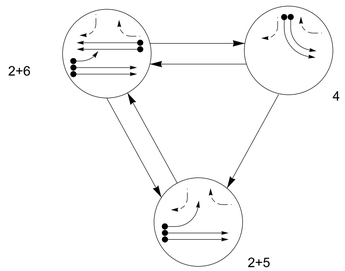
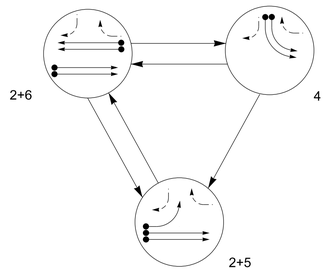
Docusign Envelope ID: E237D0F0-9E2A-4677-A80C-647C717DF96C

PROJECT REFERENCE NO.	SHEET NO.
R-4463A	Sig-8.0

DEFAULT PHASING DIAGRAM

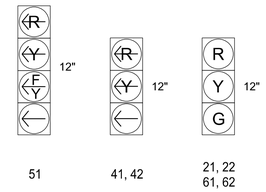


ALTERNATE PHASING DIAGRAM



SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART

DETECTOR					PROGRAMMING							
ZONE(S)	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
4A	6X40	0	@	@	4	-	-	X	-	X	-	@
4B	6X40	0	@	@	4	-	-	X	-	X	-	@
5A	6X40	0	@	@	5	15.0*	-	X	-	X	-	@
					2#	-	-	X	-	X	-	@

@ Multizone Microwave Detection
# Disable Phase call for loop during Alternate Phasing operation.
* Disable Delay during Alternate Phasing operation.

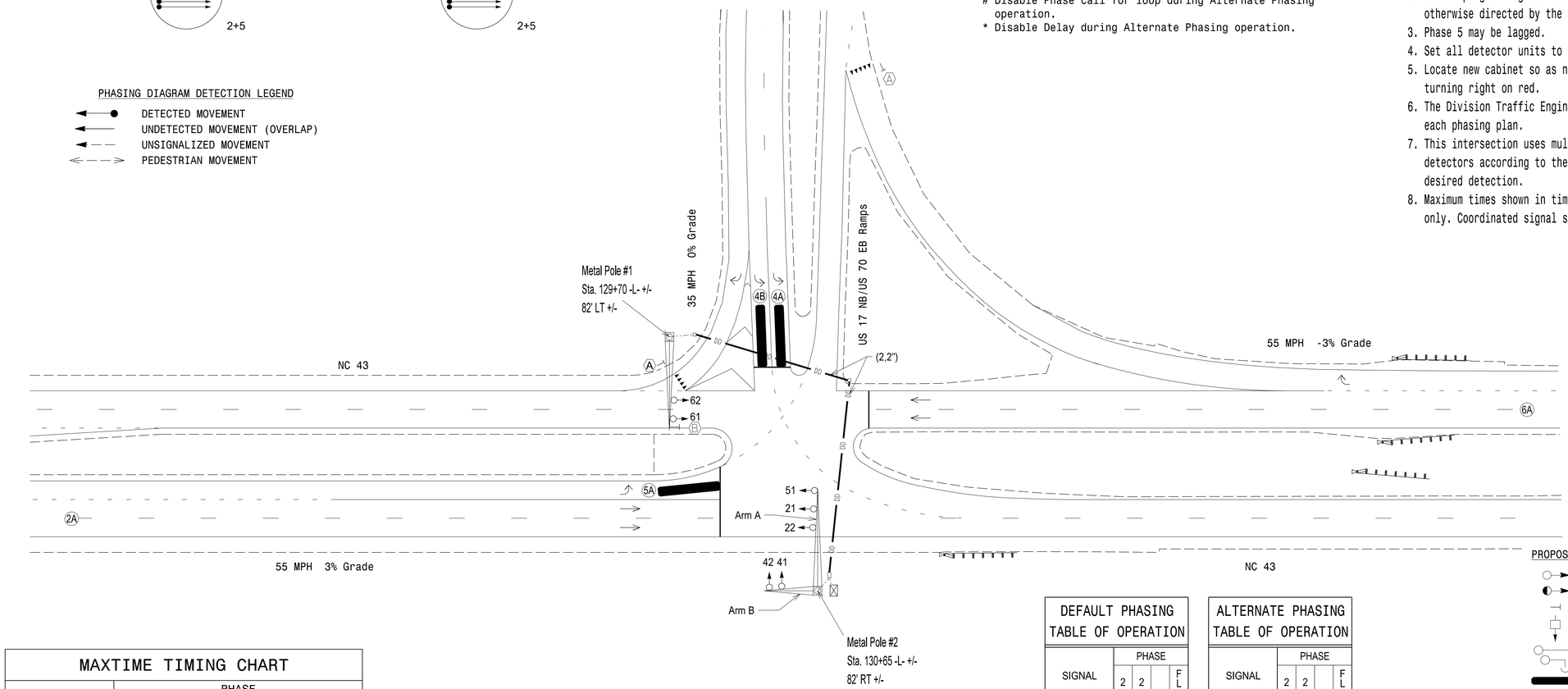
3 Phase
Fully Actuated
US 17 Bus. (MLK Blvd) CLS
D02-15_New Bern

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 5 may be lagged.
4. Set all detector units to presence mode.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. The Division Traffic Engineer will determine the hours of use for each phasing plan.
7. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve desired detection.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

PHASING DIAGRAM DETECTION LEGEND

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



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 2+5	PHASE 2+6	PHASE 4	FLASH
21, 22	G	G	R	R
41, 42	R	R	-	R
51	-	F Y	R	R
61, 62	R	G	R	R

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 2+5	PHASE 2+6	PHASE 4	FLASH
21, 22	G	G	R	R
41, 42	R	R	-	R
51	-	R	R	R
61, 62	R	G	R	R

LEGEND

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	
	Oversized Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Metal Pole with Mastarm	
DD	Directional Drill	N/A
A	"YIELD" Sign (R1-2)	A
B	"No U-Turn" Sign (R3-4)	B

MAXTIME TIMING CHART

FEATURE	PHASE 2	PHASE 4	PHASE 5	PHASE 6
Walk *	–	–	–	–
Ped Clear *	–	–	–	–
Min Green	14	7	7	14
Passage *	2.0	2.0	2.0	2.0
Max 1 *	90	30	15	90
Yellow Change	5.5	3.0	3.0	5.5
Red Clear	1.2	3.6	3.1	1.2
Added Initial *	–	–	–	–
Maximum Initial *	–	–	–	–
Time Before Reduction *	–	–	–	–
Time To Reduce *	–	–	–	–
Minimum Gap	–	–	–	–
Advance Walk	–	–	–	–
Non Lock Detector	–	X	X	–
Vehicle Recall	MIN RECALL	–	–	MIN RECALL
Dual Entry	–	–	–	–

* 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

	2A			6A		
FUNCTION	Sensor 1			Sensor 1		
Channel	1			1		
Phase	2			6		
Direction of Travel	NB			SB		
Type	Priority			Priority		
Level	1	2	QUEUE	1	2	QUEUE
Discovery Zone (ft)	>= 750	< 750	-	>= 750	< 750	-
Range (ft)	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	2.5-6.5	-

New Installation

Plans Prepared By:

DRMP
DRMP, Inc.
8210 University Executive Park Dr, Suite 220
Charlotte, NC 28262
NC License No. F-1524 (704) 549-4260

Prepared for:
Transportation Mobility and Safety Division
Signal Design Section
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
750 N.Greenfield Pkwy,Garner,NC 27529

SCALE 0 40 1"=40'

NC 43
at
US 17 NB/US 70 EB Ramps

Division 2 Craven County New Bern

PLAN DATE:	April 2025	REVIEWED BY:	BN Groome
PREPARED BY:	DS Griffith	DRMP PROJ. NO.:	17359 (040)

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 052936 ENGINEER BRITTANY N GROOME

Signed by: Brittany N Groome 4/24/2025
DOCUSIGNED BY:
SIGNATURE DATE

SIG. INVENTORY NO. 02-0924

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