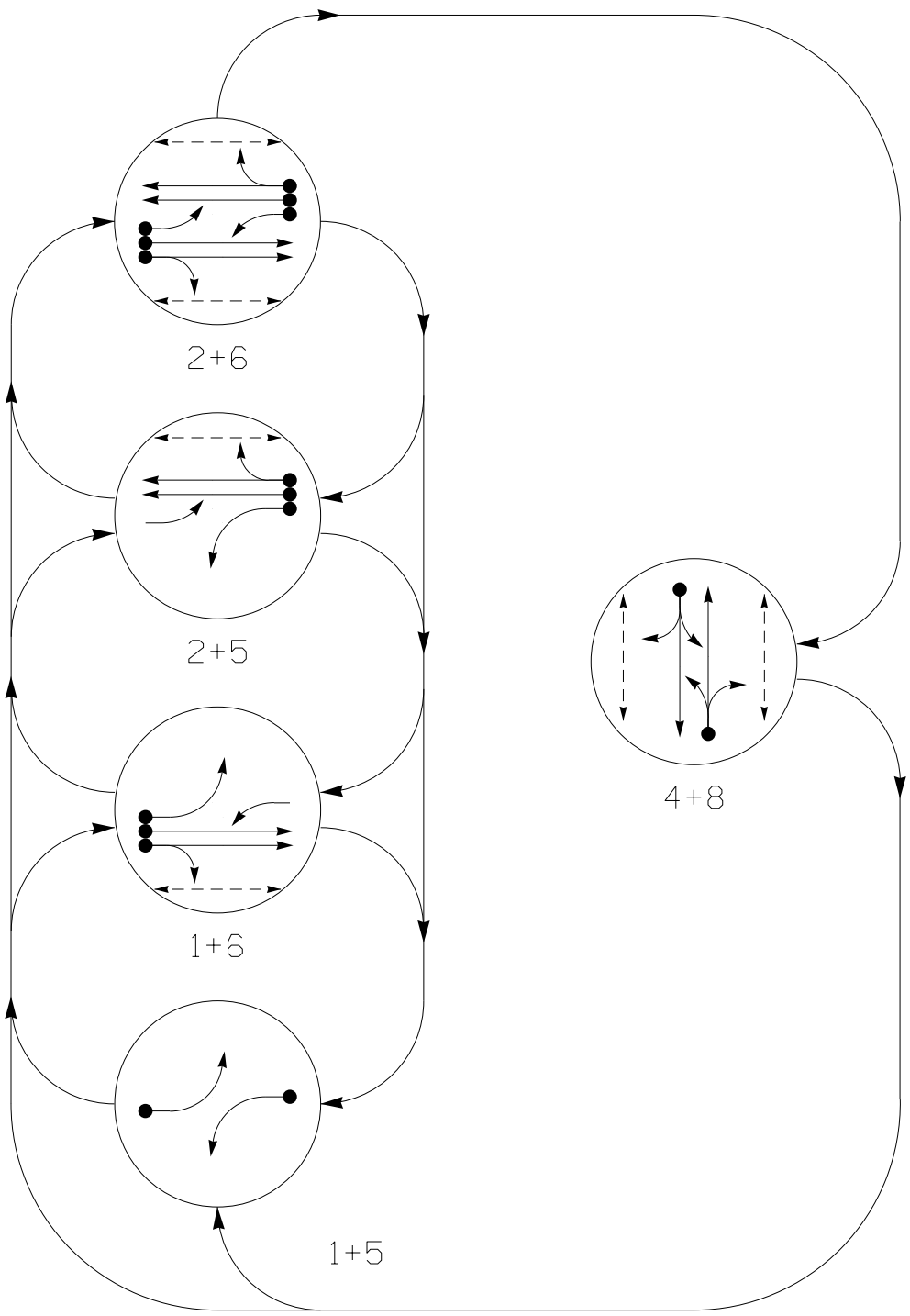


PHASING DIAGRAM



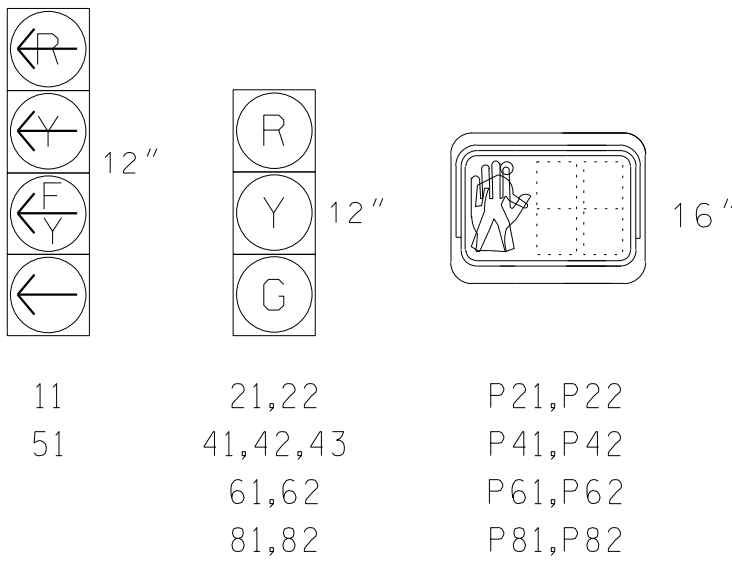
PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE					
	1 + 5	1 + 6	2 + 5	2 + 6	4 + 8	FLASH
11	←	←	←	←	←	←
21,22	R	R	G	G	R	R
41,42,43	R	R	R	R	G	R
51	←	←	←	←	←	←
61,62	R	G	R	G	R	R
81,82	R	R	R	R	G	R
P21,P22	DW	DW	W	W	DW	DRK
P41,P42	DW	DW	DW	DW	W	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.



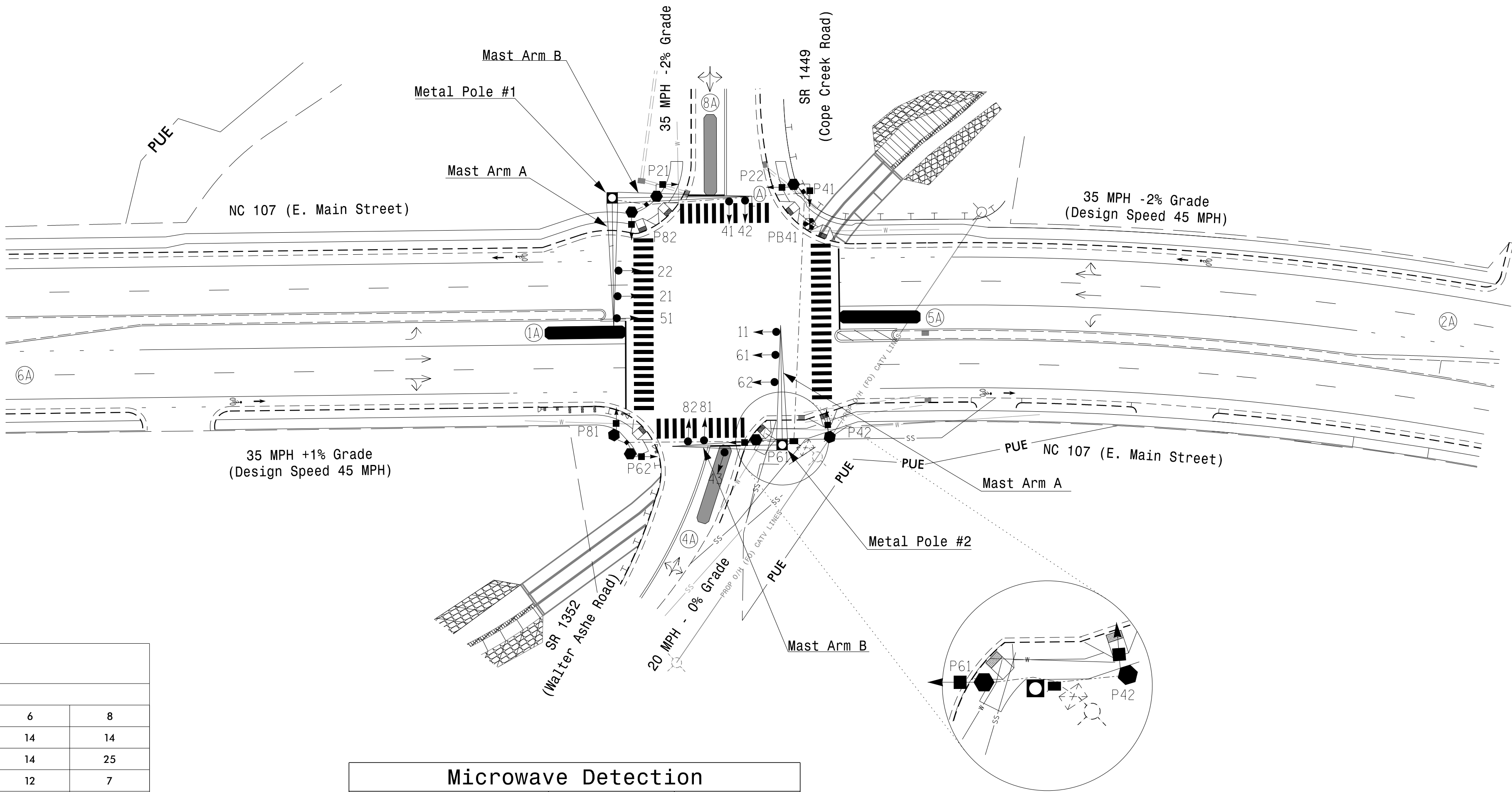
MAXTIME DETECTOR INSTALLATION CHART												
DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A	*	0	*	X	1 6	15.0 -	-	X	-	X	-	*
4A	*	0	*	X	4	5.0	-	X	-	X	-	*
5A	*	0	*	X	5 2	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.
- Reposition existing signal heads 11 and 51.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- 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	N/A
Modified Signal Head	N/A
Sign	N/A
Pedestrian Signal Head With Push Button & Sign	N/A
Signal Pole with Guy	N/A
Signal Pole with Sidewalk Guy	N/A
Inductive Loop Detector	N/A
Controller & Cabinet	N/A
Junction Box	N/A
Oversized Junction Box	N/A
2-in Underground Conduit	N/A
Right of Way	N/A
Directional Arrow	N/A
Non-Intrusive Detection Zone	N/A
Directional Drill	N/A
Metal Pole with Mastarm	N/A
Type I Pushbutton Post	N/A
Type II Signal Pedestal	N/A
Permanent Utility Easement	N/A
Guardrail	N/A
U/G Sanitary Sewer	N/A
U/G Water Line	N/A
O/H Pwr. & Util. Lines	N/A
Utility Pole	N/A
Right "TURNING VEHICLES" Yield "10" Pedestrians Sign (R10-15R)	N/A

MAXTIME TIMING CHART

FEATURE	PHASE					
	1	2	4	5	6	8
Walk *	-	14	14	-	14	14
Ped Clear	-	13	23	-	14	25
Min Green *	7	12	7	7	12	7
Passage *	3.0	2.0	2.0	2.0	2.0	2.0
Max 1 *	15	70	40	15	70	40
Yellow Change	3.0	4.7	4.0	3.0	4.7	4.0
Red Clear	2.8	2.0	3.5	2.9	2.0	3.5
Added Initial *	-	-	-	-	-	-
Maximum Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Advance Walk	-	7	7	-	7	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.

Microwave Detection

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

Plans Prepared By:



Signal Upgrade - Final Design

Prepared for: TRANSPORTATION MOBILITY AND SAFETY DIVISION NORTH CAROLINA DEPARTMENT OF TRANSPORTATION Signal Design Section		NC 107 (E. Main Street) at SR 1352 (Walter Ashe Road) / SR 1449 (Cope Creek Road) Division 14 Jackson County Sylva		DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
PLAN DATE: August 2025		REVIEWED BY: ZM Esposito		SEAL NORTH CAROLINA PROFESSIONAL ENGINEER 052936 BRITANNY N. GROOM	
PREPARED BY: KA Jones		REVIEWED BY: BN Groome		Signed by: Brittany Groome 8/26/2025	
REVISIONS		INIT.		DATE	
0		40		1"=40'	
SCALE		DATE		DATE	
SIG. INVENTORY NO.		14-0694			