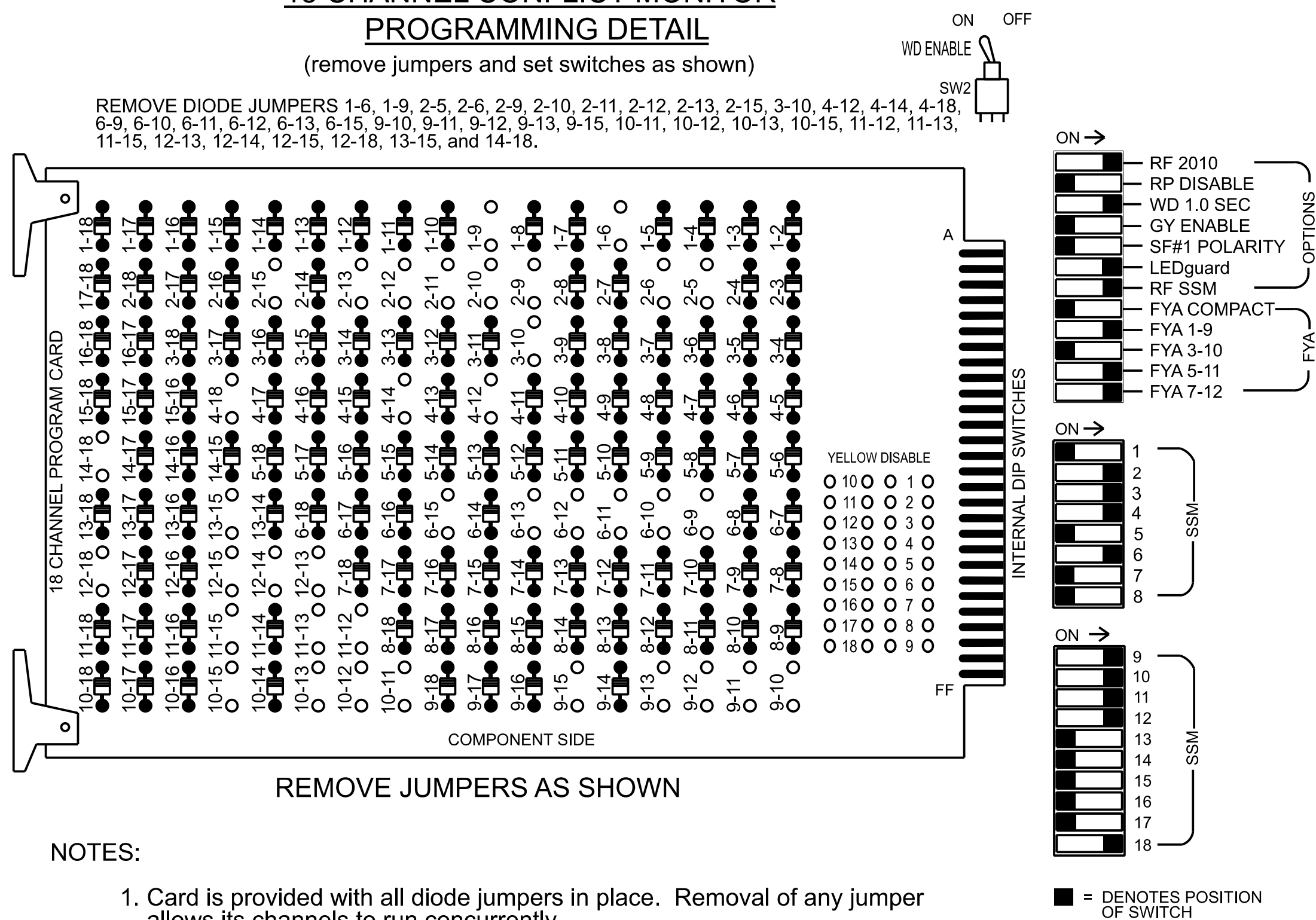


18 CHANNEL CONFLICT MONITOR

(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.

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 plan.
2. Return controller to Factory Defaults before programming per this electrical detail.
3. Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
4. If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
5. The cabinet and controller are part of the D13-24 Rutherfordton 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.....	S1, S2, S3, S4, S5, S6, S7, S8, S9, AUX S1, AUX S2, AUX S4, AUX S5, AUX S6
Phases Used.....	1, 2, 2PED, 3, 4, 4PED, 6, 6PED,
Overlap "1".....	*
Overlap "2".....	*
Overlap "3".....	*
Overlap "4".....	*
Overlap "5".....	Not Used
Overlap "6".....	*

*See overlap programming detail on sheet 2

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	OL5	OL3	OL4	OL6
SIGNAL HEAD NO.	11★	21,22	P21, P22	31	32	33	41	42	P41, P42	51★	61,62	P61, P62	NU	NU	NU	11★	63★	NU	51★	23★	43★
RED		128		116	116	116	101	101			134						A124			A101	A104
YELLOW	★	129			117		102	102		★	135										
GREEN		130		118	118		103	103			136										
RED ARROW																A121			A114		
YELLOW ARROW				117		117										A122	A125		A115	A102	A105
FLASHING YELLOW ARROW																A123	A126		A116	A103	A106
GREEN ARROW	127			118		118	103			133											
			113						104			119									
			115						106			120									

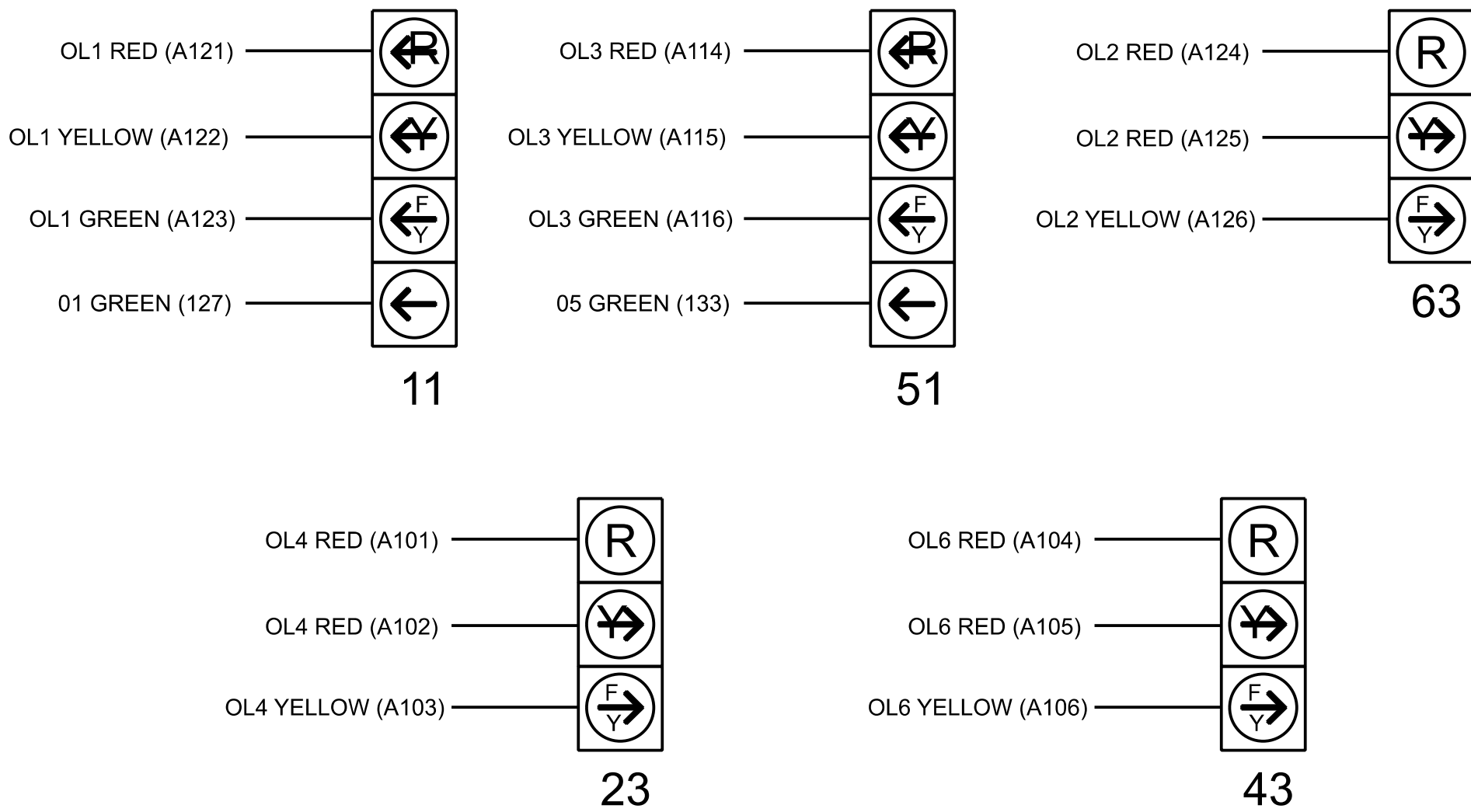
NU = Not Used

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

★ See pictorial of head wiring in detail this sheet.

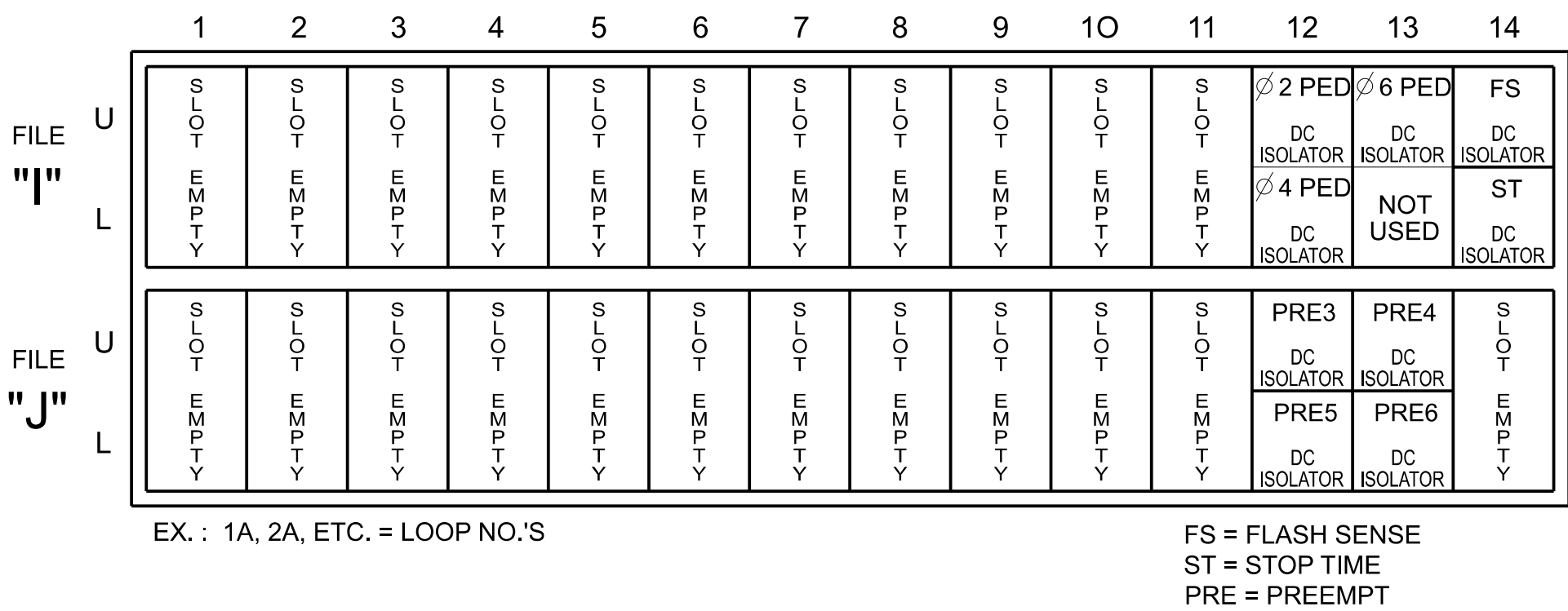
FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



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
1A	-	-	-	*	33	1	15.0		X		X	
					125	6			X		X	
2A	-	-	-	*	38	2			X		X	
3A	-	-	-	*	34	3	3.0		X		X	
3B	-	-	-	*	44	3			X		X	
3C	-	-	-	*	45	3	15.0		X		X	
4A	-	-	-	*	46	4	3.0		X		X	
4B	-	-	-	*	47	4	15.0		X		X	
5A	-	-	-	*	35	5	15.0		X		X	
				-	127	2			X		X	
6A	-	-	-	*	54	6			X		X	
PED PUSH BUTTONS												
P21,P22	TB8-4,6	I12U	67	33	2	PED 2	NOTE: INSTALL DC ISOLATORS IN INPUT FILE SLOTS I12 AND I13.					
P41,P42	TB8-5,6	I12L	69	35	4	PED 4						
P61,P62	TB8-7,9	I13U	68	34	6	PED 6						

*For Input Point numbers, see SDLC Non-Intrusive Detection Chart sheet 2.

SPECIAL DETECTOR NOTE

Install a multizone microwave 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.

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.

Signal Upgrade - Final Design
Electrical Detail - Sheet 1 of 3

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR: Prepared for the Offices of:  750 N. Greenfield Pkwy, Garner, NC 27529	US 221 Alt-US 74 Bus (Charlotte Rd)/NC 108 (Washington St) at US 221 (Main St)/US 221-74 Bus Division 13 Rutherford County Rutherfordon <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">PLAN DATE: February 2026</td> <td style="width: 50%;">REVIEWED BY: N. K. Vanlich</td> </tr> <tr> <td>PREPARED BY: E.E. Tiller</td> <td>REVIEWED BY: N. R. Simmons</td> </tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">REVISIONS</th> <th style="width: 33%;">INIT.</th> <th style="width: 33%;">DATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	PLAN DATE: February 2026	REVIEWED BY: N. K. Vanlich	PREPARED BY: E.E. Tiller	REVIEWED BY: N. R. Simmons	REVISIONS	INIT.	DATE																															SEAL  DocuSigned by: <i>Natasha R. Simmons</i> 5/12/2026 <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">SIGNATURE</td> <td style="width: 50%;">DATE</td> </tr> <tr> <td>SIG. INVENTORY NO. 13-0183</td> <td> </td> </tr> </table>	SIGNATURE	DATE	SIG. INVENTORY NO. 13-0183	
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