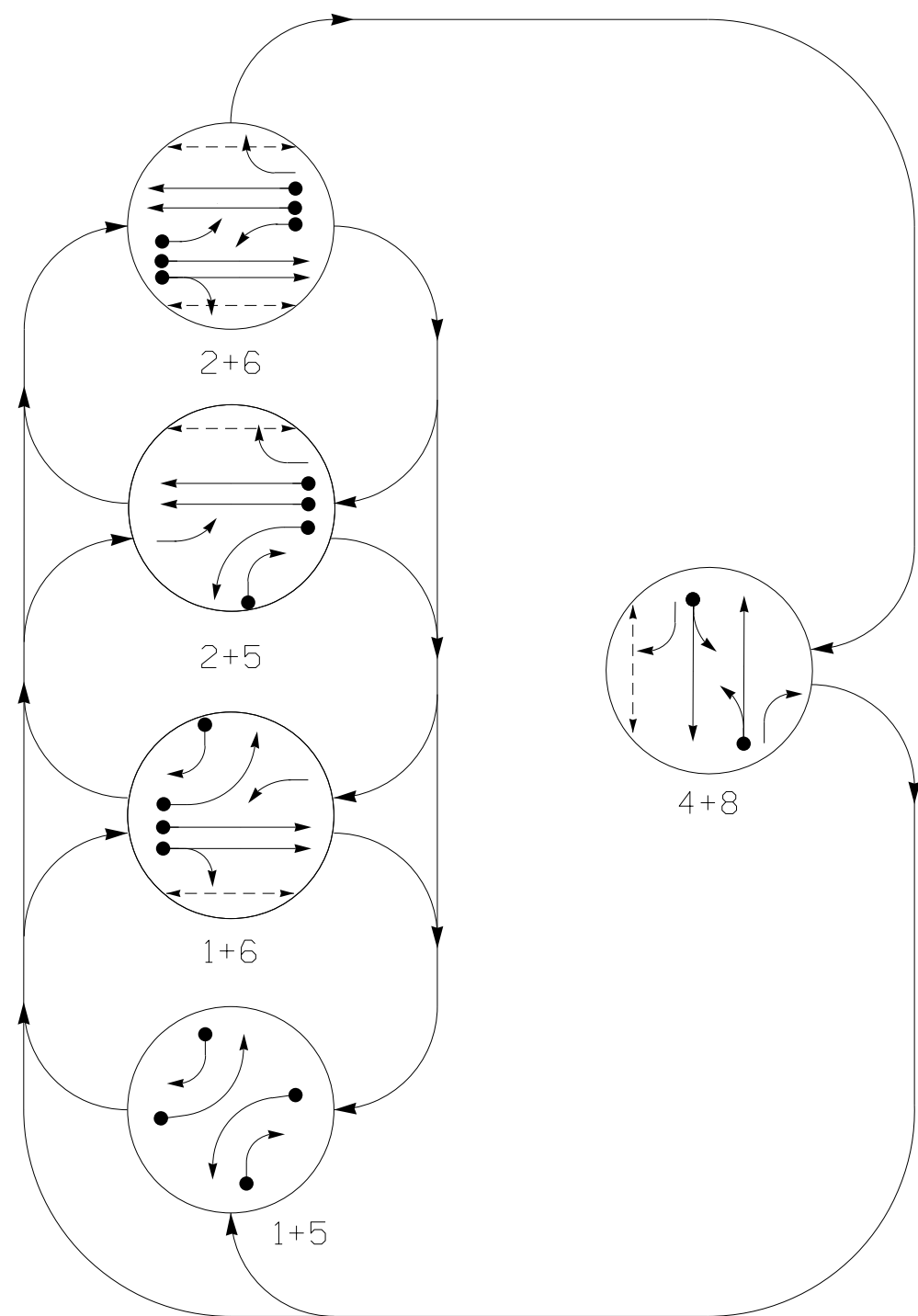


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

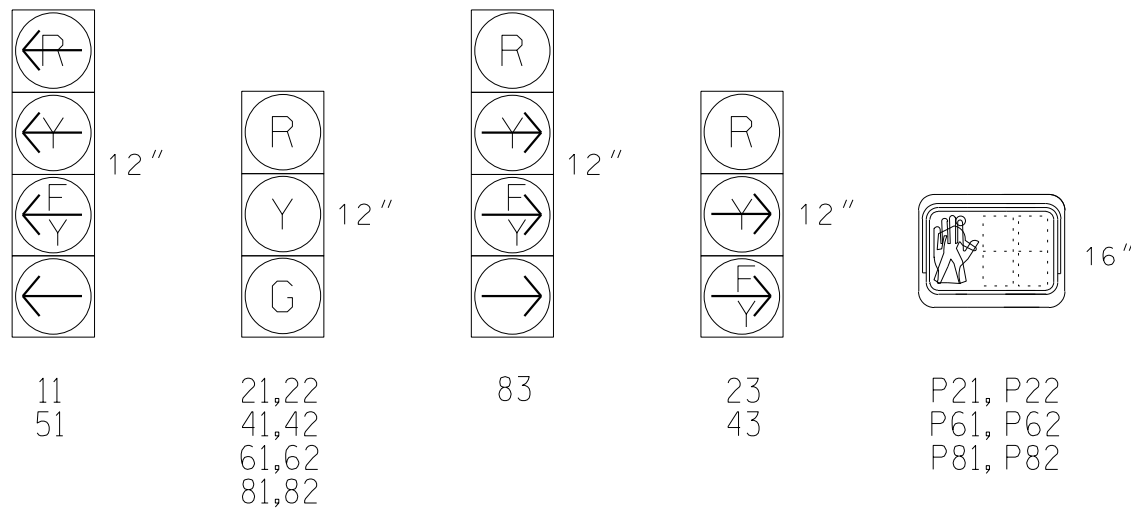
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE					
	1+5	1+6	2+5	2+6	4+8	FLASH
11	←	←	←	←	←	←
21, 22	R	R	G	G	R	R
23	R	R	←	←	R	R
41, 42	R	R	R	R	G	R
43	←	←	←	←	←	←
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	DW	DW	DRK
P81, P82	DW	DW	DW	DW	W	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART

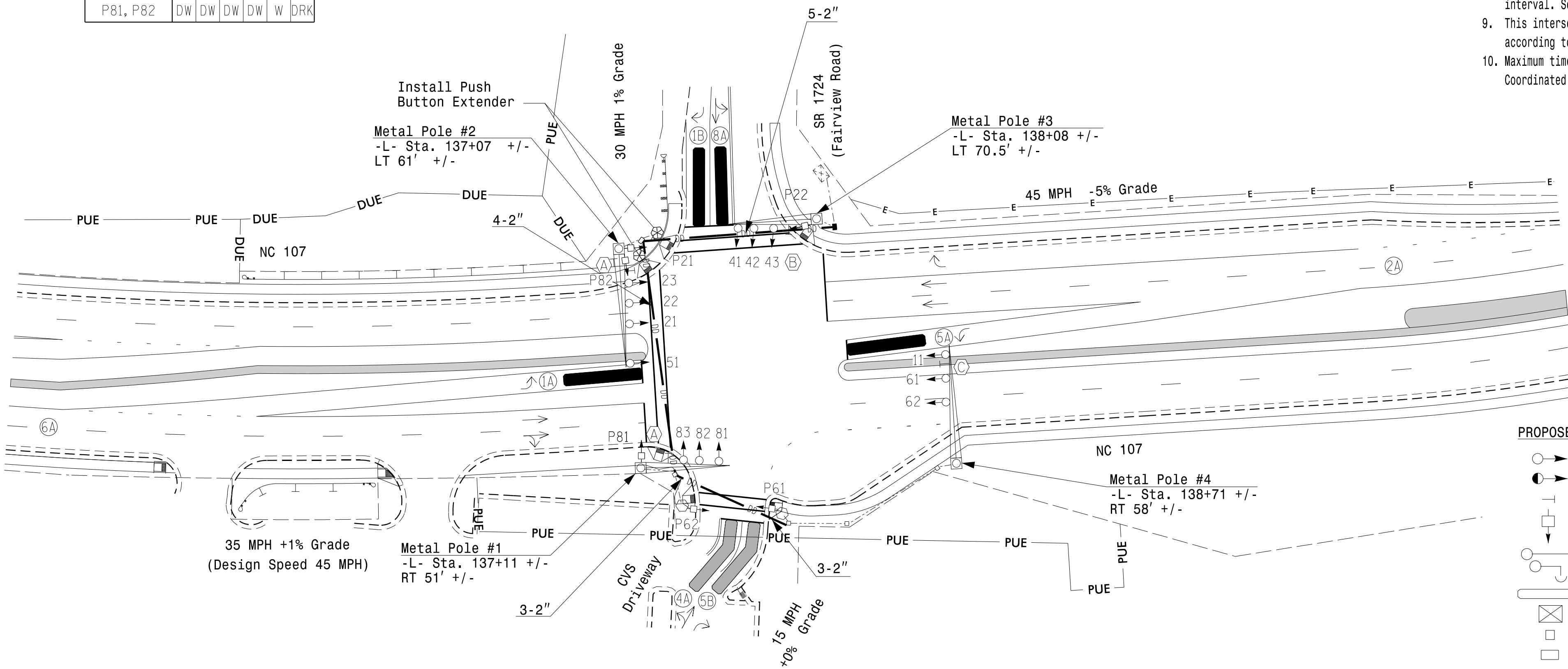
DETECTOR					PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURN	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	NEW CARD
1A	6X40	0	*	*	1	15.0	-	X	-	X	*
1B	*	0	*	X	1	15.0	-	X	-	X	*
4A	*	0	*	X	4	5.0	-	X	-	X	*
5A	6X40	0	*	*	5	15.0	-	X	-	X	*
5B	*	0	*	X	5	15.0	-	X	-	X	*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

* Multi-Zone Microwave Detection Zone

5 Phase Fully Actuated (Time Based Coordination)

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.
- Reposition existing signal heads numbered 11, 21, 22, 23, 41, 42, 43, 51, 61 and 62.
- 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

MAXTIME TIMING CHART

FEATURE	PHASE					
	1	2	4	5	6	8
Walk *	-	14	-	-	12	14
Ped Clear *	-	15	-	-	8	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	30	15	120	30
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 #8

Microwave Detection

FUNCTION	Sensor 1		Sensor 2	
	2	QUEUE	2	QUEUE
Detection Zone (ft)	< 750	-	< 750	-
Range (ft)	600-100	150-100	600-100	150-100
Enable Speed	Y	Y	Y	Y
Speed Range (mph)	35-100	1-35	35-100	1-35
Enable Estimated Time of Arrival	Y	N	Y	N
Estimated Time of Arrival (sec)	2.5-6.5	-	2.5-6.5	-

Signal Upgrade Temporary Design 4 - TMP Ph3, S1



Prepared for:

Transportation Mobility and Safety Division
DEPARTMENT OF TRANSPORTATION
SIGNAL DESIGN SECTION

NC 107 at SR 1724 (Fairview Road) / CV8 Driveway
Division 14 Jackson County Sylva

PLAN DATE: August 2025
REVIEWED BY: ZM Esposito
PREPARED BY: DS Griffith
REVIEWED BY: BN Groome

REVISIONS

INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

BRITANNY N. GROOME
ENGINEER
052936

Signed by: *Brittany Groome* 8/26/2025
DATE

SIG. INVENTORY NO. 14-079014