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
```

LOGICAL I/O PROCESSOR PROGRAMMING COMPLETE

OVERLAP PROGRAMMING DETAIL FOR DEFAULT PHASING

(program controller as shown below)

FROM MAIN MENU PRESS '8' (OVERLAPS).
THEN '1' (VEHICLE OVERLAP SETTINGS).

```
PAGE 1: VEHICLE OVERLAP 'A' SETTINGS
PHASE:        :123456789101112131415 16
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)........O
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 '+' TWICE

```
PAGE 1: VEHICLE OVERLAP 'C' SETTINGS
PHASE:        :123456789101112131415 16
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)........O
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 '+'

```
PAGE 1: VEHICLE OVERLAP 'D' SETTINGS
PHASE:        :123456789101112131415 16
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
SELECT VEHICLE OVERLAP OPTIONS:   (Y/N)
FLASH YELLOW IN CONTROLLER FLASH?...N
GREEN EXTENSION (0-255 SEC)........O
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

OVERLAP PROGRAMMING COMPLETE

OVERLAP PROGRAMMING DETAIL FOR ALTERNATE PHASING

(program controller as shown below)

FROM MAIN MENU PRESS '8' (OVERLAPS).
THEN '1' (VEHICLE OVERLAP SETTINGS).
PRESS 'NEXT' TO ADVANCE TO PAGE 2.

NOTICE PAGE 2 →
```
PAGE 2: VEHICLE OVERLAP 'A' SETTINGS
PHASE:        :123456789101112131415 16
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  _ GREEN
SELECT VEHICLE OVERLAP OPTIONS:   (Y/N)
FLASH YELLOW IN CONTROLLER FLASH?...N
GREEN EXTENSION (0-255 SEC)........O
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 '+' TWICE

NOTICE PAGE 2 →
```
PAGE 2: VEHICLE OVERLAP 'C' SETTINGS
PHASE:        :123456789101112131415 16
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  _ GREEN
SELECT VEHICLE OVERLAP OPTIONS:   (Y/N)
FLASH YELLOW IN CONTROLLER FLASH?...Y
GREEN EXTENSION (0-255 SEC)........O
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
```
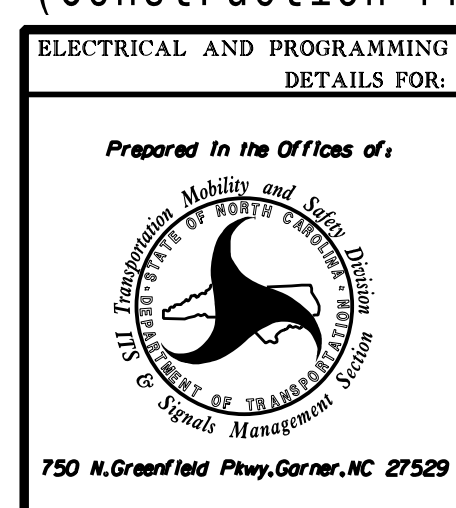
PRESS '+'

NOTICE PAGE 2 →
```
PAGE 2: VEHICLE OVERLAP 'D' SETTINGS
PHASE:        :123456789101112131415 16
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
SELECT VEHICLE OVERLAP OPTIONS:   (Y/N)
FLASH YELLOW IN CONTROLLER FLASH?...N
GREEN EXTENSION (0-255 SEC)........O
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

OVERLAP PROGRAMMING COMPLETE

OUTPUT REFERENCE SCHEDULE
USE TO INTERPRET LOGIC PROCESSOR

```
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
```
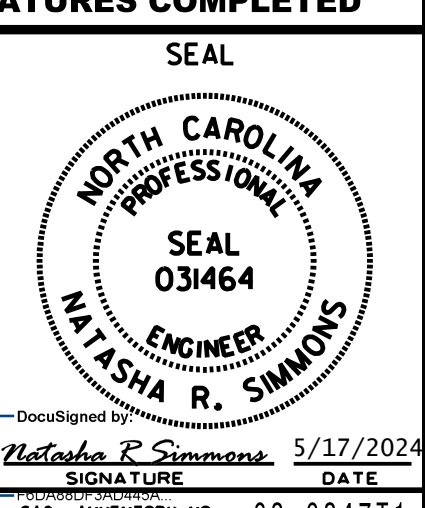

Signal Upgrade-
Electrical Detail - Sheet 2 of 5
(Construction Phase 1)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

```
THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 03-0847T1
DESIGNED: May 2022
SEALED: 5/17/2024
REVISED:
```

ELECTRICAL AND PROGRAMMING DETAILS FOR:
Prepared In the Offices of:

SR 2048 (Gordon Rd)
at
SR 2698 (Netherlands Dr/
Eaton Elementary School

Division 3	New Hanover County	Wilmington
PLAN DATE: August 2023	REVIEWED BY: N.K. Vlanich	
PREPARED BY: E.E. Tiller	REVIEWED BY: N.R. Simmons	

REVISIONS		INIT.	DATE

SEAL
NORTH CAROLINA
PROFESSIONAL
SEAL
031464
ENGINEER
NATASHA R. SIMMONS

DocuSigned by:
Natasha R Simmons 5/17/2024
SIGNATURE   DATE

SIG. INVENTORY NO. 03-0847T1