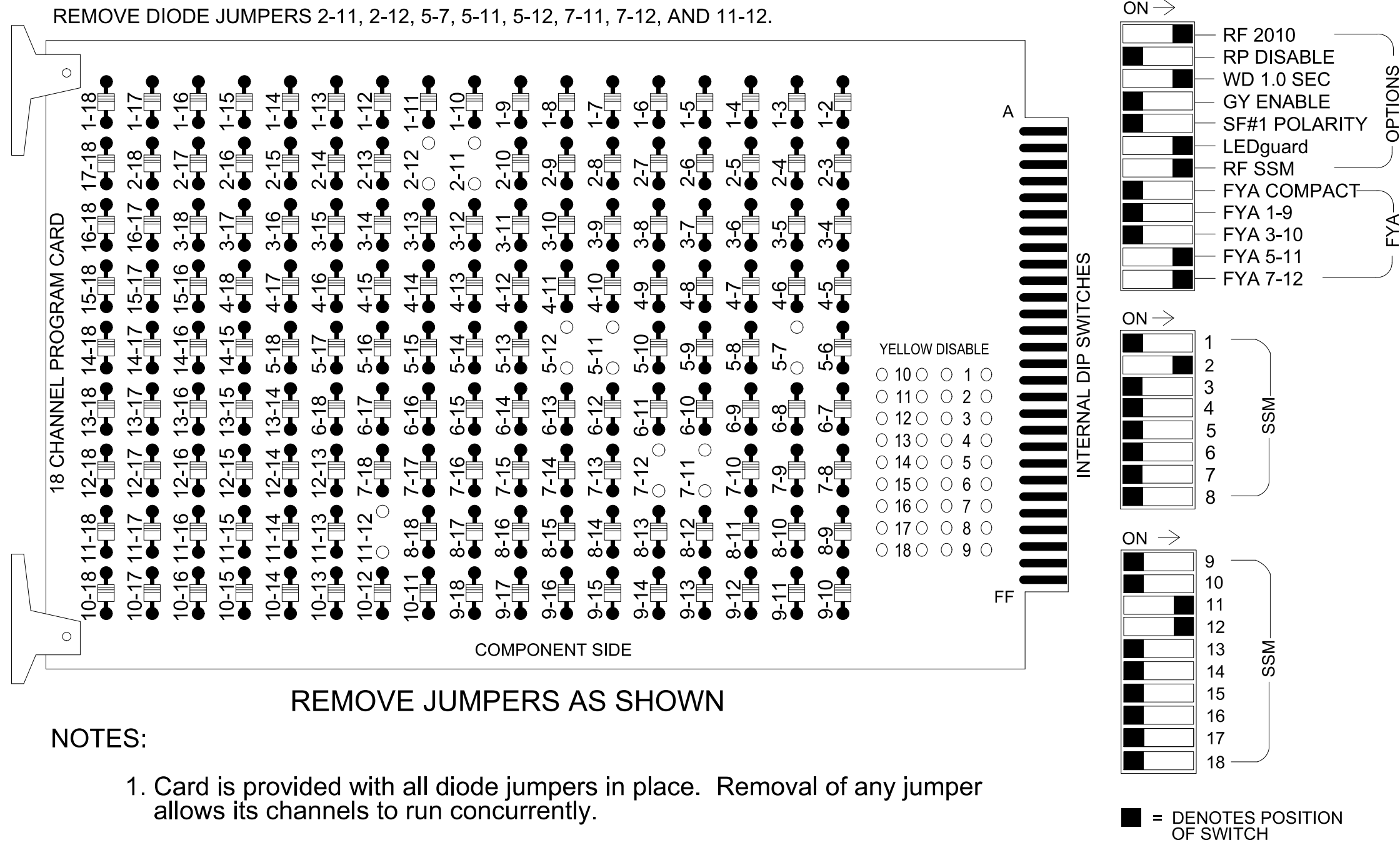


18 CHANNEL CONFLICT MONITOR
PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



NOTES

- 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 plan.
- Program controller to start up in phase 2 Green No Walk.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
- The cabinet and controller are part of the US 321 Closed Loop Signal System.

EQUIPMENT INFORMATION

Controller.....2070LX
Cabinet.....332 w/ Aux
Software.....Q-Free MAXTIME
Cabinet Mount.....Base
Output File Positions.....18 With Aux. Output File
Load Switches Used.....S2, S7, S10, AUX S4, AUX S5
Phases Used.....2, 7
Overlap "1".....NOT USED
Overlap "2".....NOT USED
Overlap "3".....*
Overlap "4".....*
Overlap "7".....*

*See overlap programming detail on sheet 3

PROJECT REFERENCE NO.	SHEET NO.
U-4700 CB	Sig. 2.1

SIGNAL HEAD HOOK-UP CHART

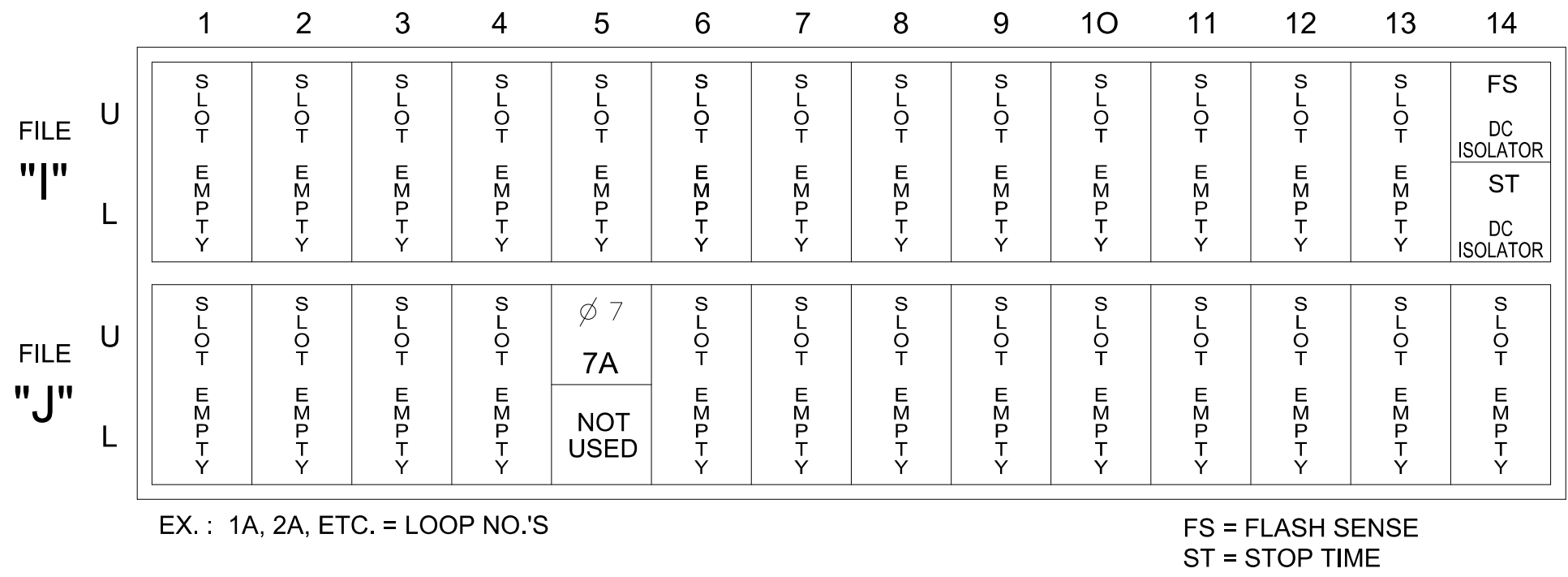
LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18
PHASE	1	2	2 PED	3	4	4 PED	OL7	6	6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	NU	21,22	NU	NU	NU	NU	72★	NU	NU	71★	NU	NU	NU	NU	NU	72★	71★	NU
RED		128																
YELLOW		129					*			*								
GREEN																		
RED ARROW																A114	A101	
YELLOW ARROW																A115	A102	
FLASHING YELLOW ARROW																A116	A103	
GREEN ARROW		130					133			124								
Hand icon																		
Walking person icon																		

NU = Not Used

* Denotes install load resistor. See load resistor installation detail this sheet.
★ See pictorial of head wiring in detail this sheet.

INPUT FILE POSITION LAYOUT

(front view)

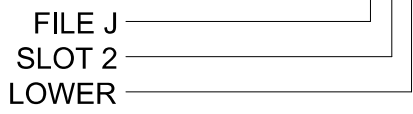


INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN
7A	TB5-5,6	J5U	57	19	21★	7	15.0		X		X	

* For the detectors to work as shown on the signal plan, see the Vehicle Detector Setup Programming Detail for Alternate Phasing on sheet 4.

INPUT FILE POSITION LEGEND: J2L



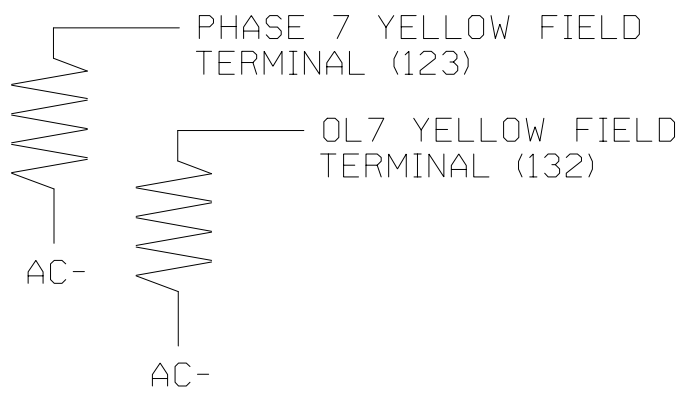
SPECIAL DETECTOR NOTE

Install a single-zone microwave detection system for vehicle detection. Perform installation according to the manufacturer's directions and NCDOT engineer-approved mounting locations to accomplish the detection schemes shown on the signal design plans.

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown below)

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

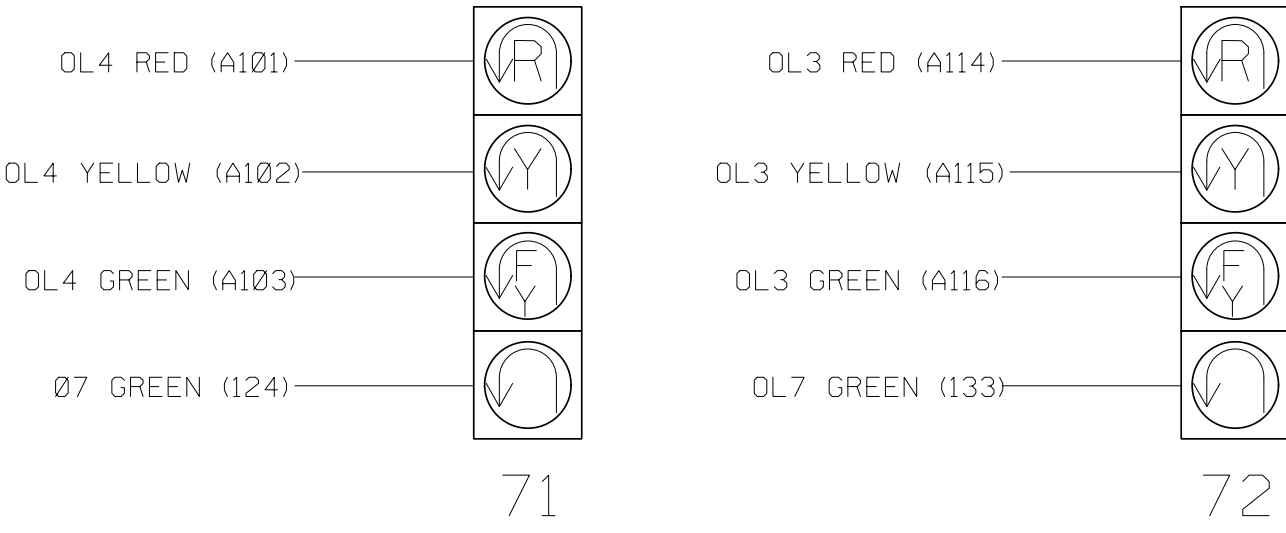


stv

STV Engineers, Inc.
2151 Hawkins St., Suite 1400
Charlotte, NC 28203
(704) 372-1885
NC License Number F-0991

4 SECTION FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



SDLC NON-INTRUSIVE
DETECTION CHART

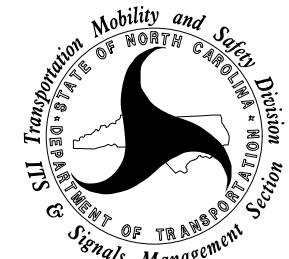
INPUT POINT	DETECTOR RACK #3		DETECTOR RACK #4	
	DET # (INDEX)	DETECTOR ZONE	DET # (INDEX)	DETECTOR ZONE
1	33	NU	49	NU
2	34	NU	50	NU
3	35	NU	51	NU
4	36	NU	52	NU
5	37	NU	53	NU
6	38	2A	54	NU
7	39	NU	55	NU
8	40	NU	56	NU
9	41	NU	57	NU
10	42	NU	58	NU
11	43	NU	59	NU
12	44	NU	60	NU
13	45	NU	61	NU
14	46	NU	62	NU
15	47	NU	63	NU
16	48	NU	64	NU

NU - NOT USED

ELECTRICAL DETAIL SHEET 1 OF 4

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared For the Offices of:



750 N.Greenfield Pkwy, Garner, NC 27529

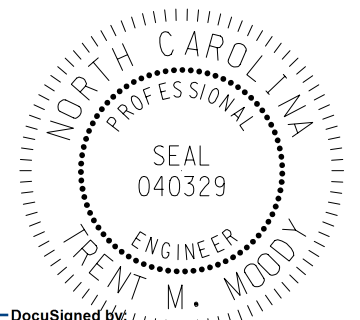
THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 11-1451
DESIGNED: May 2026
SEALED: 5/29/2026
REVISED: N/A

US 321 (Hickory Boulevard) SB
at U-Turn North of
SR 1809/1952 (Pine Mountain Rd)

Division 11	Caldwell County	Hudson
PLAN DATE: May 2026	REVIEWED BY: B. Roth-Roffy	
PREPARED BY: R.L. Aristondo	REVIEWED BY: T.M. Woody	
REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

SEAL



DocuSigned by

Trent M. Woody

5/29/2026

SIG. INVENTORY NO. 11-1451