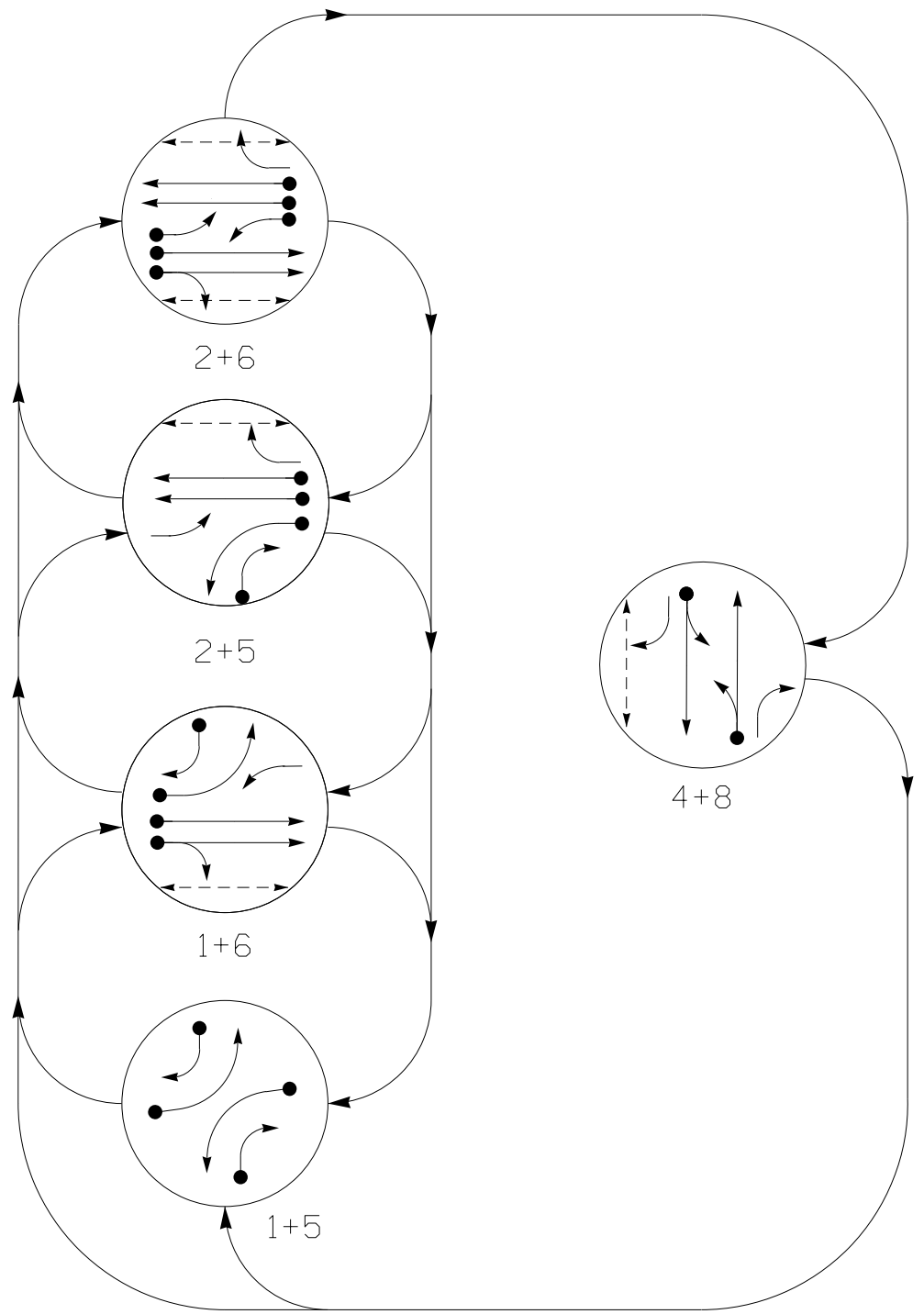


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

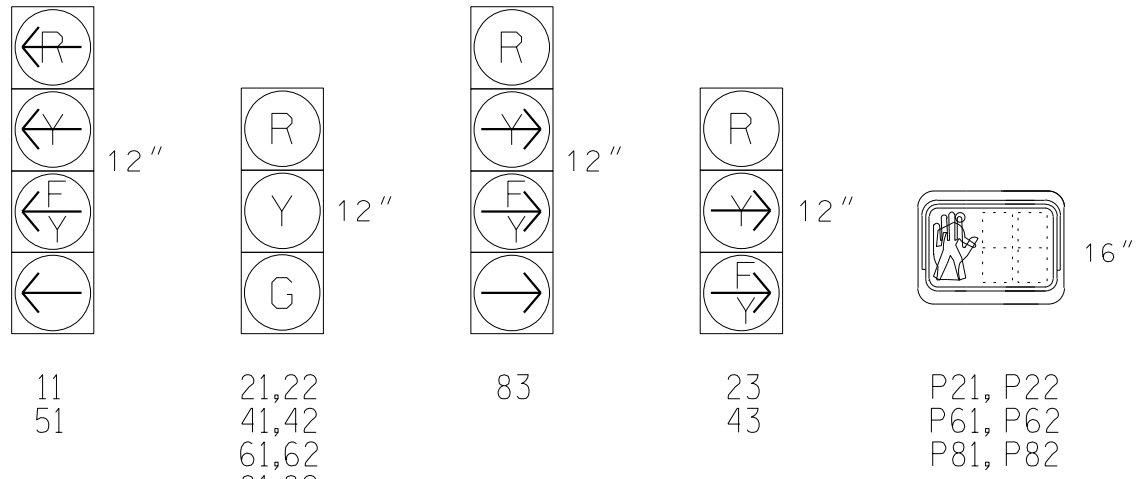
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE					FLASH
	1 + 5	1 + 6	2 + 5	2 + 6	4 + 8	
11	←	←	←	←	←	
21, 22	R	R	G	G	R	R
23	R	R	←	←	R	R
41, 42	R	R	R	R	G	R
43	←	←	←	←	←	R
51	←	←	←	←	←	
61, 62	R	G	R	G	R	R
81, 82	R	R	R	R	G	R
83	→	→	R	R	←	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.



MAXTIME DETECTOR INSTALLATION CHART

DETECTOR					PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURN	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A	6X40	0	*	*	1	15.0	-	X	-	X	*
1B	*	0	*	X	1	15.0	-	X	-	X	*
4A	*	0	*	X	4	5.0	-	X	-	X	*
5A	6X40	0	*	*	5	15.0	-	X	-	X	*
5B	*	0	*	X	5	15.0	-	X	-	X	*
8A	*	0	*	X	8	5.0	-	X	-	X	*

* Multi-Zone Microwave Detection Zone

5 Phase Fully Actuated (NC 107 - D14-14)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Set all detectors to presence mode.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- To provide a leading pedestrian interval on Phase 2, program FYA heads numbered 11 and 23 to delay for 7 seconds after the start of the phase 2 walk interval. See Electrical Details for programming.
- This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- 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 With Push Button & Sign	⊥
○	Signal Pole with Guy	●
○	Signal Pole with Sidewalk Guy	●
⊗	Inductive Loop Detector	⊗
⊗	Controller & Cabinet	⊗
⊗	Junction Box	⊗
⊗	Oversized Junction Box	⊗
⊗	2-in Underground Conduit	⊗
N/A	Right of Way	---
→	Directional Arrow	→
→	Directional Drill	→
⊗	Metal Pole with Mastarm	⊗
⊗	Type I Pushbutton Post	⊗
⊗	Type II Signal Pedestal	⊗
⊗	Non-Intrusive Detection Zone	⊗
N/A	Underground Fiber Optics Telephone Cable	---
N/A	Overhead Power & Utilities Lines	---
N/A	Underground Power Line	---
N/A	Underground Water Line	---
N/A	Underground Telephone Cable	---
⊗	"RIGHT TURN SIGNAL" Sign (R10-10R)	⊗
⊗	Right Turn Yield to U-Turn Sign (R10-30)	⊗

MAXTIME TIMING CHART

FEATURE	PHASE					
	1	2	4	5	6	8
Walk *	-	14	-	-	12	14
Ped Clear	-	15	-	-	7	23
Min Green *	7	12	7	7	12	7
Passage *	2.0	2.0	2.0	2.0	2.0	2.0
Max 1 *	15	120	40	15	120	40
Yellow Change	3.0	5.0	3.5	3.1	5.0	3.5
Red Clear	2.9	2.1	4.7	3.3	2.1	4.7
Added Initial *	-	-	-	-	-	-
Maximum Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Advance Walk	-	**	-	-	5	7
Non Lock Detector	X	-	X	X	-	X
Vehicle Recall	-	MIN RECALL	-	-	MIN RECALL	-
Dual Entry	-	-	X	-	-	X

- * 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.
- ** See note #7

Microwave Detection

	②A	⑥A
FUNCTION	Sensor 1	Sensor 2
Channel	1	1
Phase	2	6
Direction of Travel	NB	SB
Type	Priority	Priority
Level	2	2
Detection Zone (ft)	< 750	< 750
Range (ft)	600-100	150-100
Enable Speed	Y	Y
Speed Range (mph)	35-100	1-35
Enable Estimated Time of Arrival	Y	Y
Estimated Time of Arrival (sec)	2.5-6.5	2.5-6.5

Signal Upgrade - Final Design



Prepared for: TRANSPORTATION MOBILITY AND SAFETY DIVISION DEPARTMENT OF TRANSPORTATION SIGNAL DESIGN SECTION	NC 107 at SR 1724 (Fairview Road) / CVS Driveway Division 14 Jackson County Sylva PLAN DATE: August 2025 PREPARED BY: DS Griffith REVIEWED BY: ZM Esposito REVIEWED BY: BN Groome	DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED SEAL BRITANNY N. GROOME ENGINEER 052936 8/26/2025 SIC. INVENTORY NO. 14-0790
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