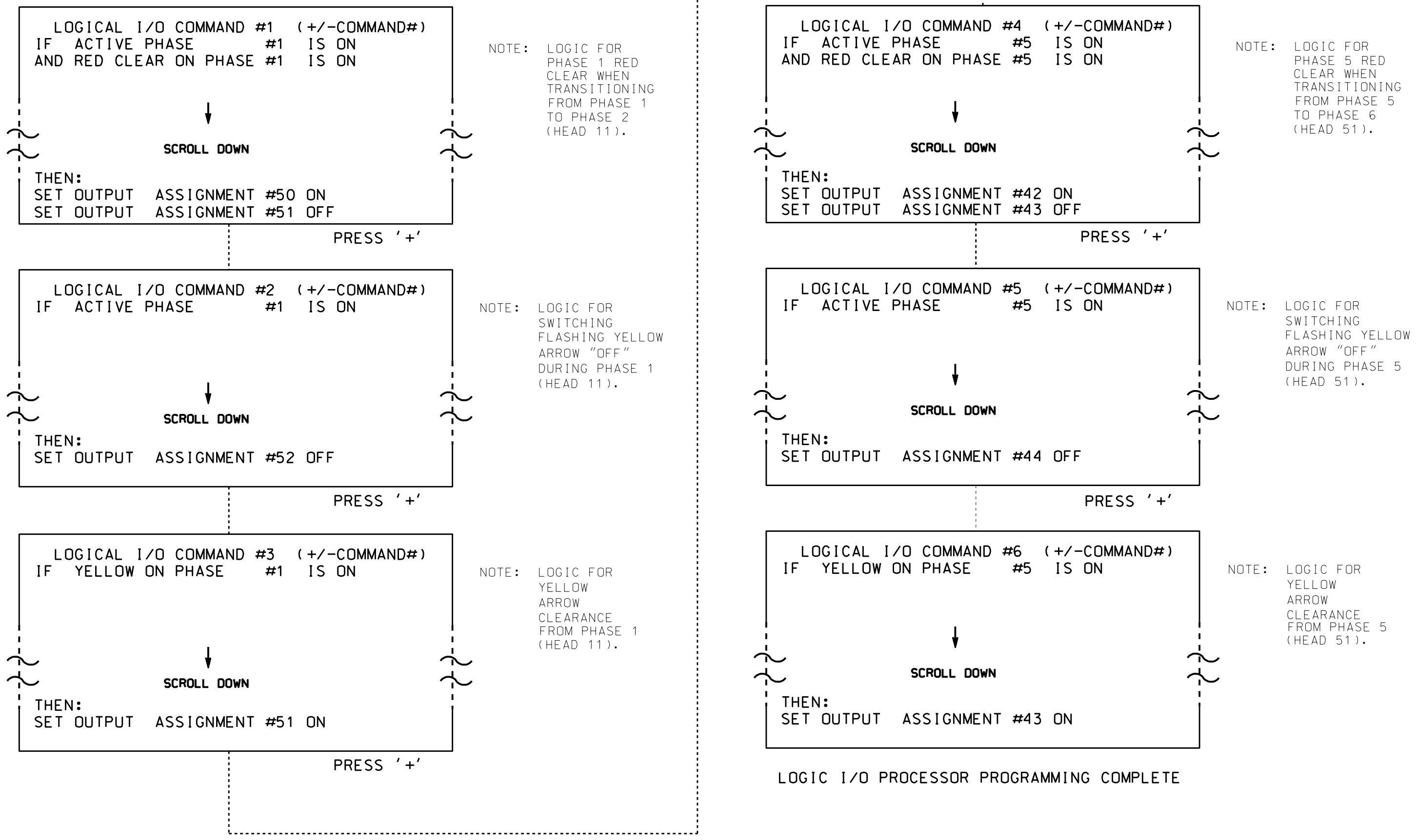## LOGICAL I/O PROCESSOR PROGRAMMING DETAIL

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 AND 6.

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

SCROLL DOWN
```
THEN:
SET OUTPUT  ASSIGNMENT #50 ON
SET OUTPUT  ASSIGNMENT #51 OFF
```
PRESS '+'

```
LOGICAL I/O COMMAND #2   (+/-COMMAND#)
IF  ACTIVE PHASE     #1  IS ON
```
NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" DURING PHASE 1 (HEAD 11).

SCROLL DOWN
```
THEN:
SET OUTPUT  ASSIGNMENT #52 OFF
```
PRESS '+'

```
LOGICAL I/O COMMAND #3   (+/-COMMAND#)
IF  YELLOW ON PHASE   #1  IS ON
```
NOTE: LOGIC FOR YELLOW ARROW CLEARANCE FROM PHASE 1 (HEAD 11).

SCROLL DOWN
```
THEN:
SET OUTPUT  ASSIGNMENT #51 ON
```
PRESS '+'

```
LOGICAL I/O COMMAND #4   (+/-COMMAND#)
IF  ACTIVE PHASE       #5  IS ON
AND RED CLEAR ON PHASE #5  IS ON
```
NOTE: LOGIC FOR PHASE 5 RED CLEAR WHEN TRANSITIONING FROM PHASE 5 TO PHASE 6 (HEAD 51).

SCROLL DOWN
```
THEN:
SET OUTPUT  ASSIGNMENT #42 ON
SET OUTPUT  ASSIGNMENT #43 OFF
```
PRESS '+'

```
LOGICAL I/O COMMAND #5   (+/-COMMAND#)
IF  ACTIVE PHASE       #5  IS ON
```
NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" DURING PHASE 5 (HEAD 51).

SCROLL DOWN
```
THEN:
SET OUTPUT  ASSIGNMENT #44 OFF
```
PRESS '+'

```
LOGICAL I/O COMMAND #6   (+/-COMMAND#)
IF  YELLOW ON PHASE    #5  IS ON
```
NOTE: LOGIC FOR YELLOW ARROW CLEARANCE FROM PHASE 5 (HEAD 51).

SCROLL DOWN
```
THEN:
SET OUTPUT  ASSIGNMENT #43 ON
```

LOGIC I/O PROCESSOR PROGRAMMING COMPLETE

OUTPUT REFERENCE SCHEDULE

```
OUTPUT 42 = Overlap C Red
OUTPUT 43 = Overlap C Yellow
OUTPUT 44 = Overlap C Green
OUTPUT 50 = Overlap A Red
OUTPUT 51 = Overlap A Yellow
OUTPUT 52 = Overlap A Green
```

FLASHER CIRCUIT MODIFICATION DETAIL

IN ORDER TO INSURE THAT SIGNALS FLASH CONCURRENTLY ON THE SAME APPROACH, MAKE THE FOLLOWING FLASHER CIRCUIT CHANGES:
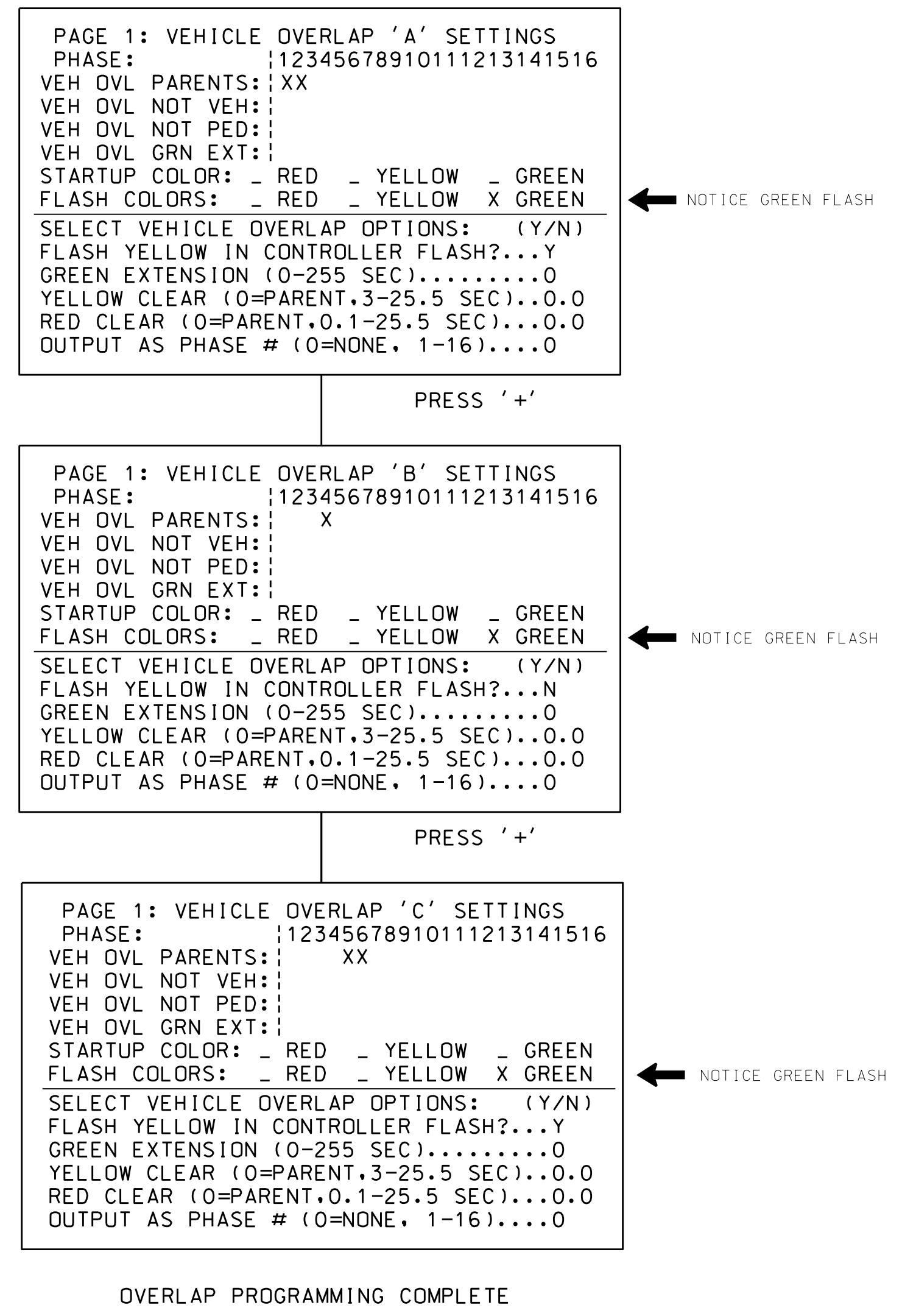
1. ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-4 AND TERMINATE ON T2-2.

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

3. REMOVE FLASHER UNIT 2.

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

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:              1234567891011213141516
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        ← NOTICE GREEN FLASH
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
```
PRESS '+'

```
PAGE 1: VEHICLE OVERLAP 'B' SETTINGS
PHASE:              1234567891011213141516
VEH OVL PARENTS:   X
VEH OVL NOT VEH:
VEH OVL NOT PED:
VEH OVL GRN EXT:
STARTUP COLOR: _ RED  _ YELLOW  _ GREEN
FLASH COLORS:  _ RED  _ YELLOW  X GREEN        ← NOTICE GREEN FLASH
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
```
PRESS '+'

```
PAGE 1: VEHICLE OVERLAP 'C' SETTINGS
PHASE:              1234567891011213141516
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        ← NOTICE GREEN FLASH
SELECT VEHICLE OVERLAP OPTIONS:  (Y/N)
FLASH YELLOW IN CONTROLLER FLASH?...Y
GREEN EXTENSION (0-255 SEC).........Y
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
```

OVERLAP PROGRAMMING COMPLETE

```
THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 13-1118
DESIGNED: June 2016
SEALED: 11/02/2016
REVISED:
```

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared in the Offices of:

NC 280 (Airport Road)
at
Airport Park Road/Airport Entrance

Division 13	Buncombe County	Fletcher
PLAN DATE: October 2016	REVIEWED BY:	BAS
PREPARED BY: A. F. Aslami	REVIEWED BY:	

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

SEAL
NORTH CAROLINA
PROFESSIONAL
SEAL
030530
ENGINEER
ZACHARY M. LITTLE

REVISIONS	INIT.	DATE

DocuSigned by:
Zachary M. Little   11/8/2016
9C21EFD94F5341F
SIG. INVENTORY NO. 13-1118