

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 2 RED
CLEAR WHEN
TRANSITIONING
FROM Phase 2
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 2
(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 2
(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

LOGICAL I/O PROCESSOR PROGRAMMING COMPLETE

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

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

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

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

NOTICE
GREEN
FLASH

PRESS '+'

PAGE 1: VEHICLE OVERLAP 'D' 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 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

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 - RED - 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
PAGE 2

PRESS '+' TWICE

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

NOTICE
GREEN
FLASH

PRESS '+'

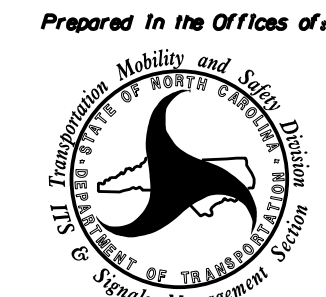
OVERLAP PROGRAMMING COMPLETE

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

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED


THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 03-0847T2
DESIGNED: May 2022
SEALED: 5/17/2024
REVISED:

ELECTRICAL AND PROGRAMMING
DETAILS FOR:

Prepared in the Office of:

 North Carolina Department of Transportation
 Signal Management

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
ENGINEER
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031464
NATASHA R. SIMMONS

DocuSigned by:

 Natasha R. Simmons 5/17/2024
 SIGNATURE DATE
 SIG. INVENTORY NO. 03-0847T2