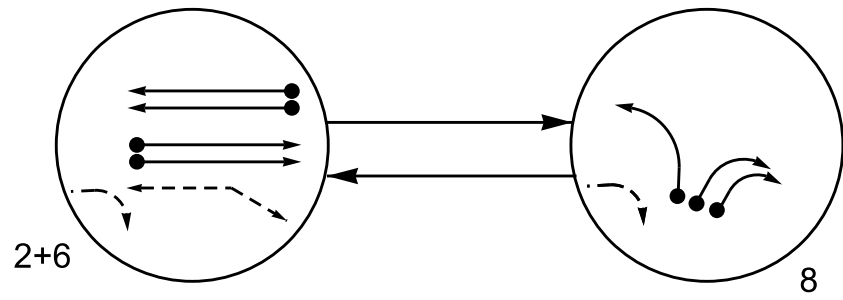


PHASING DIAGRAM

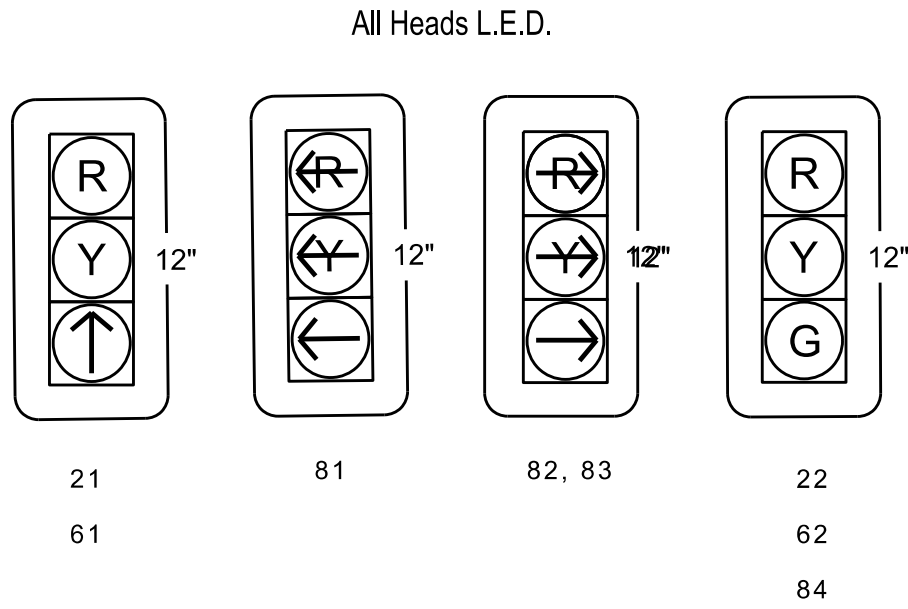


PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION				
SIGNAL FACE	2+6	8	FLASH	
21	↑	R	R	
22	G	R	R	
61	↑	R	R	
62	G	R	R	
81	←	←	←	←
82, 83	←	←	←	←
84	R	G	R	
P21, P22, P23, P24	W	DW	DRK	

SIGNAL FACE I.D.



SE-PAC 2070 LOOP & DETECTOR UNIT INSTALLATION CHART																			
INDUCTIVE LOOP						DETECTOR PROGRAMMING													
						ASSIGNED PHASE	TIMING		OPERATION MODE							SWITCH	SYSTEM LOOPS	STATUS	
									0	1	2	3	4	5	6			7	NEW
LOOP NO.	SIZE (FT)	TURNS	DIST. FROM STOP LINE (FT)	NEW	EXISTING		DELAY	EXTEND (STRETCH)	VEHICLE	PEDESTRIAN	1 CALL	STOP A	STOP B	PROT/PER LEFT	PROT/PER THROUGH	AND			
8A	*	*	0	-	X	8	-	-	X	-	-	-	-	-	-	-	-		
8B	*	*	0	X	-	8	-	-	X	-	-	-	-	-	-	-	-		
8C	*	*	0	X	-	8	-	-	X	-	-	-	-	-	-	-	-		

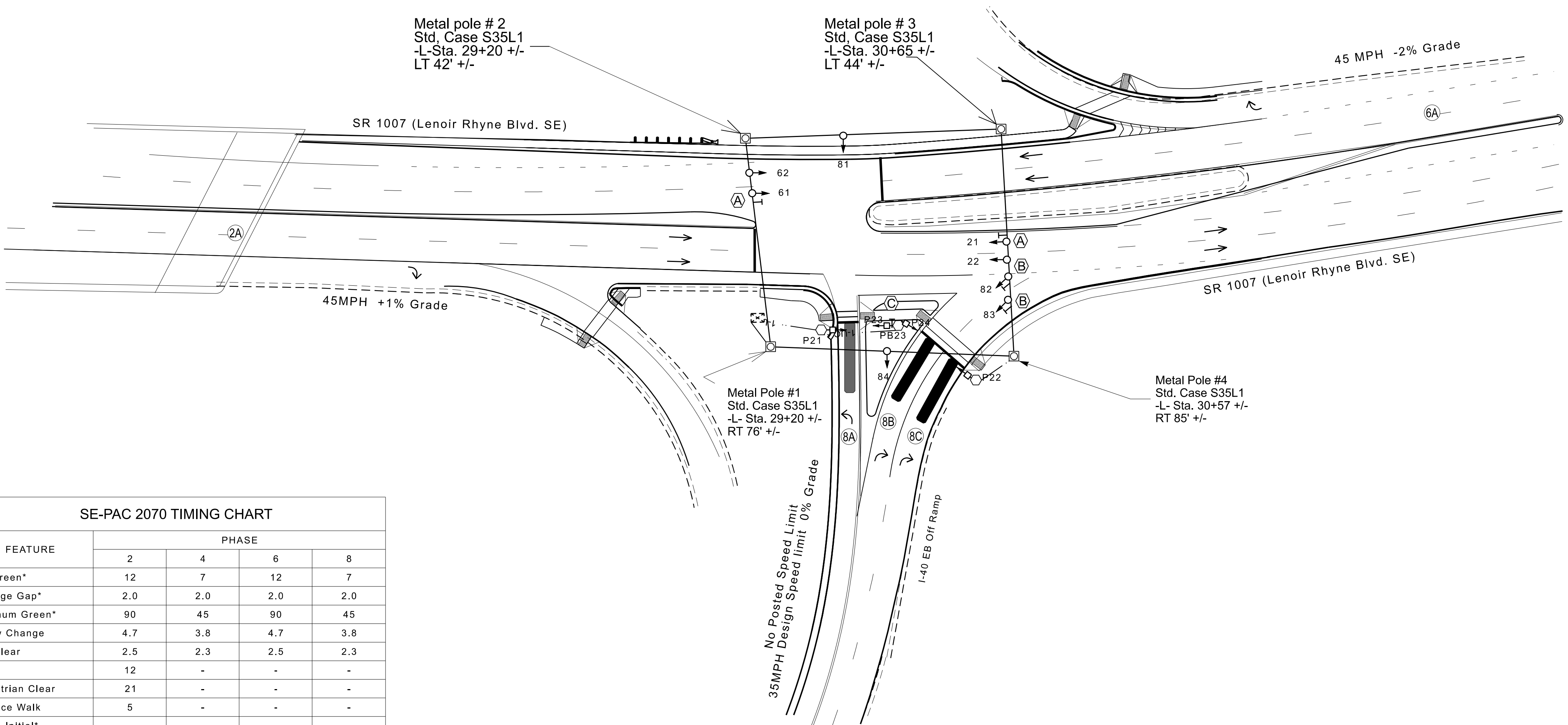
* Multi -Zone Microwave Detection

Microwave Detection						
FUNCTION	SENSOR 1 (2A)			SENSOR 2 (6A)		
Channel	1			1		
Phase	2			6		
Direction of Travel	SB			NB		
Type	Priority			Priority		
Level	1	2	Queue	1	2	Queue
Discovery Zone (ft)	>= 750	<750	-	>= 750	<750	-
Range	900-100	600-100	150-100	900-100	600-100	150-100
Enable Speed	Y	Y	Y	Y	Y	Y
Speed Range(mph)	35-100	35-100	1-35	35-100	35-100	1-35
Enable Estimated Time of Arrival	Y	Y	N	Y	Y	N
Estimated Time of Arrival (sec)	2.5-10.0	2.5-6.5	-	2.5-10.0	2.5-10.0	-

2-Phase
Fully Actuated
Hickory City Signal System

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.
- Set all detector units 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.
- This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- Install backplates with retro-reflective sheeting for all signal heads.
- Program phase 4 as a dummy phase for ring 1.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



SE-PAC 2070 TIMING CHART

FEATURE	PHASE			
	2	4	6	8
Min Green*	12	7	12	7
Passage Gap*	2.0	2.0	2.0	2.0
Maximum Green*	90	45	90	45
Yellow Change	4.7	3.8	4.7	3.8
Red Clear	2.5	2.3	2.5	2.3
Walk*	12	-	-	-
Pedestrian Clear	21	-	-	-
Advance Walk	5	-	-	-
Added Initial*	-	-	-	-
Maximum Initial*	-	-	-	-
Time Before Reduction*	-	-	-	-
Time To Reduce*	-	-	-	-
Minimum Gap	-	-	-	-
Recall Mode	MIN RECALL	-	MIN RECALL	-
Vehicle Call Memory	LOCK	NON-LOCK	LOCK	NON-LOCK
Dual Entry	-	-	-	-
Simultaneous Gap	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.

LEGEND

PROPOSED	EXISTING

Signal Upgrade -Final Design

Prepared in the Offices of: 750 N. Greenfield Pkwy, Garner, NC 27529		I-40 EB Ramp at & SR 1007 (Lenoir Rhyne Blvd) & SR 1534 (8th St SE) (West Intersection) Division 12, Catawba County, Hickory		DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
PLAN DATE: August 2026 PREPARED BY: Adja Fall		REVIEWED BY: R. N. Zinser		SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 043914 R. N. Zinser	
REVISIONS		INIT.		DATE	
0		40		1" = 40'	
DocuSigned by: R. Nicholas Zinser		08/12/2026		DATE	
SIG. INVENTORY NO.		12-0308			