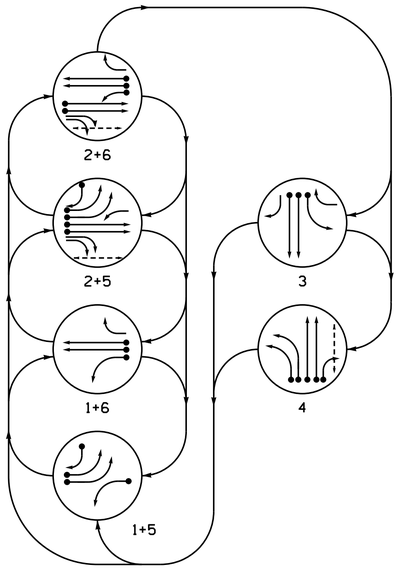
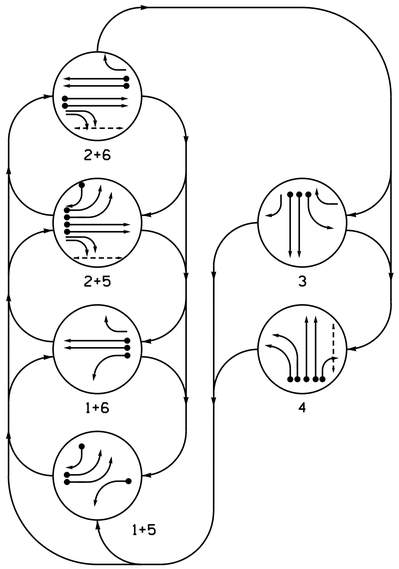
PROJECT REFERENCE NO.	SHEET NO.
U-5789	Sig. 2.1

DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM

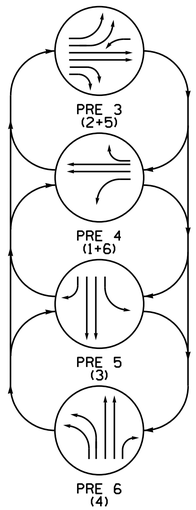


PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

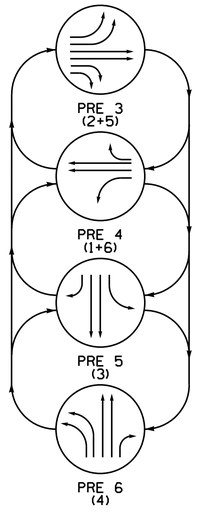
DEFAULT EV PREEMPT PHASES

(Medium Priority)



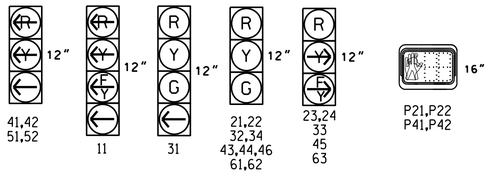
ALTERNATE EV PREEMPT PHASES

(Medium Priority)



SIGNAL FACE I.D.

All Heads L.E.D.



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE											
	1+5	1+6	2+5	2+6	3	4	PRE3	PRE4	PRE5	PRE6	FLASH
11	—	—	F	F	~~R~~	~~R~~	F	—	~~R~~	~~R~~	~~R~~
21,22	R	R	G	G	R	R	G	R	R	R	R
23,24	R	R	F	F	R	R	F	R	R	R	R
31	R	R	R	R	G	R	R	R	G	R	R
32,34	R	R	R	R	G	R	R	R	G	R	R
33	F	R	F	R	F	R	R	R	F	R	R
41,42	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	—	~~R~~	~~R~~	~~R~~	—	~~R~~
43,44,46	R	R	R	R	R	G	R	R	R	G	R
45	R	R	R	R	R	F	R	R	R	F	R
51,52	—	~~R~~	—	~~R~~	~~R~~	~~R~~	—	~~R~~	~~R~~	~~R~~	~~R~~
61,62	R	G	R	G	R	R	R	G	R	R	R
63	R	F	R	F	F	F	R	R	F	R	R
P21,P22	DW	DW	W	W	DW	DW	DW	DW	DW	DW	DRK
P41,P42	DW	DW	DW	W	DW	W	DW	DW	DW	DW	DRK

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE										
	1+5	1+6	2+5	2+6	3	4	PRE3	PRE4	PRE5	PRE6	FLASH
11	—	—	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	—	~~R~~	~~R~~	~~R~~
21,22	R	R	G	G	R	R	G	R	R	R	R
23,24	R	R	F	F	R	R	F	R	R	R	R
31	R	R	R	R	G	R	R	R	G	R	R
32,34	R	R	R	R	G	R	R	R	G	R	R
33	F	R	F	R	F	R	R	R	F	R	R
41,42	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	—	~~R~~	~~R~~	~~R~~	—	~~R~~
43,44,46	R	R	R	R	R	G	R	R	R	G	R
45	R	R	R	R	R	F	R	R	R	F	R
51,52	—	~~R~~	—	~~R~~	~~R~~	~~R~~	—	~~R~~	~~R~~	~~R~~	~~R~~
61,62	R	G	R	G	R	R	R	G	R	R	R
63	R	F	R	F	F	F	R	F	R	R	R
P21,P22	DW	DW	W	W	DW	DW	DW	DW	DW	DW	DRK
P41,P42	DW	DW	DW	DW	DW	W	DW	DW	DW	DW	DRK

6 Phase
Fully Actuated
w/ EV Preemption
Jacksonville City Signal System

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024, "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. The order of phase 3 and phase 4 may be reversed.
5. Reposition existing signal heads numbered 11, 31, 41, and 43.
6. Reposition head 33 and renumber as 34.
7. Set all detector units to presence mode.
8. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
9. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
10. Remove existing signs R3-5L, R3-6L, R3-6R, and R10-16.
11. To provide a leading pedestrian interval on phases 2 and 4, program FYA heads 11, 23, 24, and 45 to delay 7.0 seconds after the start of the phase 2 or 4 WALK interval.See Electrical Details for programming.
12. This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
13. The Division (City) Traffic Engineer will determine the hours of use for each phasing plan.
14. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
15. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

Project #: 230907

DAVENPORT
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WINSTON-SALEM, NC 27101
336.744.1636 www.davenportworld.com
NCBELS FIRM LICENSE NO. C-2522

Signal Upgrade - Sheet 2 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for: Transportation Mobility and Safety Division, NORTH CAROLINA DEPARTMENT OF TRANSPORTATION, Signal Design Section

750 N.Greenfield Pkwy.Garner,NC 27529

NC 53(Western Boulevard)
at
SR 2714(Jacksonville Parkway)/
Gateway North

Division 03 Onslow County Jacksonville

PLAN DATE:	May 2025	REVIEWED BY:	L. Boyer
PREPARED BY:	J. Dollarhite	REVIEWED BY:	

REVISIONS	INIT.	DATE

SCALE 0

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 030912 ENGINEER LORI M. BOYER

Signed by: Lori M Boyer 07/07/2025
2FBA4516878A460...
SIGNATURE DATE

SIG. INVENTORY NO. 03-0822