

	DETECTED MOVEMENT
	UNDETECTED MOVEMENT (OVERLAP)
	UNSIGNALIZED MOVEMENT
	PEDESTRIAN MOVEMENT

SIGNAL FACE	PHASE		
	2 + 6	4 + 8	FLASH
21			
22,23	G	R	R
41,42	R	G	R
61			
62,63	G	R	R
81,82,83	R	G	R
P81,P82	DW	W	DRK

Diagram showing three types of traffic signs:

- Vertical rectangular sign (12" x 21" / 61"):
 - Top: Circular symbol with a left turn arrow.
 - Middle: Circular symbol with a through/right turn arrow.
 - Bottom: Circular symbol with a left turn arrow.
 - Dimensions: 21, 61
- Vertical rectangular sign (12" x 22,23 / 41,42 / 62,63 / 81,82,83"):
 - Top: Circular symbol with 'R'.
 - Middle: Circular symbol with 'Y'.
 - Bottom: Circular symbol with 'G'.
 - Dimensions: 22,23, 41,42, 62,63, 81,82,83
- Rectangular sign (16" x P81,P82):
 - Symbol: Hand icon pointing up.
 - Dimensions: 16", P81,P82
- Rectangular sign (16" x P41,P42):
 - Symbol: Hand icon pointing up.
 - Text: (Disconnected and bagged)
 - Dimensions: 16", P41,P42

DETECTOR					PROGRAMMING							
ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	SYSTEM LOOP
2A	*	70	*	-	2	-	-	X	-	X	-	-
2B	*	0	*	-	2	3.0	-	X	-	X	-	-
4A	*	0	*	-	4	10.0	-	X	-	X	-	-
6A	*	70	*	-	6	-	-	X	-	X	-	-
6B	*	0	*	-	6	3.0	-	X	-	X	-	-
8A	*	0	*	-	8	10.0	-	X	-	X	-	-

* Multizone Microwave Detection

2 Phase
Fully Actuated
Signal System #: D13-24 Rutherfordton

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Reposition existing signal heads numbered 21, 22, 23, 61, 62, and 63 and sign A.
4. Disconnect and bag existing pedestrian heads P41 and P42.
5. Set all detector units to presence mode.
6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
7. Program pedestrian calls to countdown the flashing "Don't Walk" time only.
8. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
10. See HL-0065 TMP Phase II for pavement markings.

MAXTIME TIMING CHART				
FEATURE	PHASE			
	2	4	6	8
Walk *	—	—	—	14
Ped Clear	—	—	—	11
Min Green *	10	7	10	7
Passage *	3.0	2.0	3.0	2.0
Max I *	45	25	45	25
Yellow Change	4.3	3.1	4.3	3.1
Red Clear	1.8	3.0	1.8	3.0
Red Revert	2.0	2.0	2.0	2.0
Added Initial *	—	—	—	—
Maximum Initial *	—	—	—	—
Time Before Reduction *	—	—	—	—
Time To Reduce *	—	—	—	—
Minimum Gap	—	—	—	—
Advance Walk	—	—	—	7
Non Lock Detector	—	X	—	X
Vehicle Recall	MIN RECALL	—	MIN RECALL	—
Dual Entry	—	X	—	X

* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Non-Intrusive Detection Zone	
	Controller & Cabinet	
	Junction Box	
	Type I Pushbutton Post	
	Type II Signal Pedestal	
	Directional Drill	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Curb Construction	
	Pedestrian Barricade	
N/A	Curb Ramp	
N/A	Fence	
N/A	Guardrail	
	Street Name Sign	

Signal Upgrade
Temporary Design 2
(Construction Phase 2)

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

SEAI

US 221 Alt-
US 74 Bus (Charlotte Rd)
at
S. Cleghorn Street

Division 13 Rutherford County Rutherfordton

PLAN DATE:	February 2026	REVIEWED BY:	N.K. Vlanich
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529	PREPARED BY: E.E. Tiller	REVIEWED BY: N.R. Simmons
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REVISIONS	INIT.	DATE
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ocuSigned by:

Katasha R. Simmons 5/12/2026

SIGNATURE	DATE
6045001 GMS-470A	17 060030

SIG. INVENTORY NO. 13-062912

HNTB

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