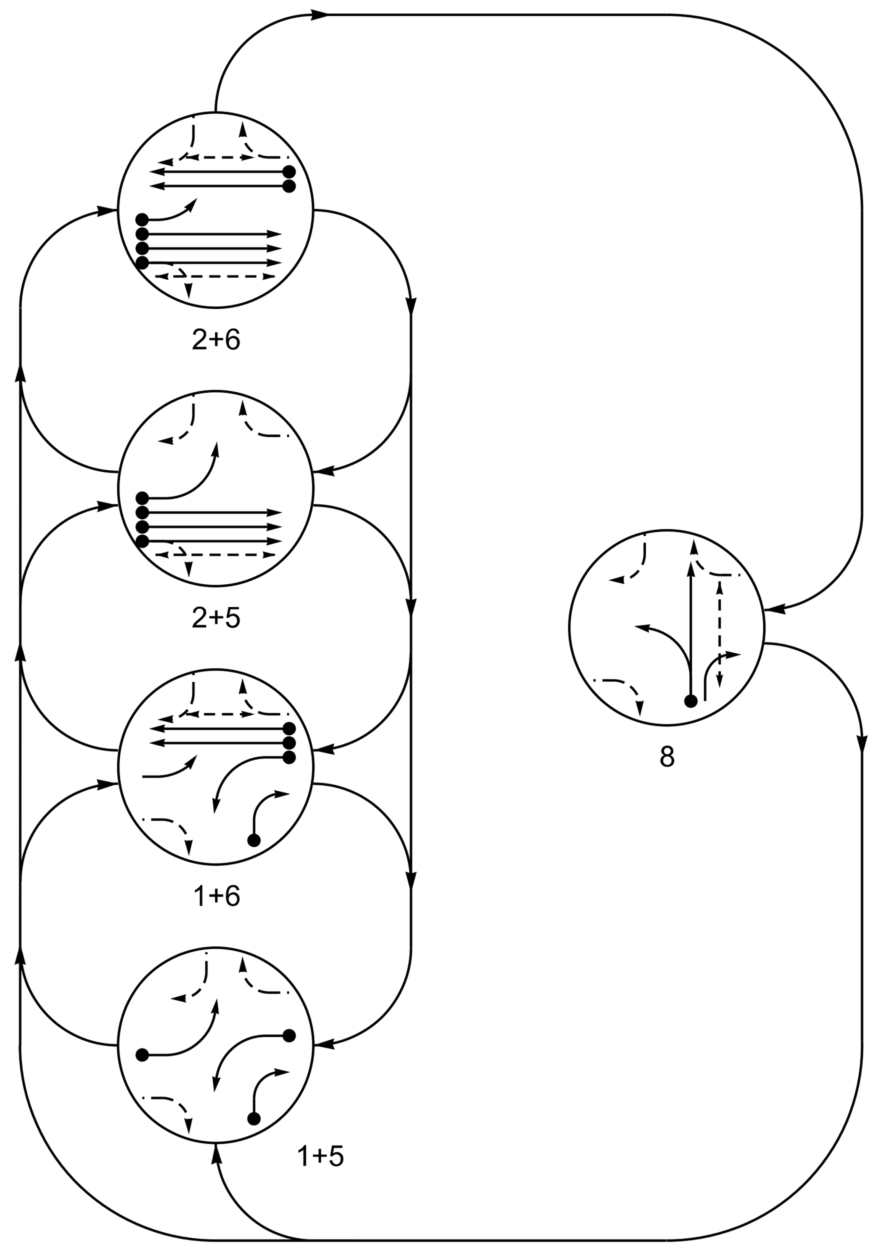
DEFAULT PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

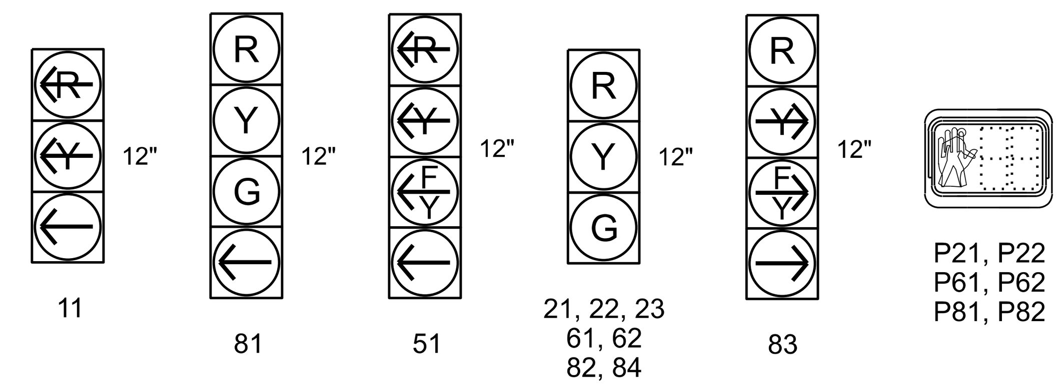
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

DEFAULT PHASING TABLE OF OPERATION

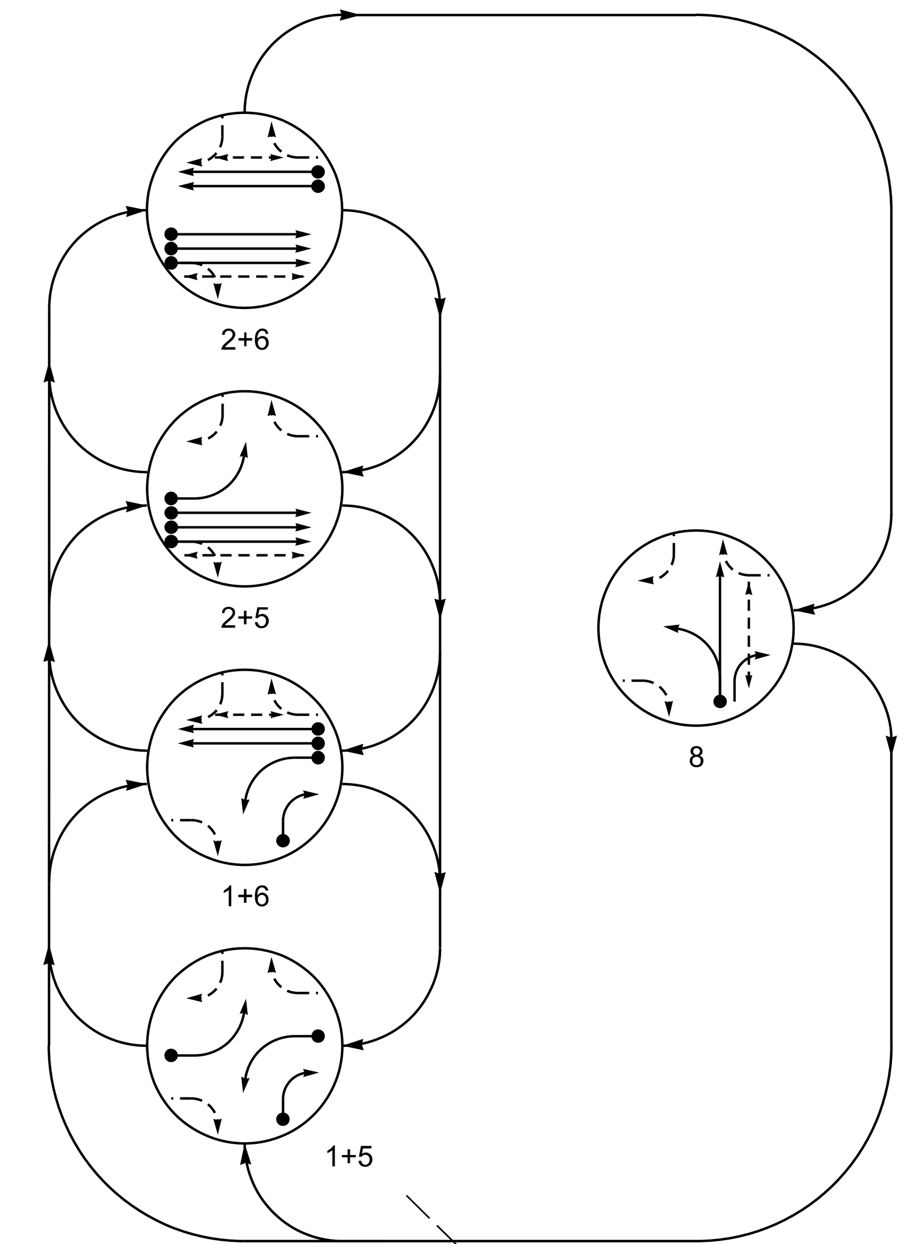
SIGNAL FACE	PHASE 1+5	1+6	2+5	2+6	8	FLASH
11	←	←	←R	←R	←R	←R
21, 22, 23	R	R	G	G	R	R
51	←	←F/Y	←	←F/Y	←R	←R
61, 62	R	G	R	G	R	R
81	R	R	R	R	G ←	R
82, 84	R	R	R	R	G	R
83	→	→	R	R	F/Y→	R
P21, P22	DW	DW	W	W	DW	DRK
P61, P62	DW	W	DW	W	DW	DRK
P81, P82	DW	DW	DW	DW	W	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



ALTERNATE PHASING DIAGRAM



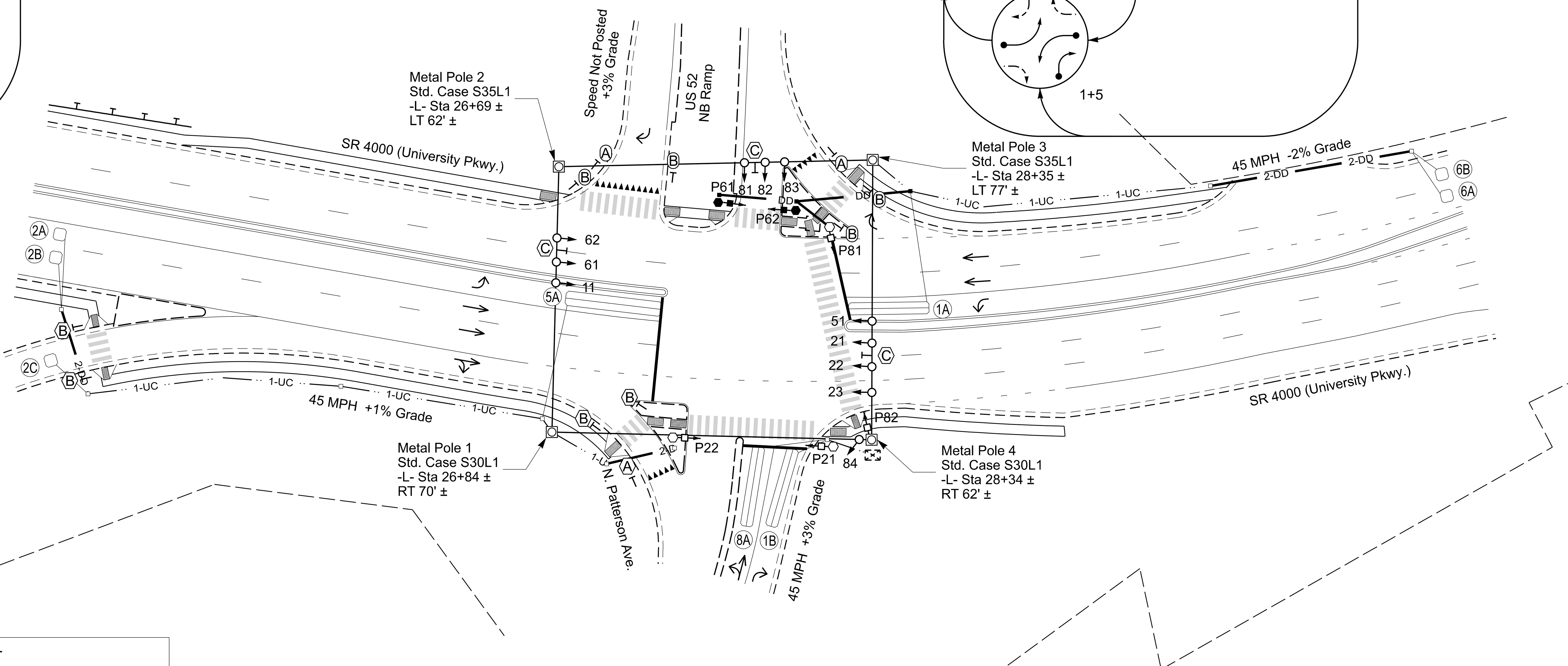
ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 1+5	1+6	2+5	2+6	8	FLASH
11	←	←	←R	←R	←R	←R
21, 22, 23	R	R	G	G	R	R
51	←	←R	←	←R	←R	←R
61, 62	R	G	R	G	R	R
81	R	R	R	R	G ←	R
82, 84	R	R	R	R	G	R
83	→	→	R	R	F/Y→	R
P21, P22	DW	DW	W	W	DW	DRK
P61, P62	DW	W	DW	W	DW	DRK
P81, P82	DW	DW	DW	DW	W	DRK

5 Phase
Fully Actuated
(Winston-Salem Signal System)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "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. Set all detector units to presence mode.
5. In the event of loop replacement, refer to the current TSMO Design Manual and submit a Plan of Record to the Signal Design Section.
6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
8. The Division (City) Traffic Engineer will determine the hours of use for each phasing plan.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
X-UC	2-in Underground Conduit	UC
N/A	Right of Way	
	Directional Arrow	
N/A	Curb Ramp	
N/A	Guardrail	
	Type II Signal Pedestal	
	Metal Strain Pole	
A	"YIELD" Sign (R1-2)	A
B	Pedestrian Crossing Sign (W11-2) with Diagnol Downward Arrow (W16-7P)	B
C	Street Name Sign By Others (D3-1)	C

OASIS 2070 TIMING CHART

FEATURE	PHASE 1	2	5	6	8
Min Green 1*	7	12	7	12	7
Extension 1*	2.0	6.0	2.0	6.0	2.0
Max Green 1*	25	90	35	90	35
Yellow Clearance	3.0	4.7	3.0	4.7	4.3
Red Clearance	2.8	1.4	2.3	1.4	2.0
Red Revert	2.0	2.0	2.0	2.0	2.0
Advance Walk	-	7	-	7	5
Walk 1*	-	14	-	14	12
Don't Walk 1	-	16	-	4	22
Seconds Per Actuation*	-	1.5	-	1.5	-
Max Variable Initial*	-	34	-	34	-
Time Before Reduction*	-	15	-	15	-
Time To Reduce*	-	30	-	30	-
Minimum Gap	-	3.0	-	3.0	-
Recall Mode	-	MIN RECALL	-	MIN RECALL	-
Vehicle Call Memory	-	YELLOW	-	YELLOW	-
Dual Entry	-	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

INDUCTIVE LOOPS					DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOP LINE (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	Y	1	Y	Y	-	-	-	-	Y
1B	6X40	0	2-4-2	Y	1	Y	Y	-	-	15	-	Y
2A	6X6	300	5	Y	2	Y	Y	-	-	-	-	Y
2B	6X6	300	5	Y	2	Y	Y	-	-	-	-	Y
2C	6X6	300	5	Y	2	Y	Y	-	-	-	-	Y
5A	6X40	0	2-4-2	Y	5	Y	Y	-	-	15*	-	Y
					2#	Y	Y	Y	-	3	-	Y
6A	6X6	300	5	Y	6	Y	Y	-	-	-	-	Y
6B	6X6	300	5	Y	6	Y	Y	-	-	-	-	Y
8A	6X40	0	2-4-2	Y	8	Y	Y	-	-	-	-	Y

* Reduce Delay to 3 seconds during Alternate Phasing Operation.
\# Disable phase call for loop during Alternate Phasing Operation.

Signal Upgrade - Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Offices of:
Transportation Mobility and Safety Division
State of North Carolina Department of Transportation
Signal Design Section
750 N. Greenfield Pkwy, Garner, NC 27529

SR 4000 (University Parkway) at N. Patterson Avenue and US 52 NB Ramps

Division 9 | Forsyth County | Winston-Salem

PLAN DATE: December 2025	REVIEWED BY:
PREPARED BY: J.A. Lohr	REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL
North Carolina Professional Engineer Seal 026486 Robert J. Ziemba

DocuSigned by: 1B9B4B66274A494... DATE 02/12/2026

SIG. INVENTORY NO. 09-0798