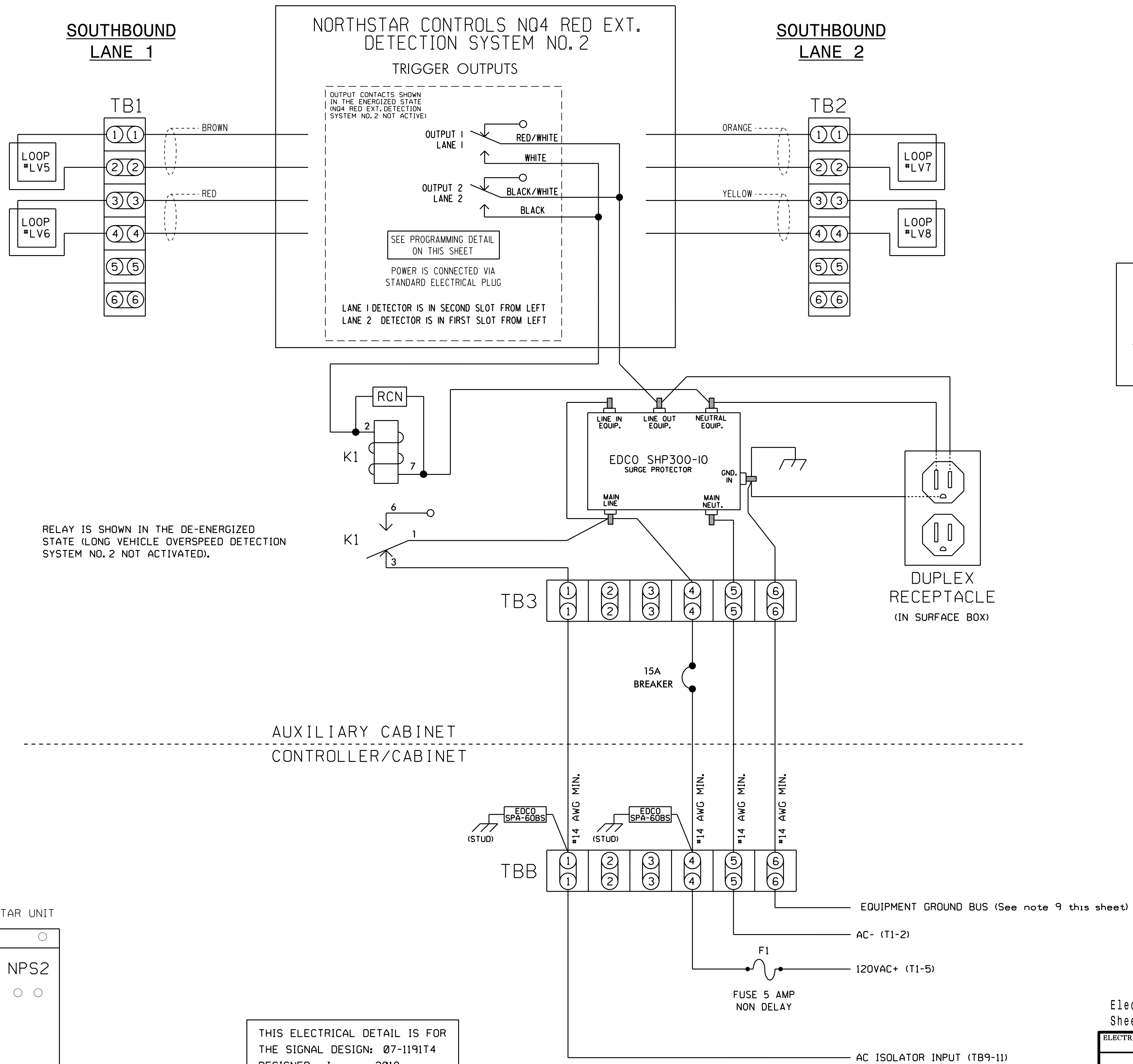


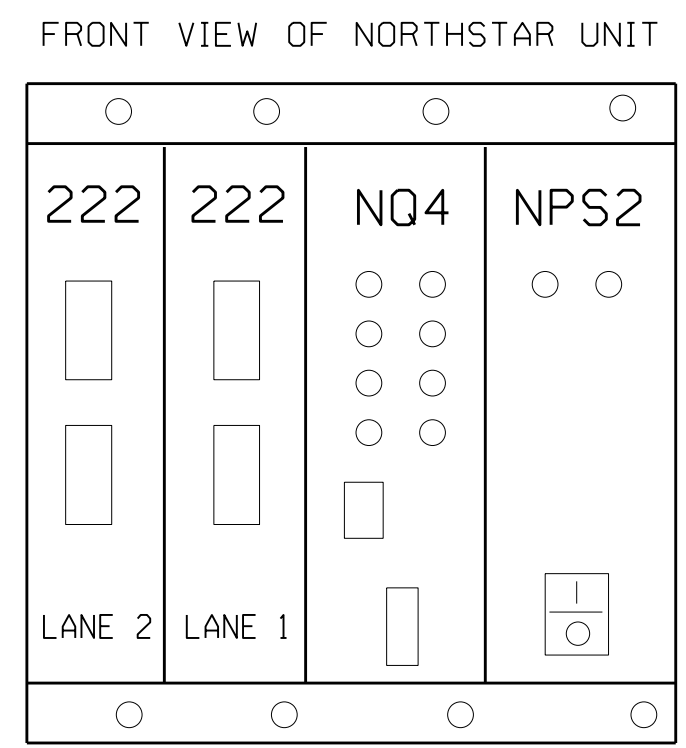
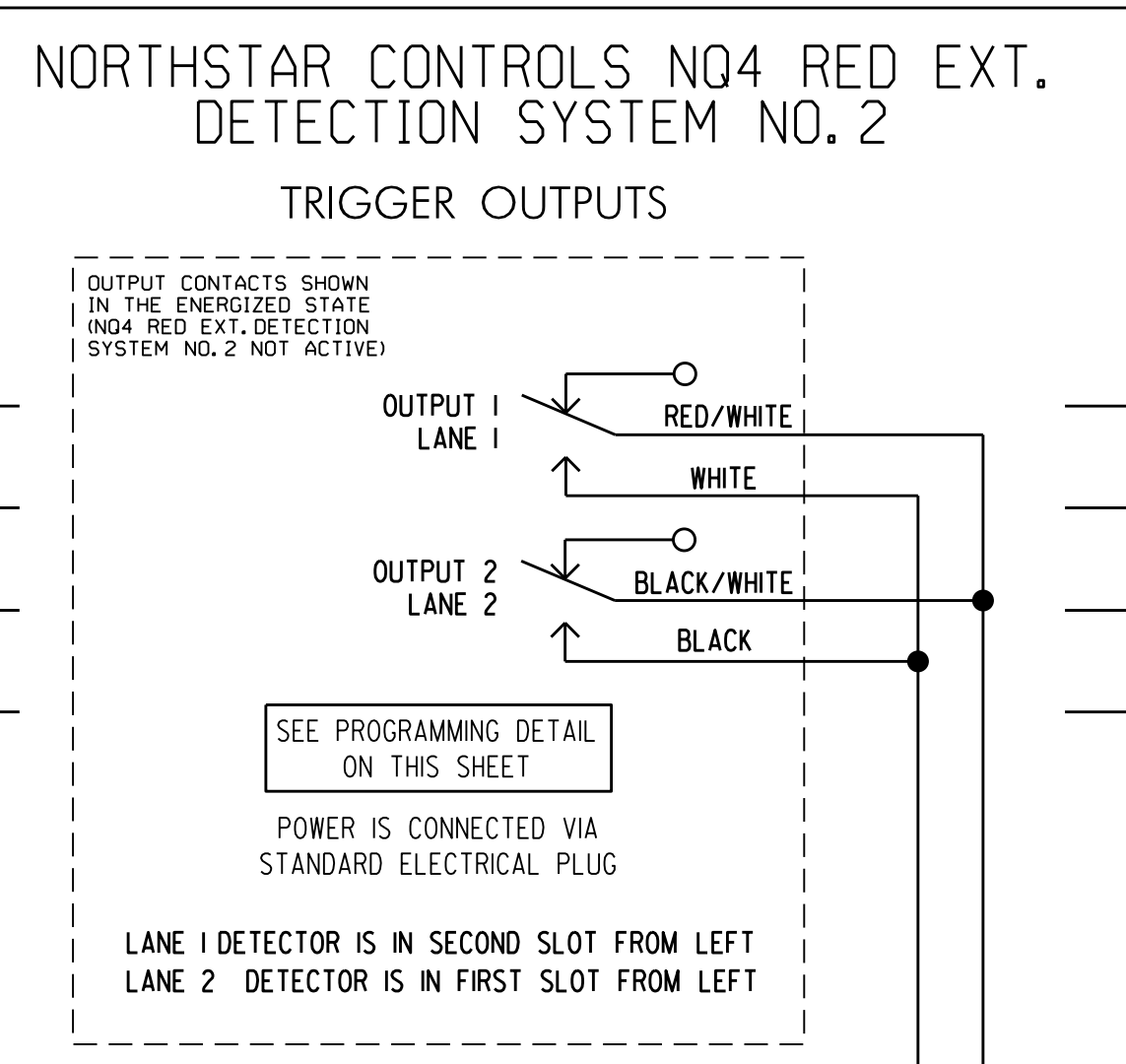
NOTES

1. Loop spacing is critical to the proper operation of this Overspeed Detection system. Make sure loop spacing is correctly programmed in the NQ4 unit.
2. The NQ4 unit shall be located in an auxiliary cabinet adjacent to the Long Vehicle Overspeed Detection loops.
3. Relay K1 is an enclosed SPDT general purpose relay with a 120VAC coil, 10A contacts, and octal style plug.
4. The RC network across the coil of K1 is 0.1 micro farad, 100 ohm.
5. EDCO SPA-60BS is a surge protector for 120VAC interconnect circuits.
6. EDCO SHP300-10 is an AC service surge protector.
7. Terminal strips TB1, TB2, TB3, and TBB to be added by the installer.
8. DO NOT install ground rods at the auxiliary cabinet.
9. Install equipment ground from the controller cabinet to the auxiliary cabinet if not already present.
10. Install a disconnect at the auxiliary cabinet if there is no disconnect already present.

(wire unit as shown below)



RELAY IS SHOWN IN THE DE-ENERGIZED STATE (LONG VEHICLE OVERSPEED DETECTION SYSTEM NO. 2 NOT ACTIVATED).



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 07-1191T4
 DESIGNED: January 2018
 SEALED: 2/7/2018
 REVISED: N/A

NORTHSTAR CONTROLS MODEL NQ4 PROGRAMMING DETAIL
 (program unit as shown below)

NOTE: Unit must be programmed using a PC and a terminal emulator program. For connection to the terminal emulator, refer to the NQ4 operation manual.

- Program the NQ4 by typing the following commands:
1. SET SPEED = 55
 2. SET LENGTH = 22'
 3. SET ALARMTIME = 12
 4. SET SEPARATION = 16' (leading edge to leading edge - program actual measured separation)
 5. SET LOOP LENGTH = 6' (program actual measured loop length)
 6. SAVE

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Electrical Detail - Temporary Design 4 (TMP Phase IV)
 Sheet 8 of 8

Prepared In the Offices of:
 GULFSTREAM COUNTY DEPARTMENT OF TRANSPORTATION & SIGNAL MANAGEMENT

DETAILS FOR: I-85 Bus. / US 29-70 at SR 1144 (River Road)

Division 7 Guilford County Jamestown

PLAN DATE: February 2018 REVIEWED BY:

PREPARED BY: S. Armstrong REVIEWED BY:

REVISIONS INIT. DATE

DocuSigned by: Keith M. Mims 2/8/2018 2:20:07PM EST

750 N. Greenfield Pkwy, Garner, NC 27529

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 KEITH M. MIMS
 036880

SIG. INVENTORY NO. 07-1191T4