PROJECT REFERENCE NO.	SHEET NO.
W-5704E	Sig.4.2

LOGIC PROCESSOR PROGRAMMING

Front Panel
Main Menu >Controller >More >User Programs >Definition

Web Interface
Home >Controller >User Programs Configuration >User Programs Definition

Program 1

Statement	Result	Index	Operation	Parameter A	Index	Parameter B	Index	Delay	Ext
21	Phase Phase Omit	4	Result=!A	Preempt Status	2	None	0	0.0	0.0
22	Global Variable	33	Result=(A OR B)	Preempt Input	2	Preempt Status	2	0.0	0.0

LOGIC STATEMENT DESCRIPTION

Statement 21 Description: Omits phase 4 while not in preemption.

Statement 22 Description: Turns pilot lamp on when button is pushed.

OUTPUT POINTS PROGRAMMING

Front Panel
Main Menu >Controller >More >Advanced IO>Output Points

Web Interface
Home >Controller >Advanced IO>Cabinet Configuration>Output Points

Modify IO Module 1 as shown below and save changes.

IO Module 1

Output Point	Description	Output Control Type	Index
33	C1-35	Global Variable	33

OPERATIONAL NOTES

1. In order for the controller to perform the Emergency Hybrid Beacon (HAWK signal) sequence, the 332_NCDOT_HAWK default database must be installed on the controller.

2. The Logic Processor flashes Phase 2 Yellow during the Phase 2 Pre-Clearance interval. Phase 2 Yellow drives the solid yellow signal face during the Phase 2 vehicle Yellow Change.

3. The Phase 2 and Phase 6 Red outputs drives the solid Red displays during the Phase 2 and 6 Red Clear. The Logic Processor flashes Phase 2 and 6 Red Outputs in a wig-wag pattern during Phase 4 Ped Clear interval.

4. The controller must be programmed for Ped Clear During Red Clear for Pedestrian Phase 4 so that Red displays continue to flash during Phase 4 Yellow Change and Red Clear.

5. Make sure that all Phase 2 and Phase 6 timings match each other.

4/24/2025
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mstygles

PREEMPTION PROGRAMMING

Front Panel
Main Menu >Controller >Preemption >Preempt Phasing/Preempt Parameters

Web Interface
Home >Controller >Preempt Configuration >Preempts

Preempt Configuration

Preempt	2
Enabled	Enabled
Type	Emergency Veh
Track Phases	-
Track Overlaps	-
Dwell Phases	4
Dwell Peds	4
Dwell Overlaps	-
Cycling Phases	-
Cycling Peds	-
Cycling Overlaps	-
Exit Phases	2
Exit Overlaps	-
Delay	*
Call Ext Time	2.0
Max Presence	0
Max Pres Act	Terminate
Enter Min Green	1
Enter Walk	255
Enter Ped Clear	255
Enter Yellow Change	25.5
Enter Red Clear	25.5
Track Green	0
Track Yellow Clr	25.5
Track Red Clear	25.5
Dwell Green	*
Exit Min Green	255
Exit Yellow Change	25.5
Exit Red Clear	25.5
Exit Type	Exit Phases
Non Locking Memory	-
Not Ovrd Flash	X
Not Ovrd Nxt Pre	-
Require All Red Entry	-
Track Clear Ovrd	X
Ped Clear During Yellow	-
Entry Omit OLTG	-
Track Reserve	-

* The Division Traffic Engineer will determine the Delay before Preempt time and Dwell Green time.

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 04-1471
DESIGNED: April 2025
SEALED: 04/24/25
REVISED: N/A

VHB Engineering NC, P.C. (C-3705)
940 Main Campus Drive, Suite 500
Raleigh, NC 27606
919.829.0328

Electrical Detail - Sheet 2 of 3 - Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared In the Offices of:
Transportation Mobility and Safety Division – ITS & Signals Management Section – State of North Carolina Department of Transportation
750 N.Greenfield Pkwy,Garner,NC 27529

SR 1700 (Covered Bridge Road) at Archer Lodge Fire Department

Divison 4 | Johnston County | Archer Lodge

PLAN DATE:	April 2025	REVIEWED BY:	M.L. Stygles
PREPARED BY:	L. Gottlieb	REVIEWED BY:	J. Ma

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 046057 MATTHEW L. STYGLES

Signed by:
394B61E9449746C...
4/24/2025
DATE

SIG. INVENTORY NO. 04-1471