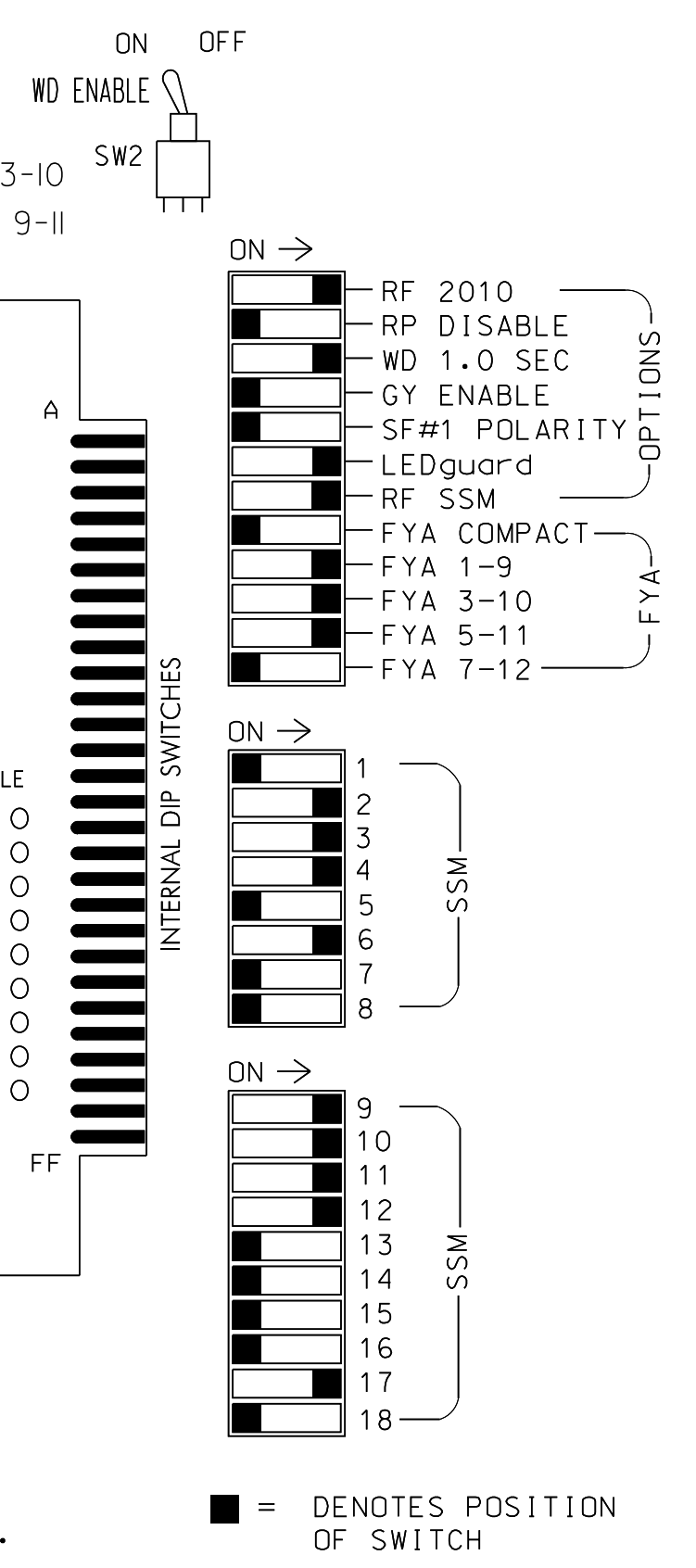
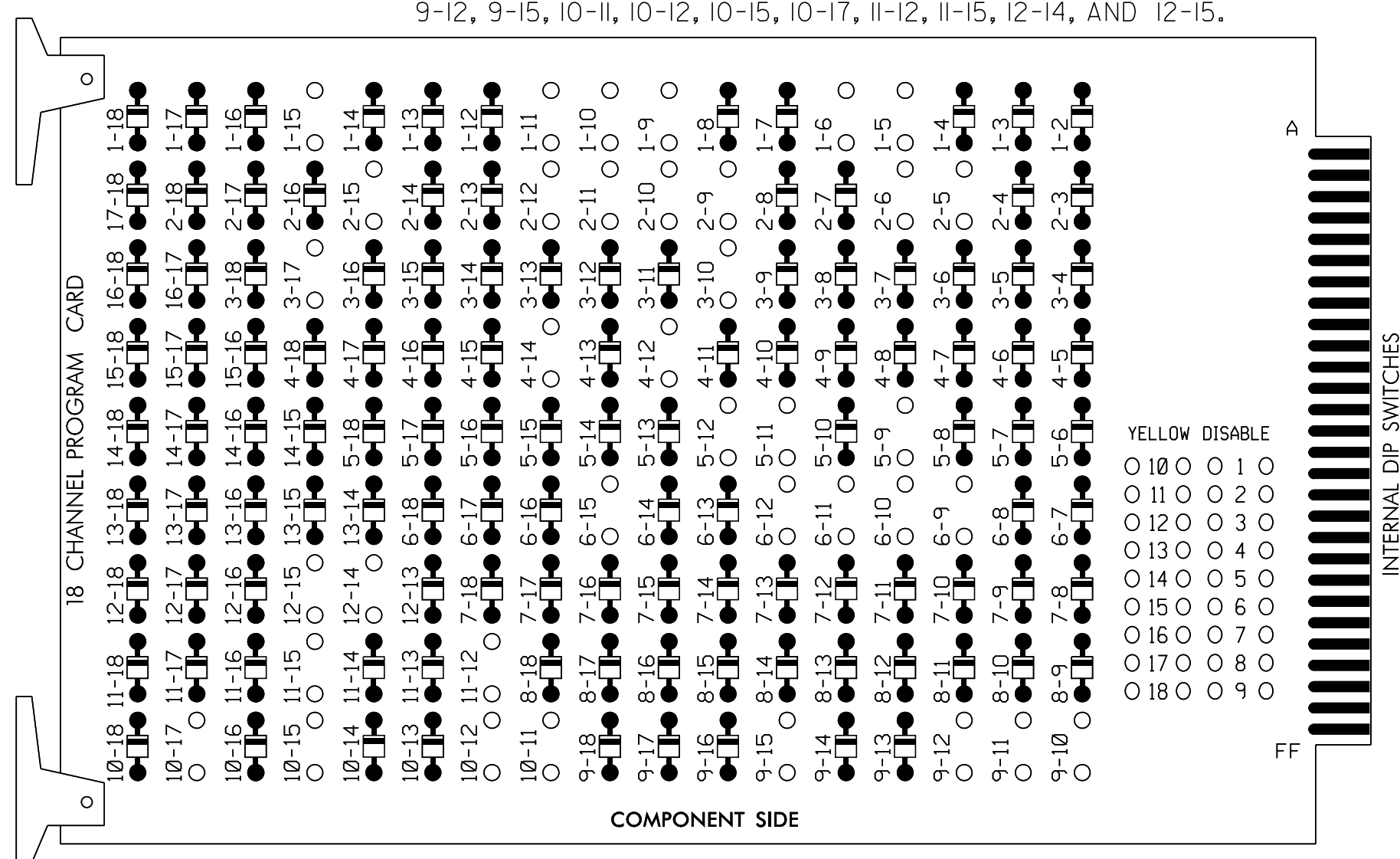


18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)
REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-10, 1-11, 1-15, 2-5, 2-6, 2-9, 2-10, 2-11, 2-12, 2-15, 3-10, 3-17, 4-12, 4-14, 5-9, 5-11, 5-12, 6-9, 6-10, 6-11, 6-12, 6-15, 9-10, 9-11, 9-12, 9-15, 10-11, 10-12, 10-15, 10-17, 11-12, 11-15, 12-14, AND 12-15.



- 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. Integrate monitor with Ethernet network in cabinet.

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. Return controller to Factory Defaults before programming per this electrical detail.
- 3. Program controller to start up in phase 2 Green and phase 6 Green.
- NOTE THAT PHASE 6 DOES NOT START IN 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 11018 Cornelius Signal System.

EQUIPMENT INFORMATION

CONTROLLER.....2070LX
CABINET.....332 W/ AUX
SOFTWARE.....ECONOLITE
ASC/3-2070
CABINET MOUNT.....BASE
OUTPUT FILE POSITIONS...18 WITH AUX.
OUTPUT FILE
LOAD SWITCHES USED.....S1,S2,S4,S5,S6,S7,
S8,S9,AUX S1,AUX S2,
AUX S3,AUX S4,AUX S5
PHASES USED.....1,2,4,4PED,
5,6,6PED
OVERLAP "A".....*
OVERLAP "B".....*
OVERLAP "C".....*
OVERLAP "D".....*
OVERLAP "E".....*
OVERLAP "F".....NOT USED
OVERLAP "G".....*
* See overlap programming detail on sheet 2

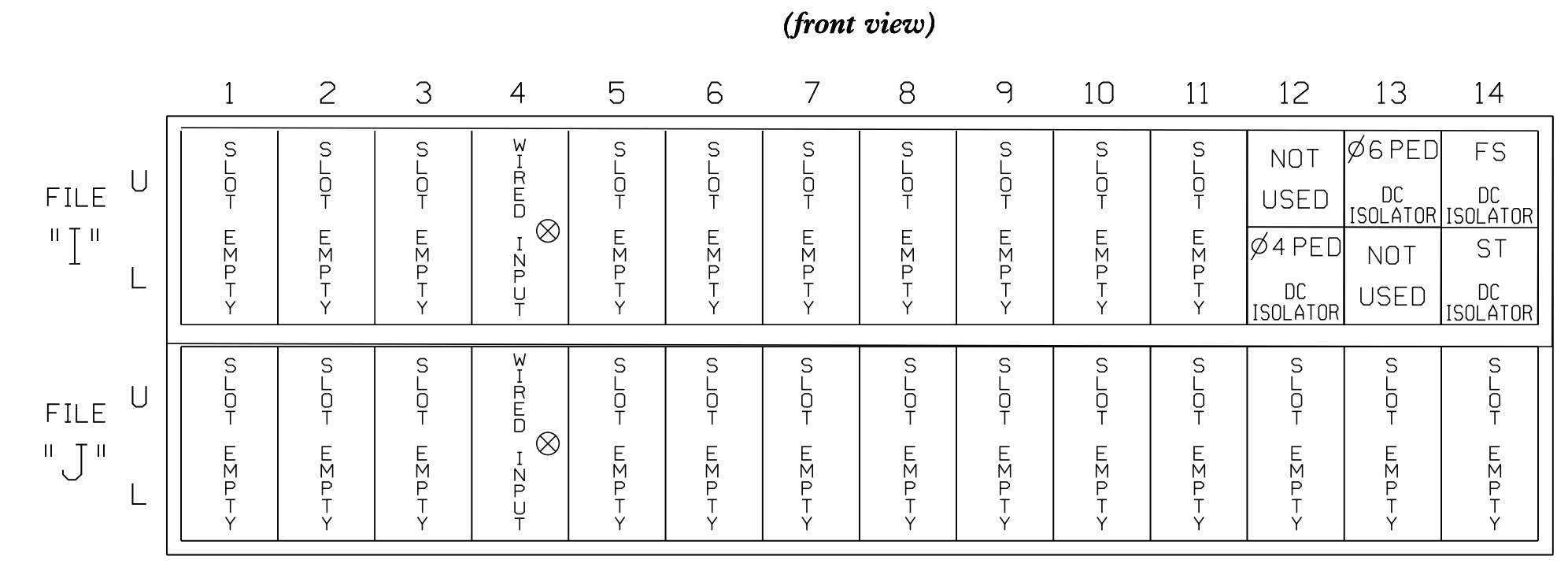
This plan supersedes the electrical plan signed and sealed by Steven G. Haynie, PE on 05/31/2022.

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	OLG	4	4 PED	5	6	6 PED	7	8	8 PED	OLA	OLB	OLE	OLC	OLD	SPARE		
SIGNAL HEAD NO.	11	21,22	NU	63	41	42,43	P41, P42	51	61, 62, 64	P61, P62	NU	NU	NU	11	63	31	32,33	51	23, 24,25	NU
RED		128			101	101			134						A124	A111	A111		A101	
YELLOW	*	129		*	102	102		*	135							A112	A112			
GREEN		130			103	103			136							A113	A113			
RED ARROW															A121				A114	
YELLOW ARROW															A122	A125			A115	A102
FLASHING YELLOW ARROW															A123	A126			A116	
GREEN ARROW	127			118	103		133									A113				A103
Hand							104		119											
Walker							106		121											

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



EX.: 1A, 2A, ETC. = LOOP NO.'S
FS = FLASH SENSE
ST = STOP TIME
⊗ Wired Input - Do not populate slot with detector card

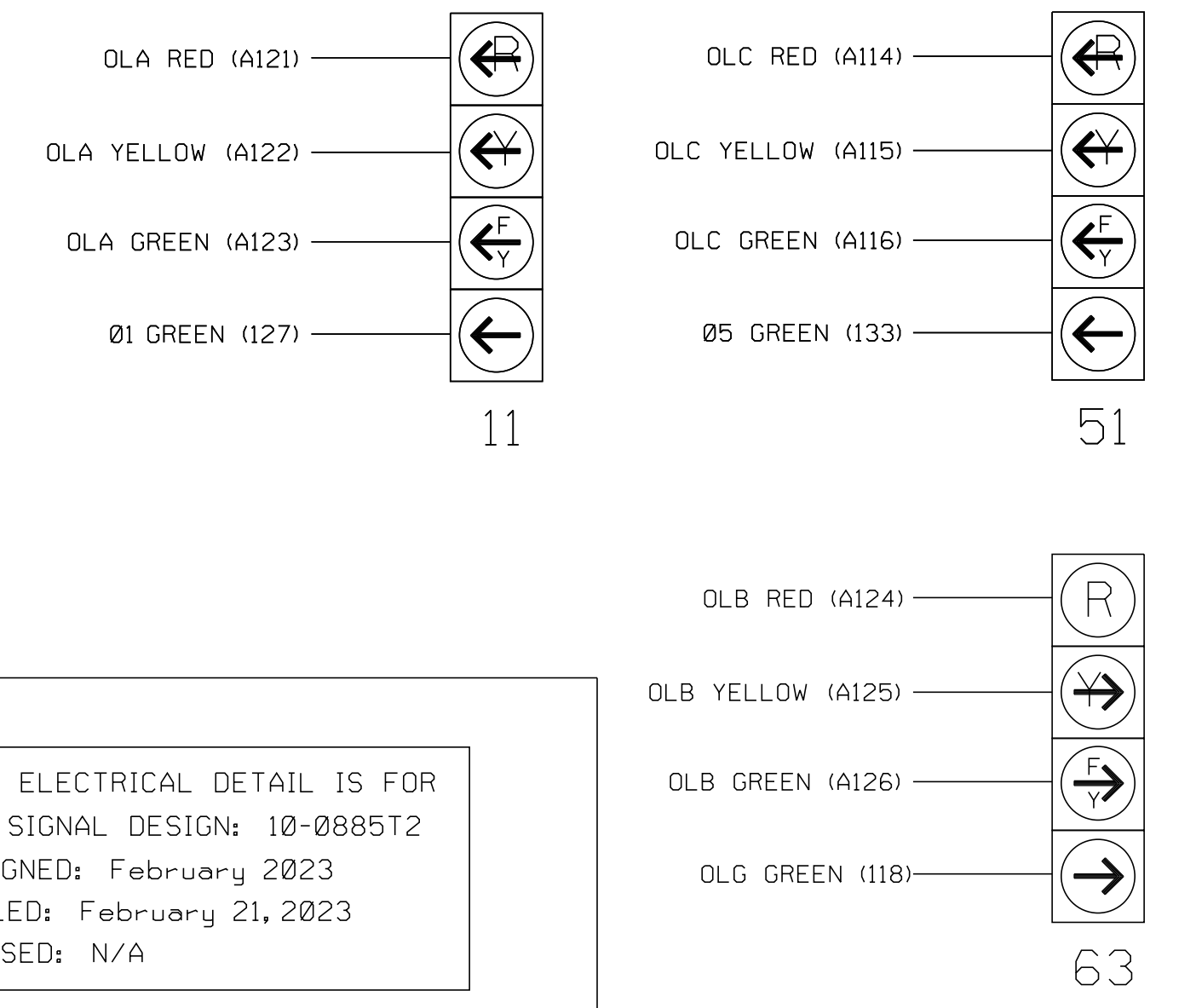
INPUT FILE CONNECTION & PROGRAMMING CHART

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	Y	---	---
5A ²	TB3-1,2	J1U	55	17	5	5	Y	Y	-	---	15
	-	I4U	47	9	22	2	Y	Y	Y	---	---
PED PUSH BUTTONS	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	NOTE: INSTALL DC ISOLATORS IN INPUT FILE SLOTS 112 AND 113.				
P41,P42	TB8-5,6	I12L	69	31	PED 4	4 PED					
P61,P62	TB8-7,9	I13U	68	30	PED 6	6 PED					

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
FILE J
SLOT 2
LOWER

FYA SIGNAL WIRING DETAIL

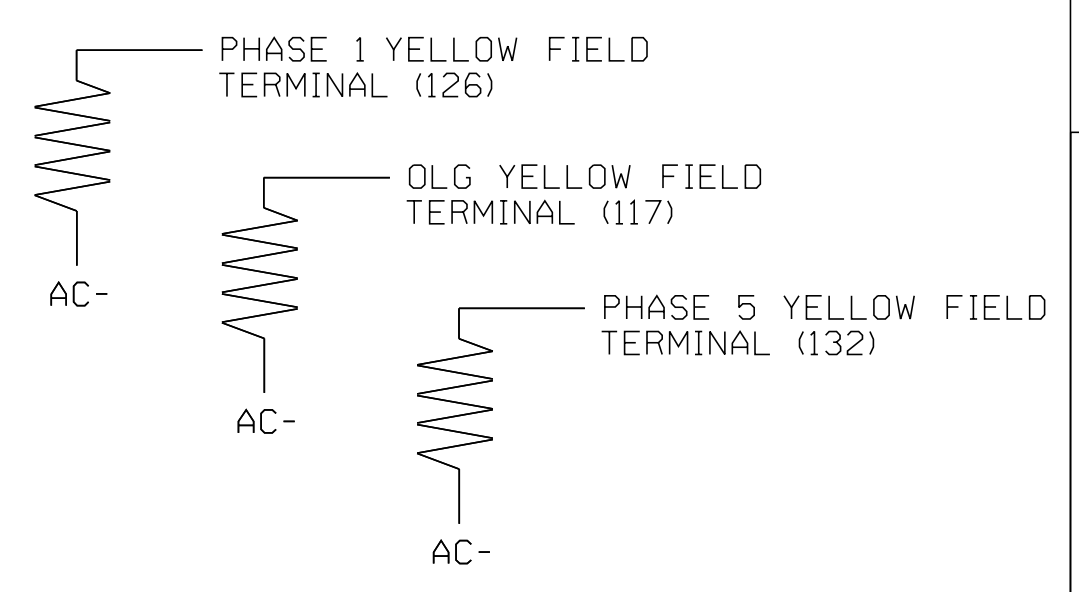
(wire signal heads as shown)



LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown below)

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



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.

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.

For Detection Zones 1A and 5A, the equipment placement and slots reserved for wired inputs are typical for a NCDOT installation.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 10-0885T2
DESIGNED: February 2023
SEALED: February 21, 2023
REVISED: N/A

Temporary Signal 2 - TCP Phase 2
Electrical Detail - Sheet 1 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of: US 21 (Catawba Avenue)/ Catawba Avenue at US 21 (Statesville Road)/ Holiday Lane
Division 10 Mecklenburg County Cornelius
Plan Date: March 2023 Reviewed By: V. Kaiser
Prepared By: S.G. Haynie Reviewed By:
REVISIONS INIT. DATE
Seal: Steven G. Haynie 3/8/2023
750 N. Greenfield Pkwy, Garner, NC 27529
RS&H NC FIRM LICENSE No: F-0493 8521 SIX FORKS ROAD, SUITE 400 RALEIGH, NC 27615 (919) 926-4100
DocuSigned by: Steven G. Haynie 3/8/2023
Signature DATE
Sig. Inventory No. 10-0885T2