LOGICAL I/O PROCESSOR PROGRAMMING DETAIL

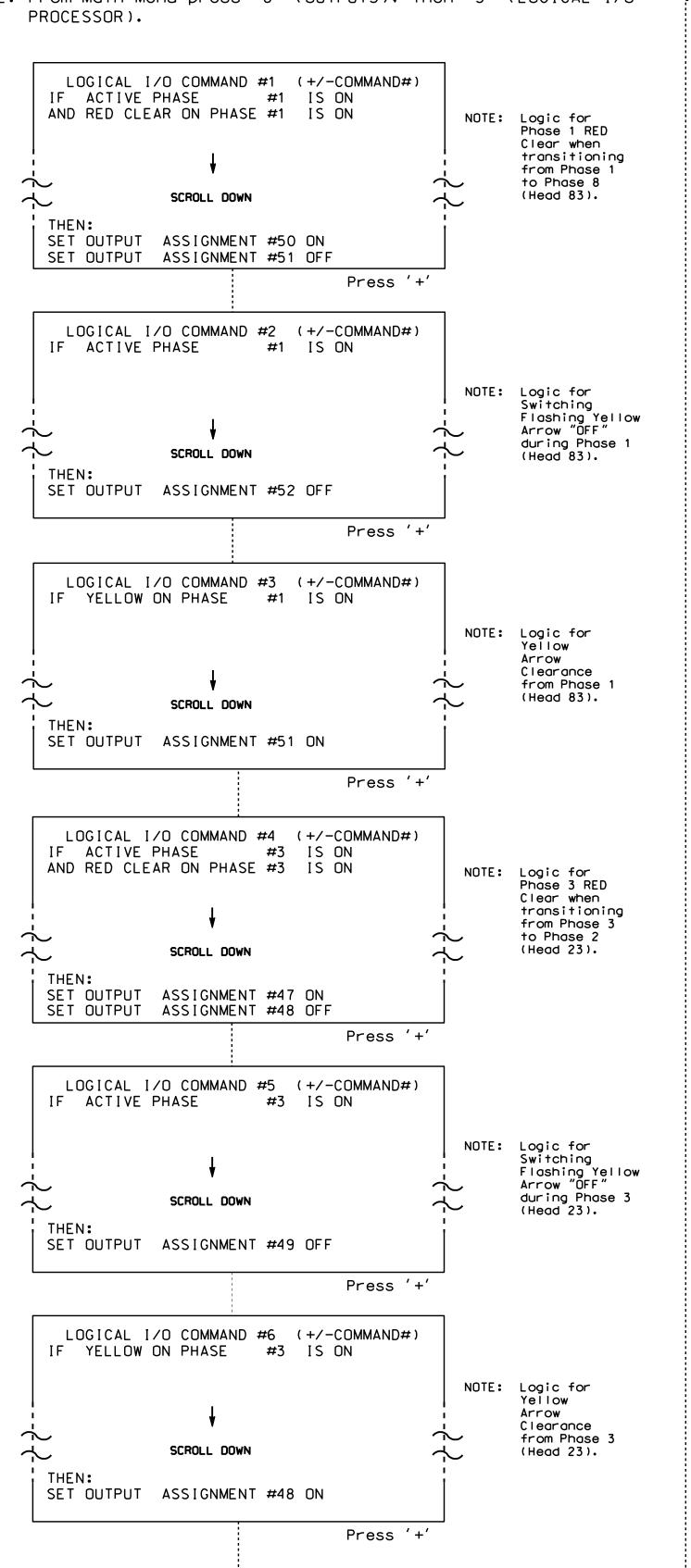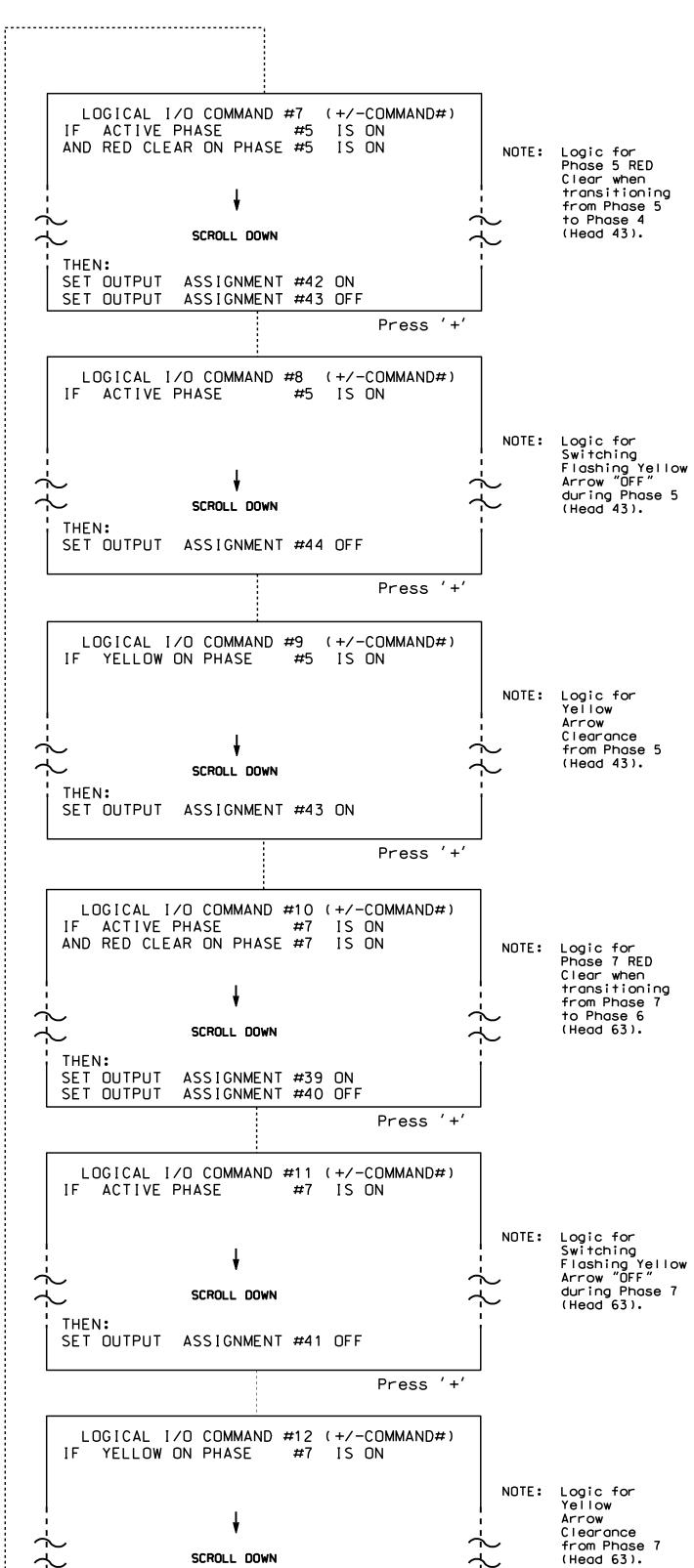## TO PRODUCE SPECIAL FYA-PPLT SIGNAL SEQUENCE

(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.

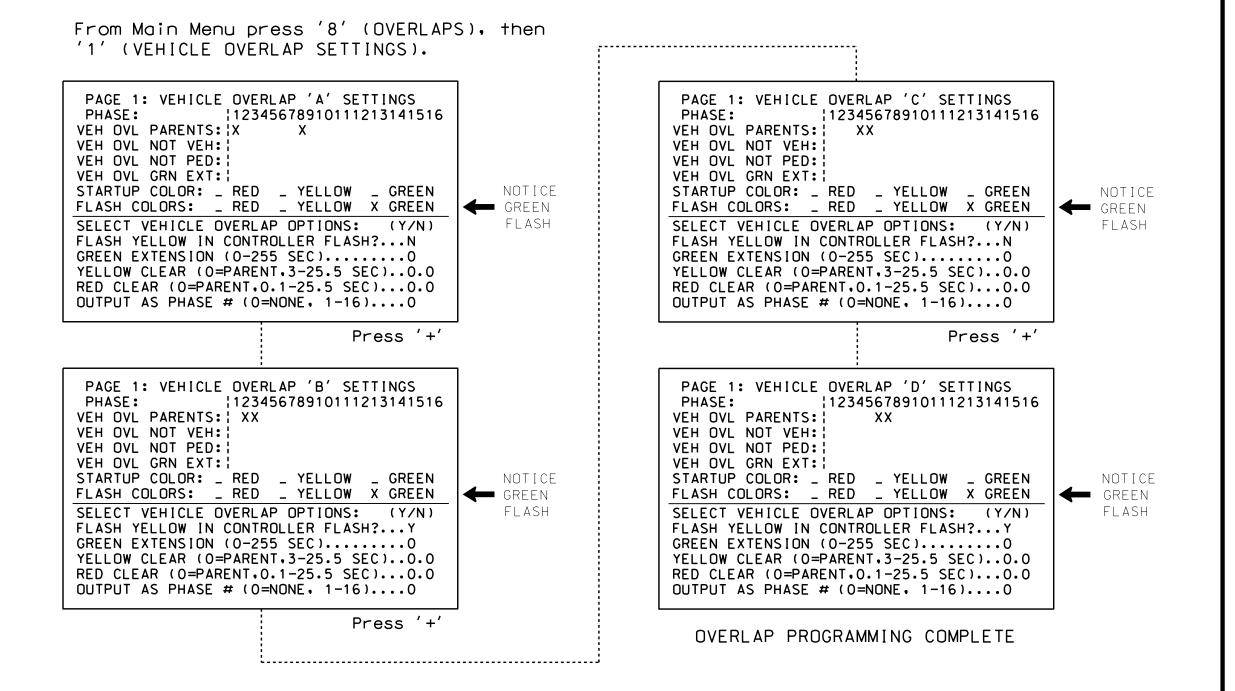2. From Main Menu press '6' (OUTPUTS), then '3' (LOGICAL I/O PROCESSOR).

```
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 #50 ON
SET OUTPUT  ASSIGNMENT #51 OFF
                        Press '+'
```
NOTE: Logic for Phase 1 RED Clear when transitioning from Phase 1 to Phase 8 (Head 83).

```
LOGICAL I/O COMMAND #2  (+/-COMMAND#)
IF  ACTIVE PHASE      #1  IS ON
            SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #52 OFF
                        Press '+'
```
NOTE: Logic for Switching Flashing Yellow Arrow "OFF" during Phase 1 (Head 83).

```
LOGICAL I/O COMMAND #3  (+/-COMMAND#)
IF  YELLOW ON PHASE    #1  IS ON
            SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #51 ON
                        Press '+'
```
NOTE: Logic for Yellow Arrow Clearance from Phase 1 (Head 83).

```
LOGICAL I/O COMMAND #4  (+/-COMMAND#)
IF  ACTIVE PHASE      #3  IS ON
AND RED CLEAR ON PHASE #3  IS ON
            SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #47 ON
SET OUTPUT  ASSIGNMENT #48 OFF
                        Press '+'
```
NOTE: Logic for Phase 3 RED Clear when transitioning from Phase 3 to Phase 2 (Head 23).

```
LOGICAL I/O COMMAND #5  (+/-COMMAND#)
IF  ACTIVE PHASE      #3  IS ON
            SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #49 OFF
                        Press '+'
```
NOTE: Logic for Switching Flashing Yellow Arrow "OFF" during Phase 3 (Head 23).

```
LOGICAL I/O COMMAND #6  (+/-COMMAND#)
IF  YELLOW ON PHASE    #3  IS ON
            SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #48 ON
                        Press '+'
```
NOTE: Logic for Yellow Arrow Clearance from Phase 3 (Head 23).

```
LOGICAL I/O COMMAND #7  (+/-COMMAND#)
IF  ACTIVE PHASE      #5  IS ON
AND RED CLEAR ON PHASE #5  IS ON
            SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #42 ON
SET OUTPUT  ASSIGNMENT #43 OFF
                        Press '+'
```
NOTE: Logic for Phase 5 RED Clear when transitioning from Phase 5 to Phase 4 (Head 43).

```
LOGICAL I/O COMMAND #8  (+/-COMMAND#)
IF  ACTIVE PHASE      #5  IS ON
            SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #44 OFF
                        Press '+'
```
NOTE: Logic for Switching Flashing Yellow Arrow "OFF" during Phase 5 (Head 43).

```
LOGICAL I/O COMMAND #9  (+/-COMMAND#)
IF  YELLOW ON PHASE    #5  IS ON
            SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #43 ON
                        Press '+'
```
NOTE: Logic for Yellow Arrow Clearance from Phase 5 (Head 43).

```
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 #39 ON
SET OUTPUT  ASSIGNMENT #40 OFF
                        Press '+'
```
NOTE: Logic for Phase 7 RED Clear when transitioning from Phase 7 to Phase 6 (Head 63).

```
LOGICAL I/O COMMAND #11  (+/-COMMAND#)
IF  ACTIVE PHASE      #7  IS ON
            SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #41 OFF
                        Press '+'
```
NOTE: Logic for Switching Flashing Yellow Arrow "OFF" during Phase 7 (Head 63).

```
LOGICAL I/O COMMAND #12  (+/-COMMAND#)
IF  YELLOW ON PHASE    #7  IS ON
            SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #40 ON
                        Press '+'
```
NOTE: Logic for Yellow Arrow Clearance from Phase 7 (Head 63).

LOGIC I/O PROCESSOR PROGRAMMING COMPLETE

OVERLAP PROGRAMMING DETAIL

(program controller as shown below)

From Main Menu press '8' (OVERLAPS), then '1' (VEHICLE OVERLAP SETTINGS).

```
PAGE 1: VEHICLE OVERLAP 'A' SETTINGS
 PHASE:          :12345678910111213141516
VEH OVL PARENTS:X        X
VEH OVL NOT VEH:
VEH OVL NOT PED:
VEH OVL GRN EXT:
STARTUP COLOR: _ RED  _ YELLOW  _ GREEN
FLASH COLORS:  _ RED  _ YELLOW  X GREEN
SELECT VEHICLE OVERLAP OPTIONS:   (Y/N)
FLASH YELLOW IN CONTROLLER FLASH?...N
GREEN EXTENSION (0-255 SEC)........0
YELLOW CLEAR (0=PARENT.3-25.5 SEC)..0.0
RED CLEAR (0=PARENT.0.1-25.5 SEC)...0.0
OUTPUT AS PHASE # (0=NONE, 1-16)....0
```
← NOTICE GREEN FLASH

```
PAGE 1: VEHICLE OVERLAP 'B' SETTINGS
 PHASE:          :12345678910111213141516
VEH OVL PARENTS:  XX
VEH OVL NOT VEH:
VEH OVL NOT PED:
VEH OVL GRN EXT:
STARTUP COLOR: _ RED  _ YELLOW  _ GREEN
FLASH COLORS:  _ RED  _ YELLOW  X GREEN
SELECT VEHICLE OVERLAP OPTIONS:   (Y/N)
FLASH YELLOW IN CONTROLLER FLASH?...Y
GREEN EXTENSION (0-255 SEC)........0
YELLOW CLEAR (0=PARENT.3-25.5 SEC)..0.0
RED CLEAR (0=PARENT.0.1-25.5 SEC)...0.0
OUTPUT AS PHASE # (0=NONE, 1-16)....0
```
← NOTICE GREEN FLASH

```
PAGE 1: VEHICLE OVERLAP 'C' SETTINGS
 PHASE:          :12345678910111213141516
VEH OVL PARENTS:         XX
VEH OVL NOT VEH:
VEH OVL NOT PED:
VEH OVL GRN EXT:
STARTUP COLOR: _ RED  _ YELLOW  _ GREEN
FLASH COLORS:  _ RED  _ YELLOW  X GREEN
SELECT VEHICLE OVERLAP OPTIONS:   (Y/N)
FLASH YELLOW IN CONTROLLER FLASH?...N
GREEN EXTENSION (0-255 SEC)........0
YELLOW CLEAR (0=PARENT.3-25.5 SEC)..0.0
RED CLEAR (0=PARENT.0.1-25.5 SEC)...0.0
OUTPUT AS PHASE # (0=NONE, 1-16)....0
```
← NOTICE GREEN FLASH

```
PAGE 1: VEHICLE OVERLAP 'D' SETTINGS
 PHASE:          :12345678910111213141516
VEH OVL PARENTS:           XX
VEH OVL NOT VEH:
VEH OVL NOT PED:
VEH OVL GRN EXT:
STARTUP COLOR: _ RED  _ YELLOW  _ GREEN
FLASH COLORS:  _ RED  _ YELLOW  X GREEN
SELECT VEHICLE OVERLAP OPTIONS:   (Y/N)
FLASH YELLOW IN CONTROLLER FLASH?...Y
GREEN EXTENSION (0-255 SEC)........0
YELLOW CLEAR (0=PARENT.3-25.5 SEC)..0.0
RED CLEAR (0=PARENT.0.1-25.5 SEC)...0.0
OUTPUT AS PHASE # (0=NONE, 1-16)....0
```
← NOTICE GREEN FLASH

Press '+'

OVERLAP PROGRAMMING COMPLETE

FLASHER CIRCUIT MODIFICATION DETAIL

IN ORDER TO INSURE THAT SIGNALS FLASH CONCURRENTLY ON THE SAME APPROACH, MAKE THE FOLLOWING FLASHER CIRCUIT CHANGES:
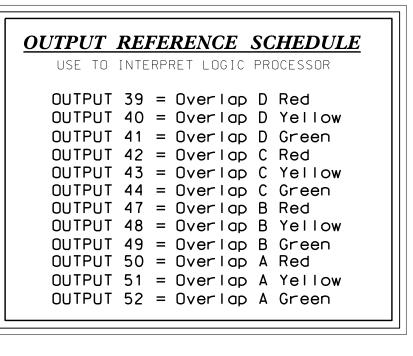
1. ON REAR OF PDA – REMOVE WIRE FROM TERM. T2-4 AND TERMINATE ON T2-3.

2. ON REAR OF PDA – REMOVE WIRE FROM TERM. T2-5 AND TERMINATE ON T2-2.
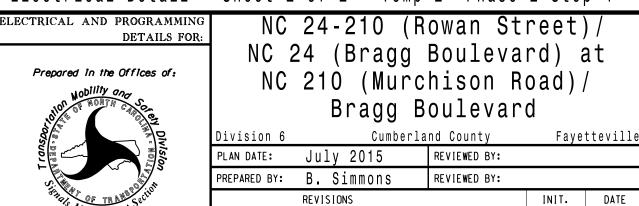
3. REMOVE FLASHER UNIT 2.

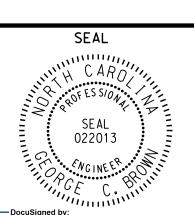THE CHANGES LISTED ABOVE TIES ALL PHASES AND OVERLAPS TO FLASHER UNIT 1.

OUTPUT REFERENCE SCHEDULE

USE TO INTERPRET LOGIC PROCESSOR

OUTPUT 39 = Overlap D Red
OUTPUT 40 = Overlap D Yellow
OUTPUT 41 = Overlap D Green
OUTPUT 42 = Overlap C Red
OUTPUT 43 = Overlap C Yellow
OUTPUT 44 = Overlap C Green
OUTPUT 47 = Overlap B Red
OUTPUT 48 = Overlap B Yellow
OUTPUT 49 = Overlap B Green
OUTPUT 50 = Overlap A Red
OUTPUT 51 = Overlap A Yellow
OUTPUT 52 = Overlap A Green

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 06-1336T2
DESIGNED: June 2015
SEALED: 8/28/15
REVISED: N/A

Electrical Detail - Sheet 2 of 2 - Temp 2 Phase 2 Step 4

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared In the Offices of:

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

NC 24-210 (Rowan Street)/
NC 24 (Bragg Boulevard) at
NC 210 (Murchison Road)/
Bragg Boulevard

Division 6	Cumberland County	Fayetteville
PLAN DATE: July 2015	REVIEWED BY:	
PREPARED BY: B. Simmons	REVIEWED BY:	

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA
PROFESSIONAL
SEAL
022013
ENGINEER
GEORGE C. BROWN

DocuSigned by:
George C. Brown 8/31/2015
F1260ISD99BEB434
DATE

SIG. INVENTORY NO. 06-1336T2