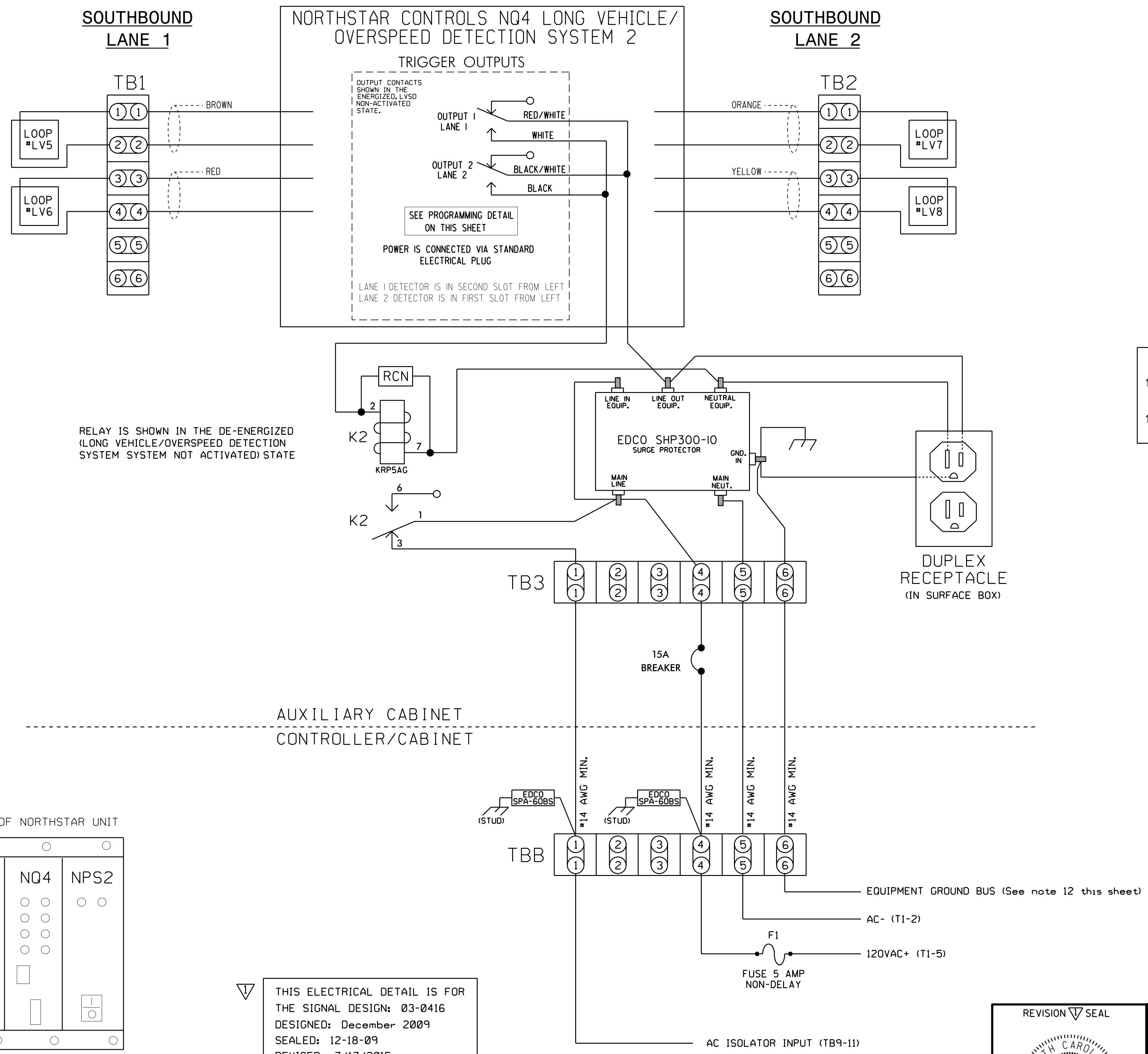


WIRING DETAIL FOR NORTHSTAR CONTROLS NQ4 LONG VEHICLE / OVERSPEED DETECTION SYSTEM NO. 2
(wire unit as shown below)

NOTES

- All loop lead-ins shall be twisted.
- Loop spacing is critical to the proper operation of this Overspeed Detection System. Make sure loop spacing is correctly programmed in NQ4 Unit.
- Insure that connectors on rear of NQ4 are seated securely.
- NQ4 Unit shall be located in an auxiliary cabinet adjacent to Speed Warning System Loops.
- Unit power is connected by standard electrical plug.
- Terminal strips TB1, TB2, TB3, & TBB to be added by installer.
- Relay 'K2' is a SPDT with an 120VAC coil. Potter & Brumfield no. KRP5AGAG, Dot Material no. 625028600.
- The RC Network across the coil of 'K2' is a .1 micro farad, 100 ohm. Dot Material no. 106018075. P&B no. 104M060C100
- EDCO SPA-60BS is a surge protector for 120VAC interconnect circuits. Dot Material no. 625022076.
- EDCO SHP300-10 is an AC service surge protector. Dot Material no. 625022075.
- Do not install ground rods at auxiliary cabinet.
- Install equipment ground from controller cabinet to auxiliary cabinet if not already present.
- Install disconnect if there is no disconnect present at auxiliary cabinet.



RELAY IS SHOWN IN THE DE-ENERGIZED (LONG VEHICLE/OVERSPEED DETECTION SYSTEM SYSTEM NOT ACTIVATED) STATE

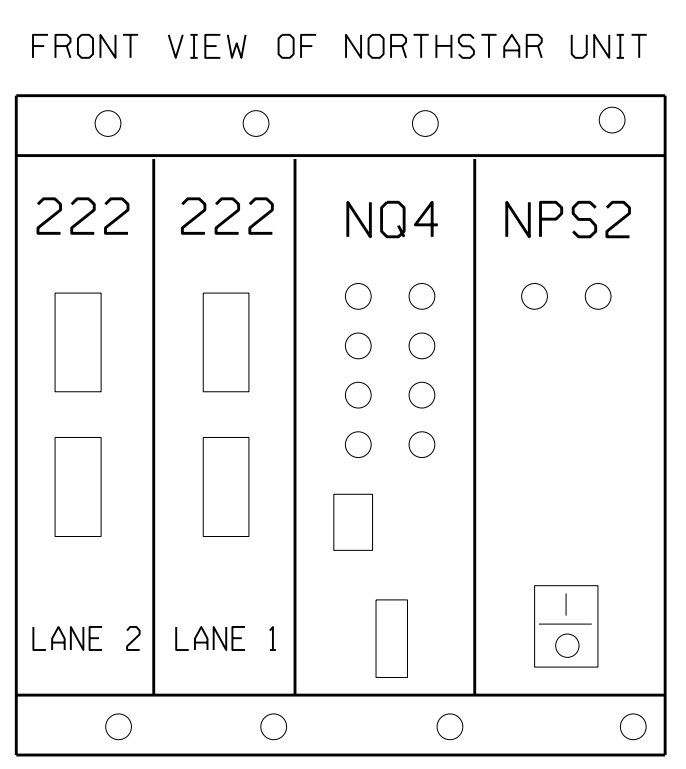
NORTHSTAR CONTROLS MODEL NQ4
PROGRAMMING DETAIL
(program unit as shown)

NOTE: UNIT MUST BE PROGRAMMED USING PC AND HYPERTERMINAL PROGRAM. FOR CONNECTION TO HYPERTERMINAL REFER TO NQ4 OPERATION MANUAL.

PROGRAM NQ4 BY TYPING THE FOLLOWING COMMANDS

- SET SPEED=55
- SET LENGTH=22'
- SET ALARMTIME=12
- SET SEPARATION=16' (LEADING EDGE TO LEADING EDGE) (THIS VALUE MAY VARY, PROGRAM ACTUAL MEASURED SEPARATION)
- SET LOOP LENGTH=6' (THIS VALUE MAY VARY, PROGRAM ACTUAL MEASURED LOOP LENGTH)
- SAVE

NOTE
PROGRAMMING APPLIES TO BOTH LANE 1 AND LANE 2



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 03-0416
DESIGNED: December 2009
SEALED: 12-18-09
REVISED: 7/17/2015

ELECTRICAL DETAIL SHEET 5 OF 7

US 17 (Ocean Highway) at SR 1304 (Pea Landing Road) / SR 1165 (Thomasboro Road)

Division 03 Brunswick County Near Sunset Beach

PLAN DATE: 08-04-10 REVIEWED BY: [Signature]

PREPARED BY: D.H. Spaulding REVIEWED BY: [Signature]

REVISIONS: No changes to this electrical plan. (WSA)

DATE: 7/21/2015

Signature: [Signature] DATE: [Date]

SIG. INVENTORY NO. 03-0416

21-Jul-2015 08:54
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