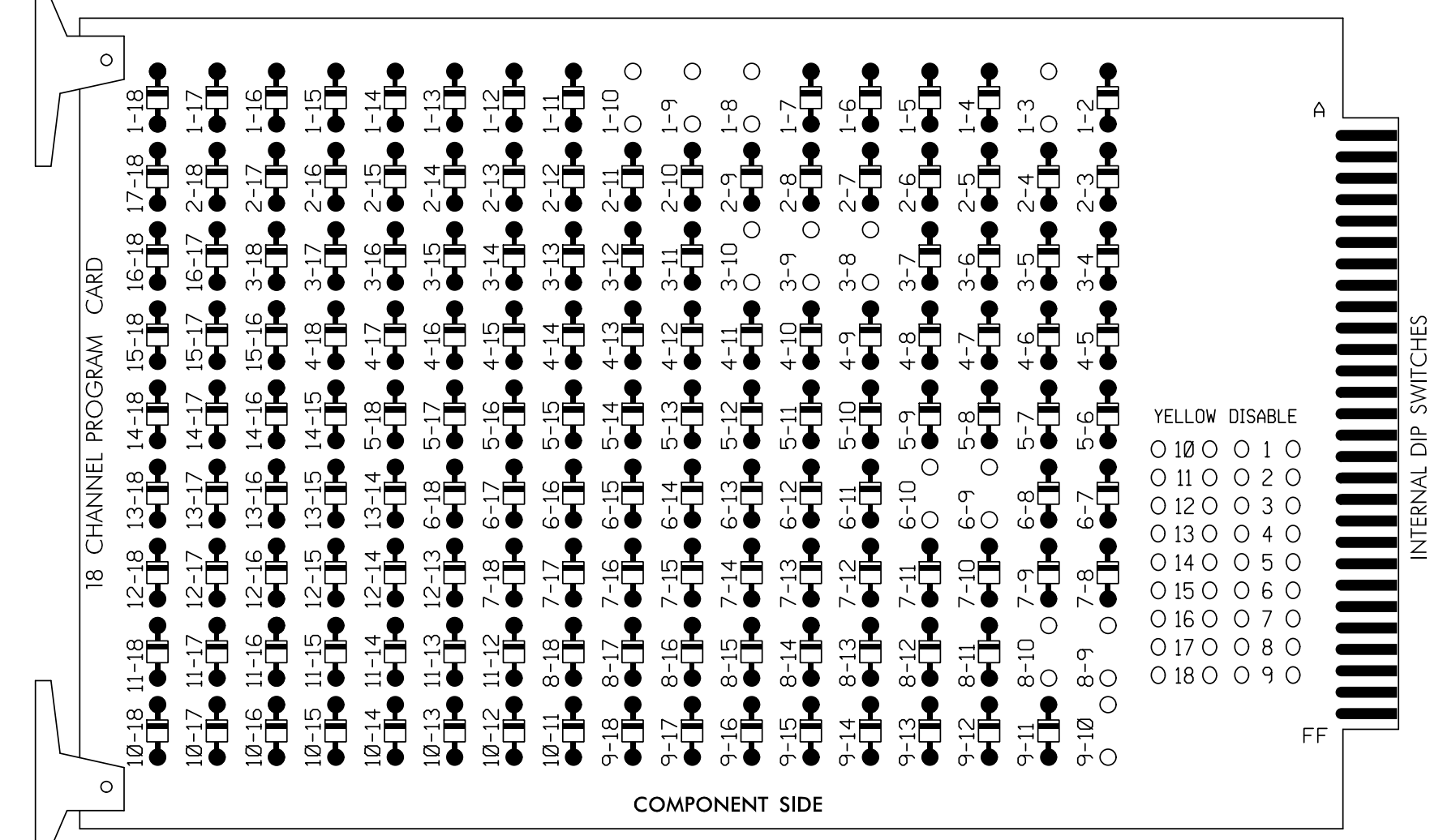


### 18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

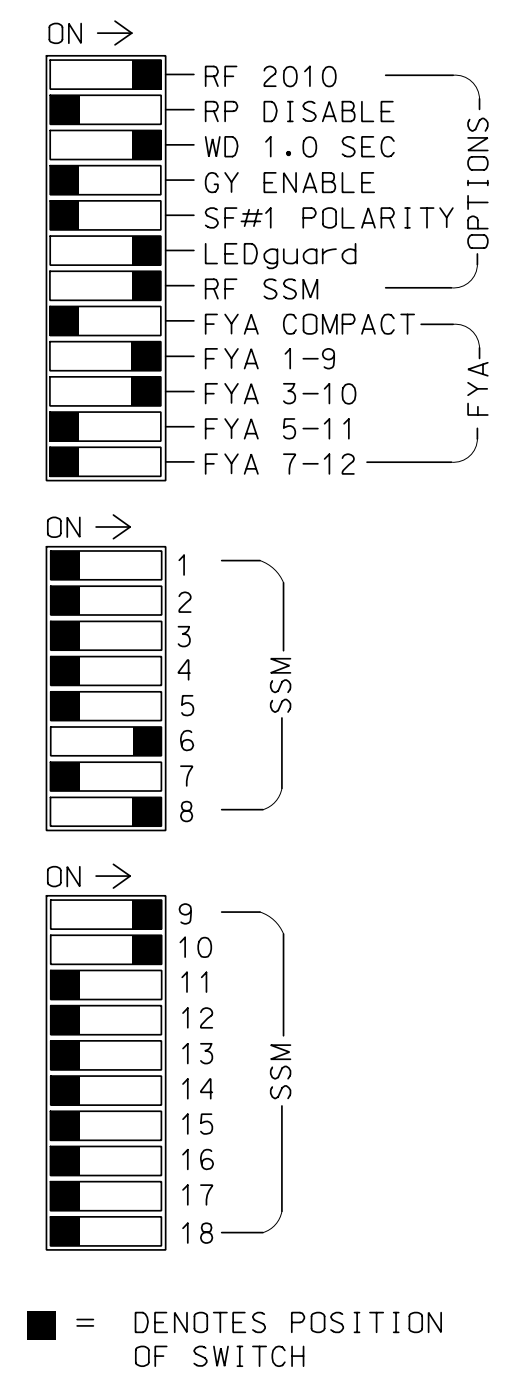
(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-3, 1-8, 1-9, 1-10, 3-8, 3-9, 3-10, 6-9, 6-10, 8-9, 8-10, and 9-10.



REMOVE JUMPERS 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.
  - Integrate monitor with Ethernet network in cabinet.



### 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 Plans.
- Program phases 3 and 8 for Dual Entry.
- Program controller to start up in phase 6 Green No Walk.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all enabled detectors.
- The cabinet and controller are part of the NC 55 Bypass Closed Loop System.

### EQUIPMENT INFORMATION

CONTROLLER.....2070LX  
 CABINET.....332 W/AUX  
 SOFTWARE.....0-Free MAXTIME  
 CABINET MOUNT.....BASE  
 OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE  
 LOAD SWITCHES USED.....S1,S4,S8,S11,AUX S1,AUX S2  
 PHASES USED.....3,6,8  
 OVERLAP "1".....\*  
 OVERLAP "2".....\*  
 OVERLAP "3".....NOT USED  
 OVERLAP "4".....NOT USED  
 OVERLAP "5".....NOT USED  
 OVERLAP "6".....NOT USED  
 OVERLAP "7".....\*

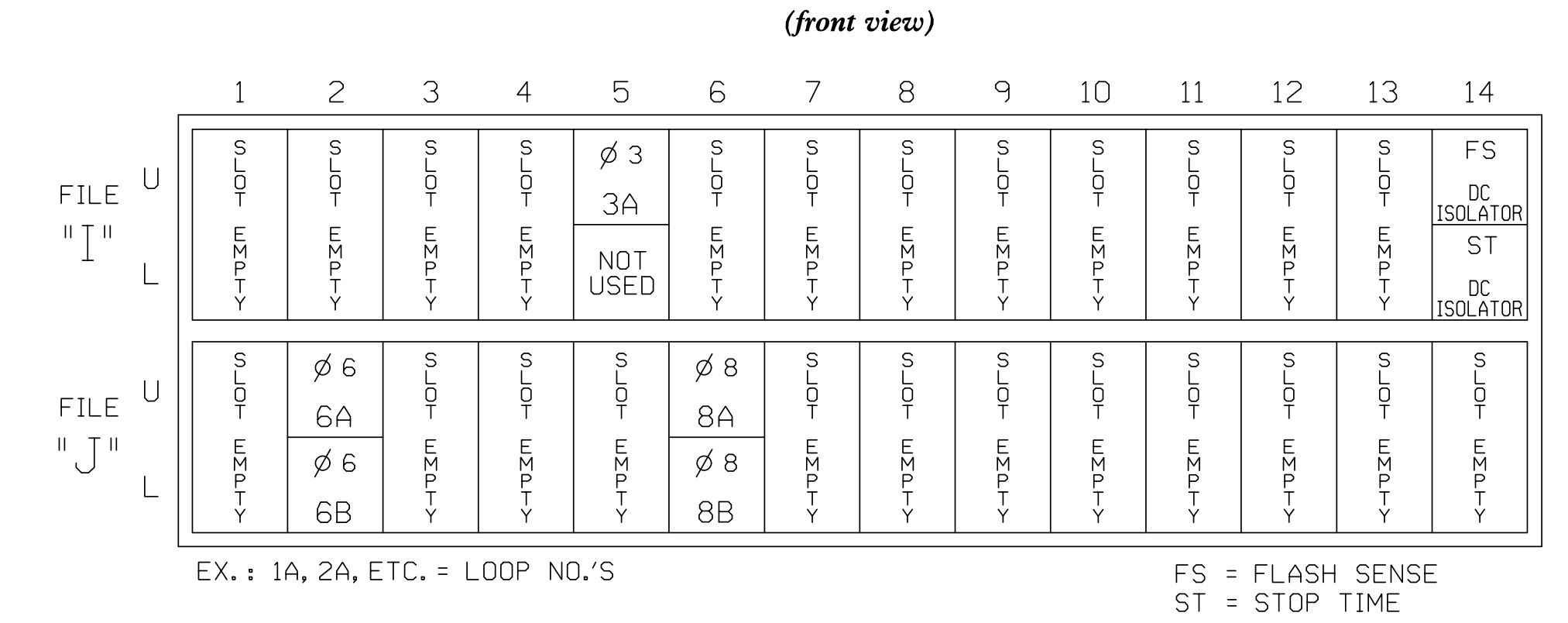
\* See overlap programming detail on sheet 2

### 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                 | OL7 | 2  | 2 PED | 3   | 4  | 4 PED | 5  | 6     | 6 PED | 7   | 8   | 8 PED    | OL1    | OL2    | SPARE  | OL3    | OL4    | SPARE  |
| SIGNAL HEAD NO.       | 32  | NU | NU    | 31  | NU | NU    | NU | 61,62 | 63,64 | NU  | NU  | 81,82,83 | 32     | 31     | NU     | NU     | NU     | NU     |
| RED                   |     |    |       |     |    |       |    | 134   | 134   |     |     | 107      |        |        |        |        |        |        |
| YELLOW                | *   |    |       | *   |    |       |    | 135   |       |     |     |          |        |        |        |        |        |        |
| GREEN                 |     |    |       |     |    |       |    | 136   |       |     |     |          |        |        |        |        |        |        |
| RED ARROW             |     |    |       |     |    |       |    |       |       |     |     |          | A121   | A124   |        |        |        |        |
| YELLOW ARROW          |     |    |       |     |    |       |    | 135   |       |     | 108 |          | A122   | A125   |        |        |        |        |
| FLASHING YELLOW ARROW |     |    |       |     |    |       |    |       |       |     |     |          | A123   | A126   |        |        |        |        |
| GREEN ARROW           | 127 |    |       | 118 |    |       |    | 136   |       |     | 109 |          |        |        |        |        |        |        |

NU = Not Used  
 \* Denotes install load resistor. See load resistor installation detail this sheet.  
 \* See pictorial of head wiring in detail this sheet.  
 NOTE: Load switch S1 requires special output remapping. See sheet 2 of this electrical detail for instruction.

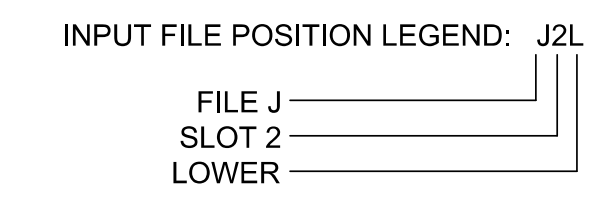
### INPUT FILE POSITION LAYOUT



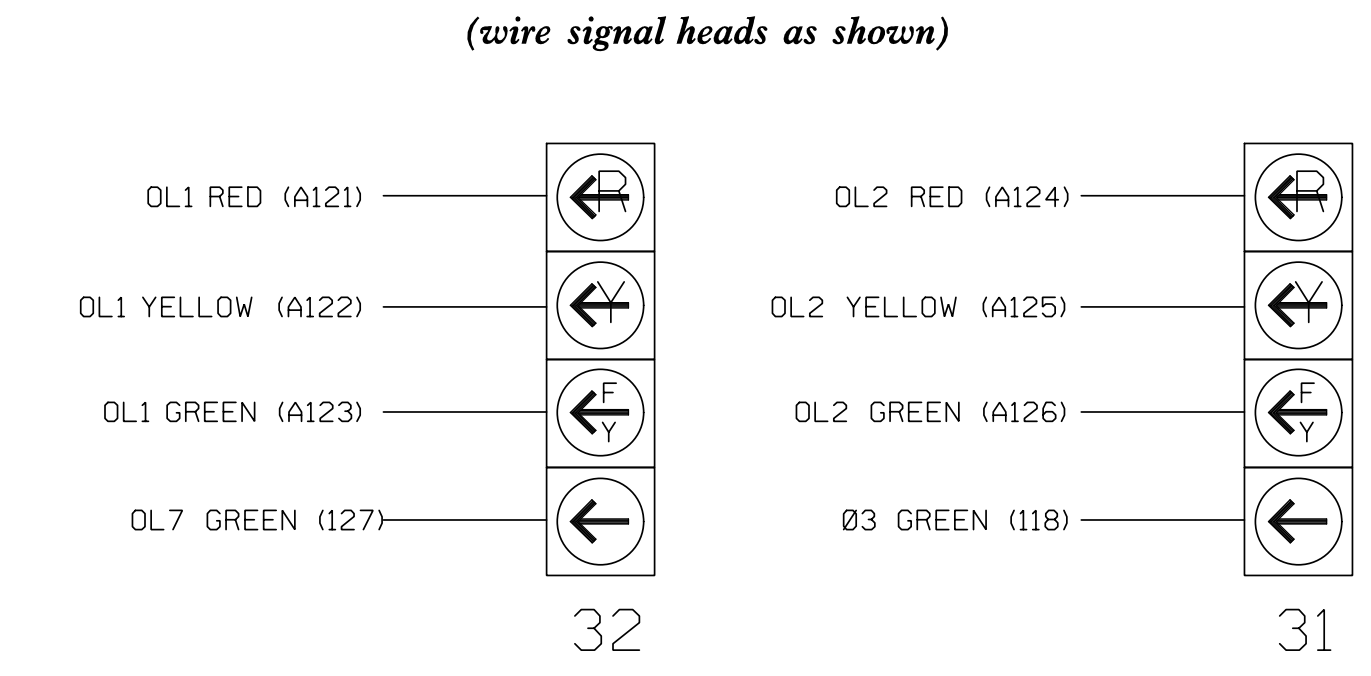
### INPUT FILE CONNECTION & PROGRAMMING CHART

| 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 |
|----------|---------------|-----------------|---------|-------------|--------------|------------|------------|-------------|--------|---------------|------|--------------------|
| 3A       | TB4-5,6       | I6U             | 58      | 20          | 7            | 3          | 15         |             | X      |               | X    |                    |
| 6A       | TB3-5,6       | J2U             | 40      | 2           | 16           | 6          |            |             | X      | X             | X    |                    |
| 6B       | TB3-7,8       | J2L             | 44      | 6           | 17           | 6          |            |             | X      | X             | X    |                    |
| 8A       | TB5-9,10      | J6U             | 42      | 4           | 22           | 8          | 15         |             | X      |               | X    |                    |
| 8B       | TB5-11,12     | J6L             | 46      | 8           | 23           | 8          | 15         |             | X      |               | X    |                    |

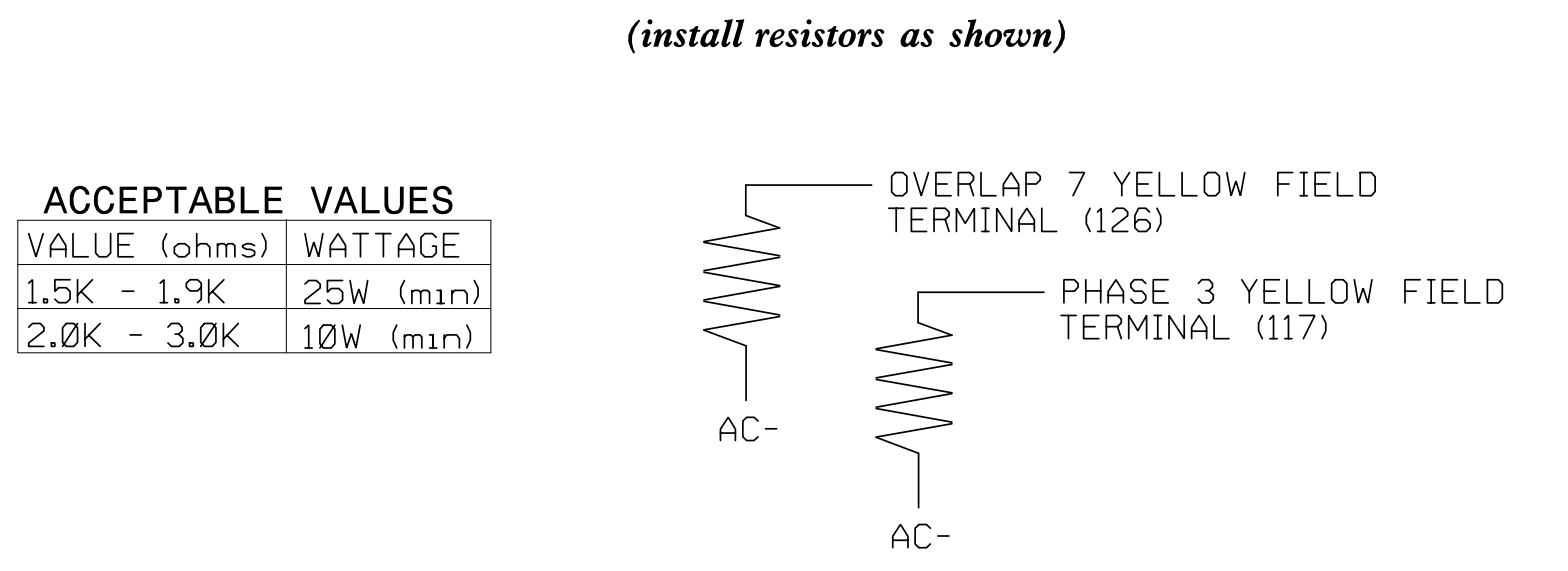
\* For the detectors to work as shown on the signal design plan, see the Vehicle Detector Setup Programming Detail for Alternate Phasing on sheet 2.



### FYA SIGNAL WIRING DETAIL

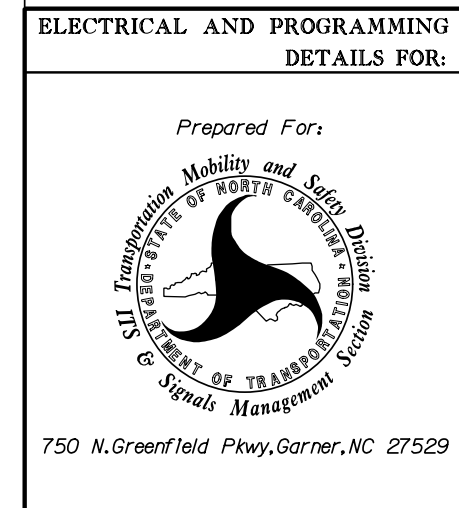


### LOAD RESISTOR INSTALLATION DETAIL



Electrical Detail - Sheet 1 of 3

PLANS PREPARED IN THE OFFICE OF:  
**Kimley-Horn**  
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 421 Fayetteville Street, Suite 600  
 Raleigh, NC 27601  
 (919) 677-2000



NC 55 Bypass Southbound at NC 210  
 Division 6 Harnett County Angier  
 PLAN DATE: August 2022 REVIEWED BY: KP Baumann  
 PREPARED BY: CF Davis REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 SEAL 044434  
 KEVIN P. BAUMANN  
 ENGINEER

DocuSigned by:  
 Kevin P. Baumann  
 6/22/2023  
 DATE

SIG. INVENTORY NO. 06-1403

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 06-1403  
 DESIGNED: August 2022  
 SEALED: 06/22/2023  
 REVISED: N/A

6/22/2023 11:20:13 AM c:\p1\g.davis \*\*\*k:\m\ey-horn.com\c\_ral\m\al\_roadway\011036479 - R-5705A - NC 55 Signal\w54 - S1\gnl Design - MaxTime\3.1 06-1403-2023.r.dgn