

**LOGICAL I/O PROCESSOR PROGRAMMING DETAIL  
TO PRODUCE SPECIAL FYA-PPLT SIGNAL SEQUENCE**

(program controller as shown below)

- 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.
- 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 2 (HEAD 11).

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 11).

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 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 #42 ON  
SET OUTPUT ASSIGNMENT #43 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 #44 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 #43 ON

PRESS '+'

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

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

**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: 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)...0.0

← NOTICE GREEN FLASH

PRESS '+' TWICE

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?...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)...0.0

← NOTICE GREEN FLASH

PRESS '+' TWICE

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: 12345678910111213141516  
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)...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)...0.0

← NOTICE GREEN FLASH

PRESS '+' TWICE

NOTICE PAGE 2 → PAGE 2: VEHICLE OVERLAP 'C' SETTINGS  
PHASE: 12345678910111213141516  
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)...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)...0.0

← NOTICE GREEN FLASH

PRESS '+' TWICE

OVERLAP PROGRAMMING COMPLETE

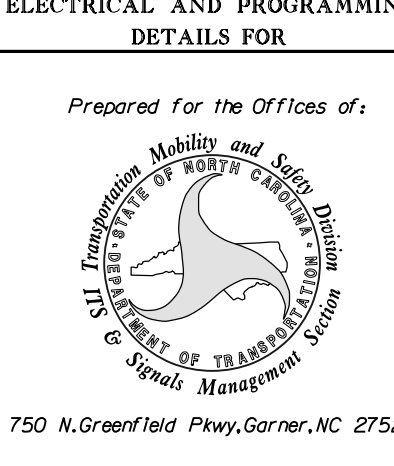
THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 08-0047T1  
DESIGNED: OCTOBER 2019  
SEALED: 10-03-2019  
REVISED:

Temporary Design 1 - (TMP Phase I & II)  
Electrical Detail - Sheet 2 of 5

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



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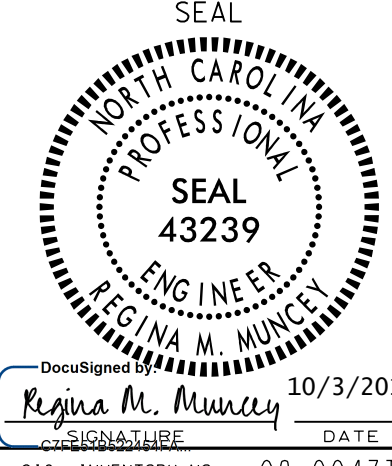


ELECTRICAL AND PROGRAMMING DETAILS FOR  
Prepared for the Offices of:  
North Carolina Department of Transportation  
750 N. Greenfield Pkwy, Garner, NC 27529

US 421 Business/  
NC 87-42 (S. Horner Boulevard)  
at  
NC 78-42 (Main Street)  
Division 8 Lee County Sanford

PLAN DATE: October 2019 REVIEWED BY: E D Harris  
PREPARED BY: R M Muncie REVIEWED BY:

REVISIONS	INIT.	DATE



SEAL  
REGINA M. MUNCIE  
ENGINEER  
43239

DocuSigned by:  
Regina M. Muncie  
10/3/2019  
DATE

SIG. INVENTORY NO. 08-0047T1

9/26/2019 AM  
U:\Projects\Signal\Signal\Detail\Signal\Temporary Design\08-0047T1.dgn  
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