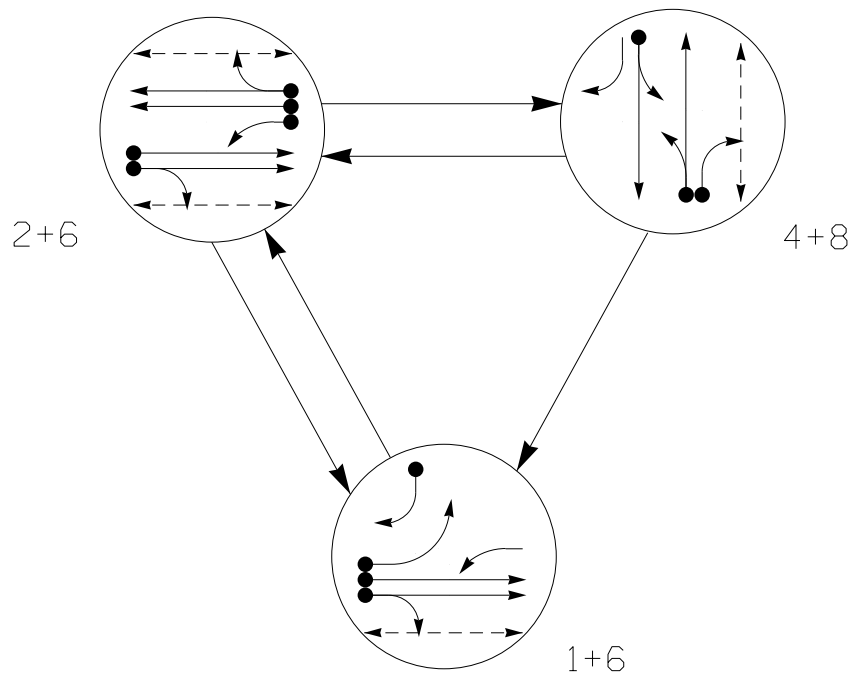


PHASING DIAGRAM



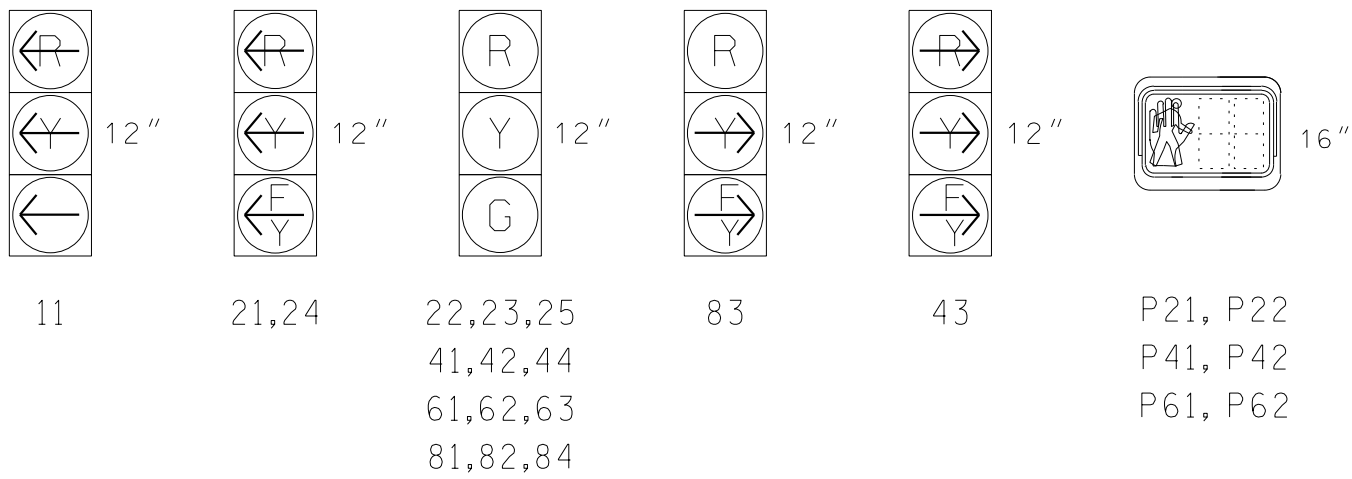
PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE			
	1 + 6	2 + 6	4 + 8	F L S H
11	←	→	→	→
21,24	←	←	→	→
22, 23, 25	R	G	R	R
41, 42, 44	R	R	G	R
43	→	→	←	→
61, 62, 63	G	G	R	R
81, 82, 84	R	R	G	R
83	←	R	←	R
P21, P22	DW	W	DW	DRK
P41, P42	DW	DW	W	DRK
P61, P62	W	W	DW	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	NEW CARD
1A	*	0	*	X	1	3.0	-	X	-	X	*
1B	*	0	*	-	1	-	-	X	-	X	*
2B	*	0	*	X	2	-	-	X	-	X	*
4A	*	+5	*	-	4	3.0	-	X	-	X	*
4B	*	+5	*	-	4	-	-	X	-	X	*
4C	*	+5	*	-	4	-	-	X	-	X	*
8A	*	0	*	-	8	3.0	-	X	-	X	*

* Multi-zone Microwave Detection Zone

3 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 may be lagged.
- 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.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

LEGEND

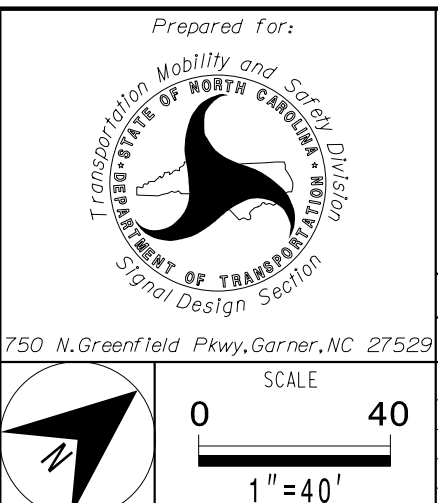
PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	
	Sign	
	Pedestrian Signal Head	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	Oversized Junction Box	
	2-in Underground Conduit	
	Right of Way	
	Directional Arrow	
	Directional Drill	
	Non-Intrusive Detection Zone	
	Metal Pole with Mastarm	
	Type I Pushbutton Post	
	Type II Signal Pedestal	
	Gas Line	
	U/G Sanitary Sewer	
	U/G Water Line	
	Telephone Fiber	
	Drainage Pipe	
	Underground CATV Fiber	
	"RIGHT TURN SIGNAL" Sign (R10-10R)	
	"NO TURN ON RED" Sign (R10-11a)	
	"RIGHT TURN YIELD TO U-TURN" Sign	

MAXTIME TIMING CHART					
FEATURE	PHASE				
	1	2	4	6	8
Walk *	-	14	14	14	-
Ped Clear *	-	15	26	22	-
Min Green	7	12	7	12	7
Passage *	2.0	2.0	2.0	2.0	2.0
Max I *	25	40	40	40	25
Yellow Change	3.0	5.1	3.9	5.1	3.9
Red Clear	3.3	2.0	3.4	2.0	3.4
Red Revert	2.0	2.0	2.0	2.0	2.0
Added Initial *	-	-	-	-	-
Maximum Initial *	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-
Time To Reduce *	-	-	-	-	-
Minimum Gap	-	-	-	-	-
Advance Walk	-	7	7	7	-
Non Lock Detector	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			
FUNCTION	Sensor 1		Sensor 2
	1	1	1
Channel	2	6	6
Phase	WB	EB	EB
Direction of Travel	Priority	Priority	Priority
Type	2	2	2
Level	2	2	2
Detection Zone (ft)	<750	<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	Y
Estimated Time of Arrival (sec)	2.5-6.5	-	2.5-6.5

Signal Upgrade - Final Design



US 23 Bus. (Asheville Hwy) at SR 1432 (Skyland Drive) / SR 1438 (Dillardtown Road)	
Division 14	Jackson County Sylva
PLAN DATE: August 2025	REVIEWED BY: ZM Esposito
PREPARED BY: DJ White	REVIEWED BY: BN Groome
REVISIONS	INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
SEAL	SEAL
Signed by: Brittany N. Groome	Signed by: ZM Esposito
DATE: 8/26/2025	DATE: 8/26/2025
SIG. INVENTORY NO.	14-0727