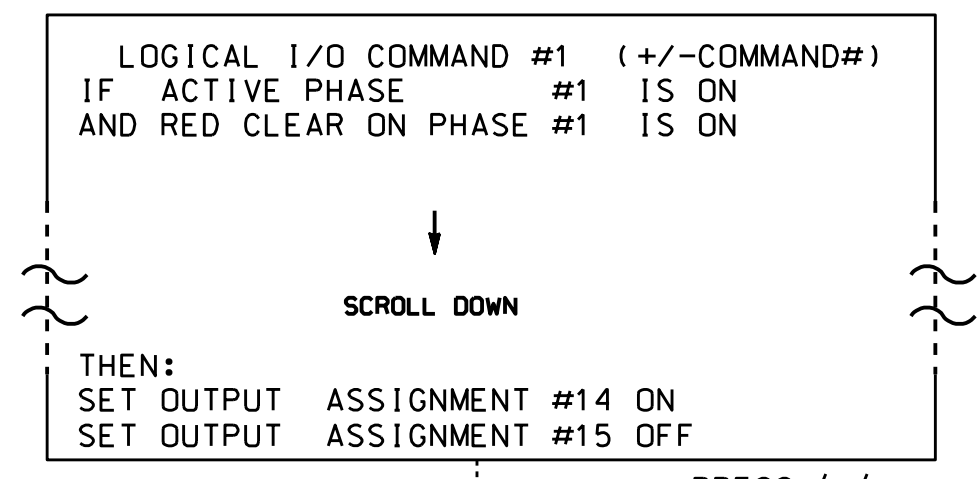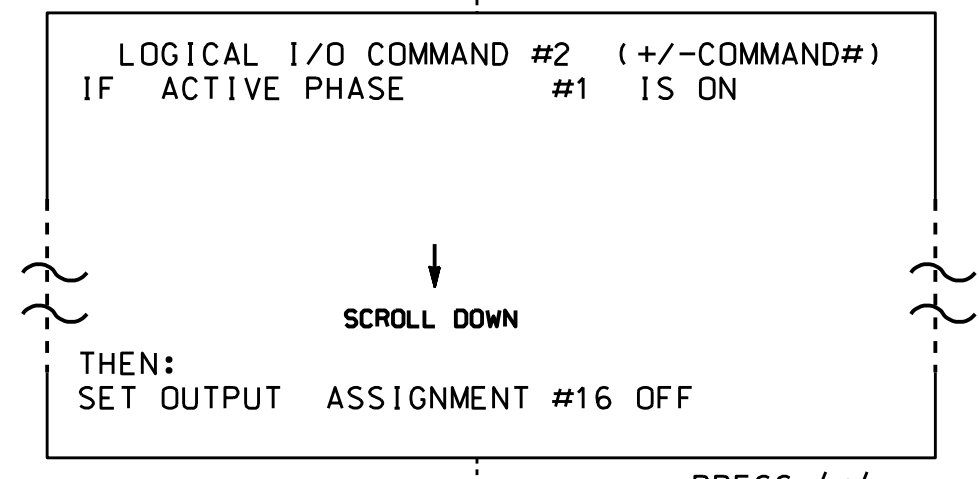# LOGICAL I/O PROCESSOR PROGRAMMING DETAIL

TO PRODUCE SPECIAL FYA-PPLT SIGNAL SEQUENCE

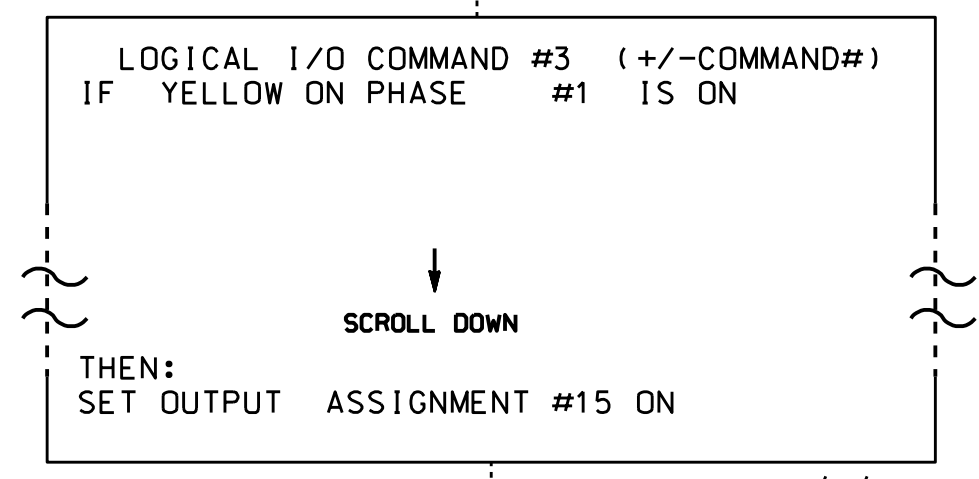*(program controller as shown below)*

1. FROM MAIN MENU PRESS '2' (PHASE CONTROL), THEN '1' (PHASE CONTROL FUNCTIONS). SCROLL TO THE BOTTOM OF THE MENU AND ENABLE ACT LOGIC COMMANDS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12.

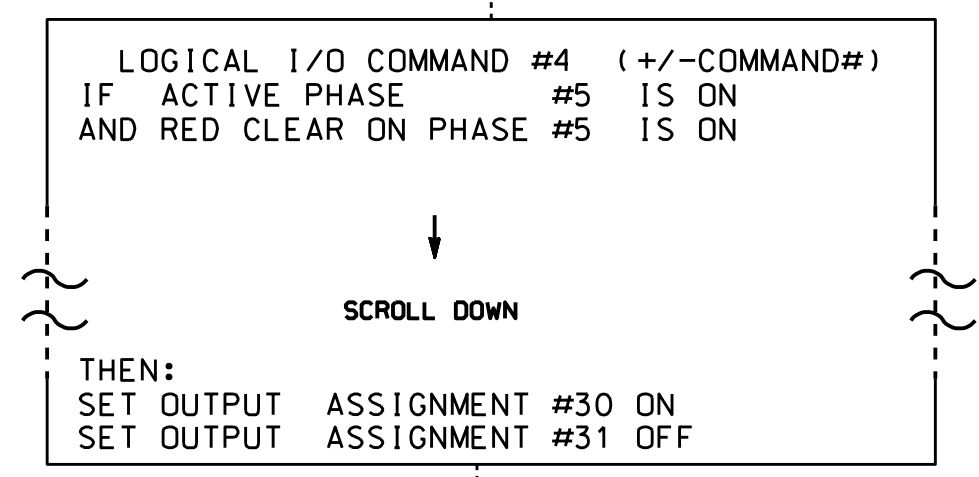2. FROM MAIN MENU PRESS '6' (OUTPUTS), THEN '3' (LOGICAL I/O PROCESSOR).

LOGICAL I/O COMMAND #1 (+/-COMMAND#)
IF ACTIVE PHASE   #1 IS ON
AND RED CLEAR ON PHASE #1 IS ON

SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #14 ON
SET OUTPUT ASSIGNMENT #15 OFF

PRESS '+'

NOTE: LOGIC FOR PHASE 1 RED CLEAR WHEN TRANSITIONING FROM PHASE 1 TO PHASE 2 (HEAD 11).

LOGICAL I/O COMMAND #2 (+/-COMMAND#)
IF ACTIVE PHASE   #1 IS ON

SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #16 OFF

PRESS '+'

NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" DURING PHASE 1 (HEAD 11).

LOGICAL I/O COMMAND #3 (+/-COMMAND#)
IF YELLOW ON PHASE   #1 IS ON

SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #15 ON

PRESS '+'

NOTE: LOGIC FOR YELLOW ARROW CLEARANCE FROM PHASE 1 (HEAD 11).

LOGICAL I/O COMMAND #4 (+/-COMMAND#)
IF ACTIVE PHASE   #5 IS ON
AND RED CLEAR ON PHASE #5 IS ON

SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #30 ON
SET OUTPUT ASSIGNMENT #31 OFF

PRESS '+'

NOTE: LOGIC FOR PHASE 5 RED CLEAR WHEN TRANSITIONING FROM PHASE 5 TO PHASE 6 (HEAD 51).

LOGICAL I/O COMMAND #5 (+/-COMMAND#)
IF ACTIVE PHASE   #5 IS ON

SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #32 OFF

PRESS '+'
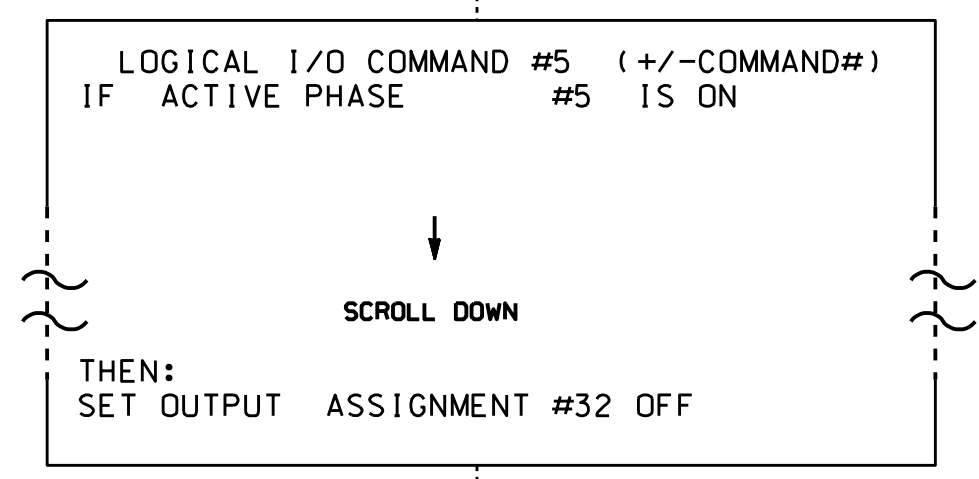
NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" DURING PHASE 5 (HEAD 51).

LOGICAL I/O COMMAND #6 (+/-COMMAND#)
IF YELLOW ON PHASE   #5 IS ON

SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #31 ON

PRESS '+'
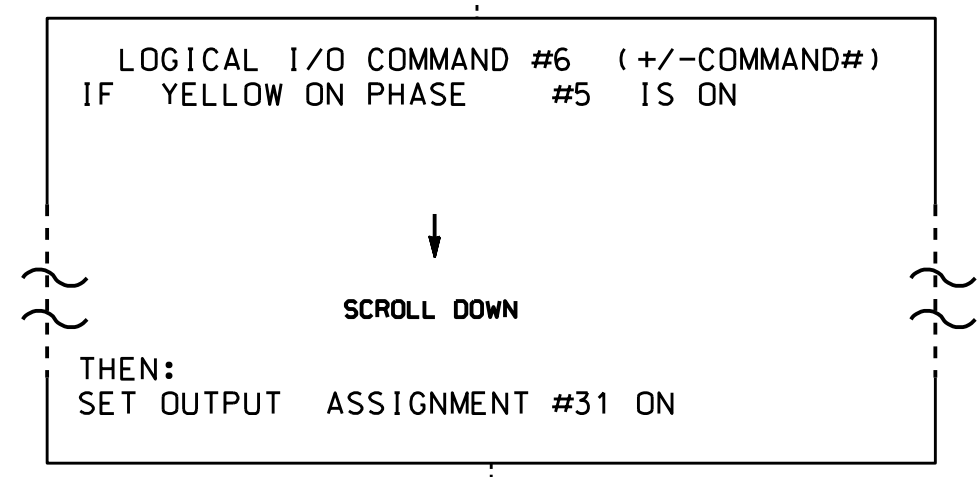
NOTE: LOGIC FOR YELLOW ARROW CLEARANCE FROM PHASE 5 (HEAD 51).

LOGICAL I/O COMMAND #7 (+/-COMMAND#)
IF ACTIVE PHASE   #3 IS ON
AND RED CLEAR ON PHASE #3 IS ON

SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #6 ON
SET OUTPUT ASSIGNMENT #7 OFF

PRESS '+'
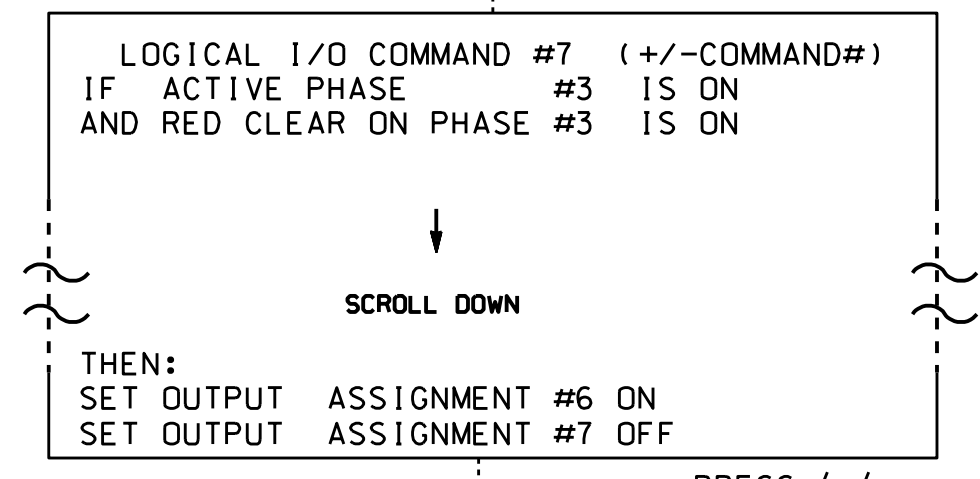
NOTE: LOGIC FOR PHASE 3 RED CLEAR WHEN TRANSITIONING FROM PHASE 3 TO PHASE 4 (HEAD 31).

LOGICAL I/O COMMAND #8 (+/-COMMAND#)
IF ACTIVE PHASE   #3 IS ON

SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #8 OFF

PRESS '+'
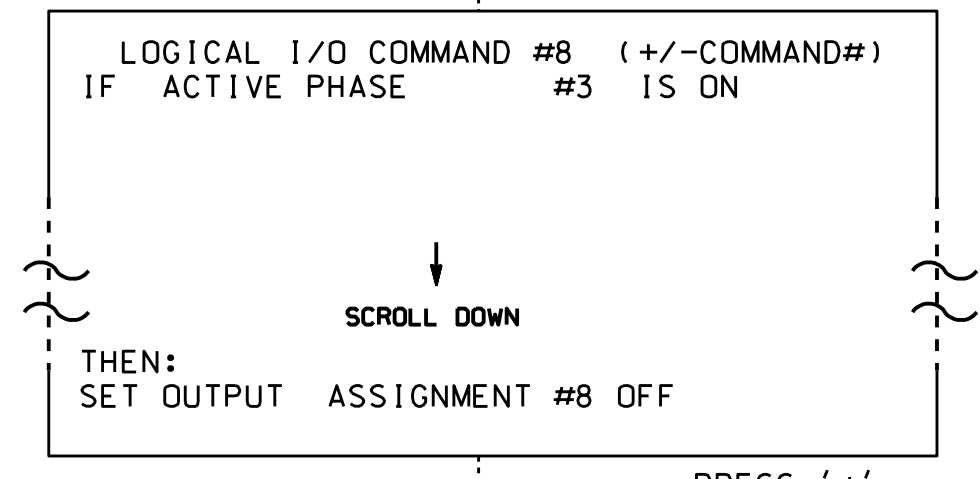
NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" DURING PHASE 3 (HEAD 31).

LOGICAL I/O COMMAND #9 (+/-COMMAND#)
IF YELLOW ON PHASE   #3 IS ON

SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #7 ON

PRESS '+'
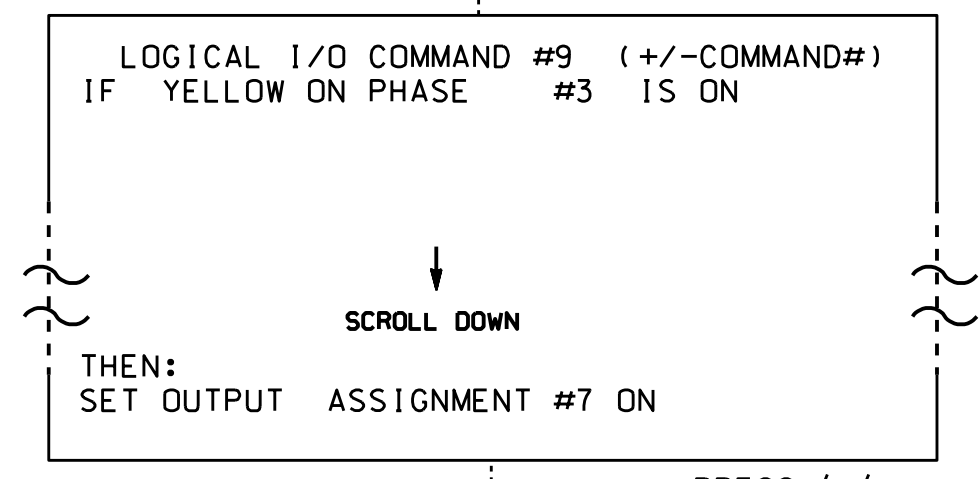
NOTE: LOGIC FOR YELLOW ARROW CLEARANCE FROM PHASE 3 (HEAD 31).

LOGICAL I/O COMMAND #10 (+/-COMMAND#)
IF ACTIVE PHASE   #7 IS ON
AND RED CLEAR ON PHASE #7 IS ON

SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #22 ON
SET OUTPUT ASSIGNMENT #23 OFF

PRESS '+'
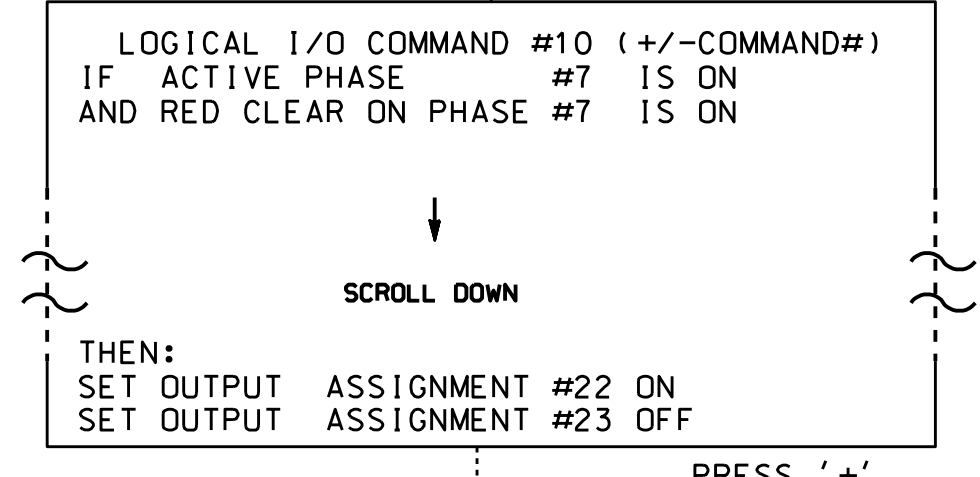
NOTE: LOGIC FOR PHASE 7 RED CLEAR WHEN TRANSITIONING FROM PHASE 7 TO PHASE 8 (HEAD 71).

LOGICAL I/O COMMAND #11 (+/-COMMAND#)
IF ACTIVE PHASE   #7 IS ON

SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #24 OFF

PRESS '+'
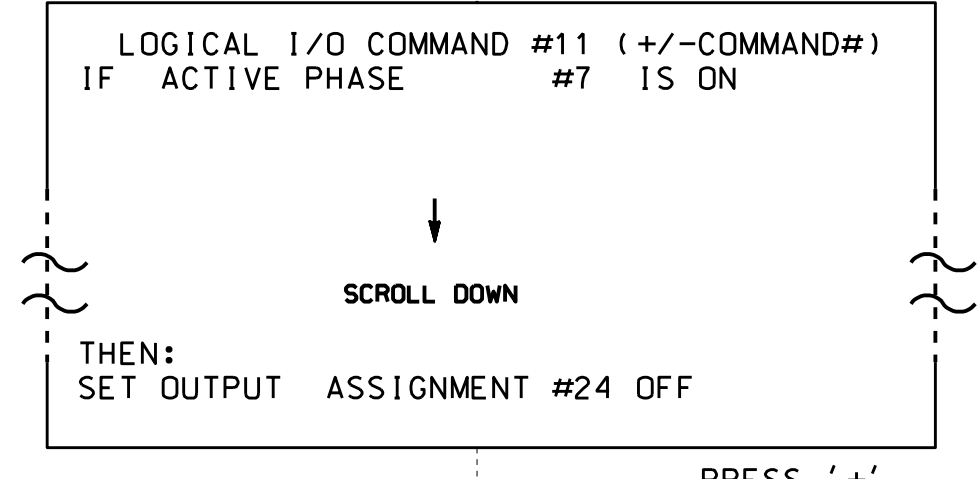
NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" DURING PHASE 7 (HEAD 71).

LOGICAL I/O COMMAND #12 (+/-COMMAND#)
IF YELLOW ON PHASE   #7 IS ON

SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #23 ON

LOGIC I/O PROCESSOR PROGRAMMING COMPLETE
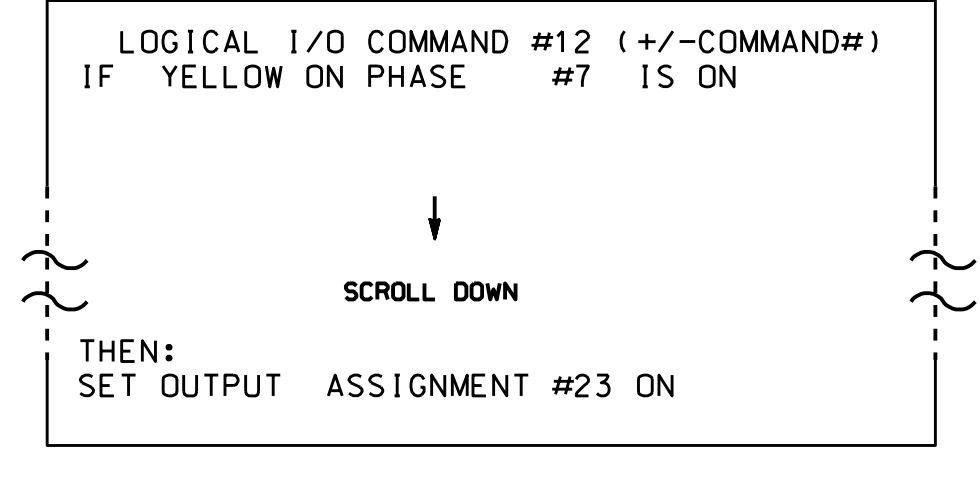
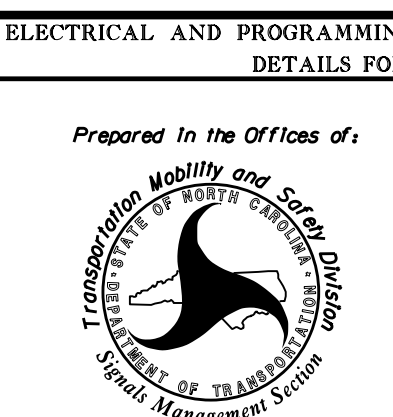NOTE: LOGIC FOR YELLOW ARROW CLEARANCE FROM PHASE 7 (HEAD 71).

OUTPUT REFERENCE SCHEDULE

OUTPUT 14 = Overlap A Red
OUTPUT 15 = Overlap A Yellow
OUTPUT 16 = Overlap A Green
OUTPUT 6 = Overlap B Red
OUTPUT 7 = Overlap B Yellow
OUTPUT 8 = Overlap B Green
OUTPUT 30 = Overlap C Red
OUTPUT 31 = Overlap C Yellow
OUTPUT 32 = Overlap C Green
OUTPUT 22 = Overlap D Red
OUTPUT 23 = Overlap D Yellow
OUTPUT 24 = Overlap D Green
OUTPUT 33 = Phase 1 Green
OUTPUT 34 = Phase 5 Green
OUTPUT 35 = Phase 3 Green
OUTPUT 36 = Phase 7 Green

Note: All outputs shown above have been remapped. See sheets 4 through 7 of this electrical detail.

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 12-0596T
DESIGNED: January 2017
SEALED: 2/20/2017
REVISED:

Electrical Detail - Temporary Design - Sheet 3 of 7

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared In the Offices of:

Transportation Mobility and Safety Division
750 N.Greenfield Pkwy,Garner,NC 27529

NC 150 (Cherryville Rd.)
at
NC 180 (North Post Rd.)

Division 12	Cleveland County	Shelby
PLAN DATE: February 2017	REVIEWED BY: T. Joyce	
PREPARED BY: C. Strickland	REVIEWED BY:	

REVISIONS	INIT.	DATE

SIG. INVENTORY NO. 12-0596T

SEAL

NORTH CAROLINA
PROFESSIONAL
SEAL
030530
ZACHARY M. LITTLE
ENGINEER

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

DocuSigned by:
Zachary M. Little 3/7/2017
0C21EFD94F5341F DATE