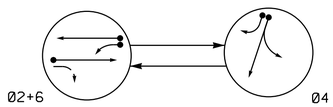
PROJECT REFERENCE NO.	SHEET NO.
B-4654	Sig. 2.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

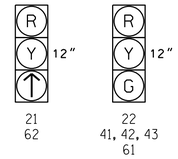
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 02+6	PHASE 04	FLASH
21	↑	R	Y
22	G	R	Y
41, 42, 43	R	G	R
61	G	R	Y
62	↑	R	Y

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART

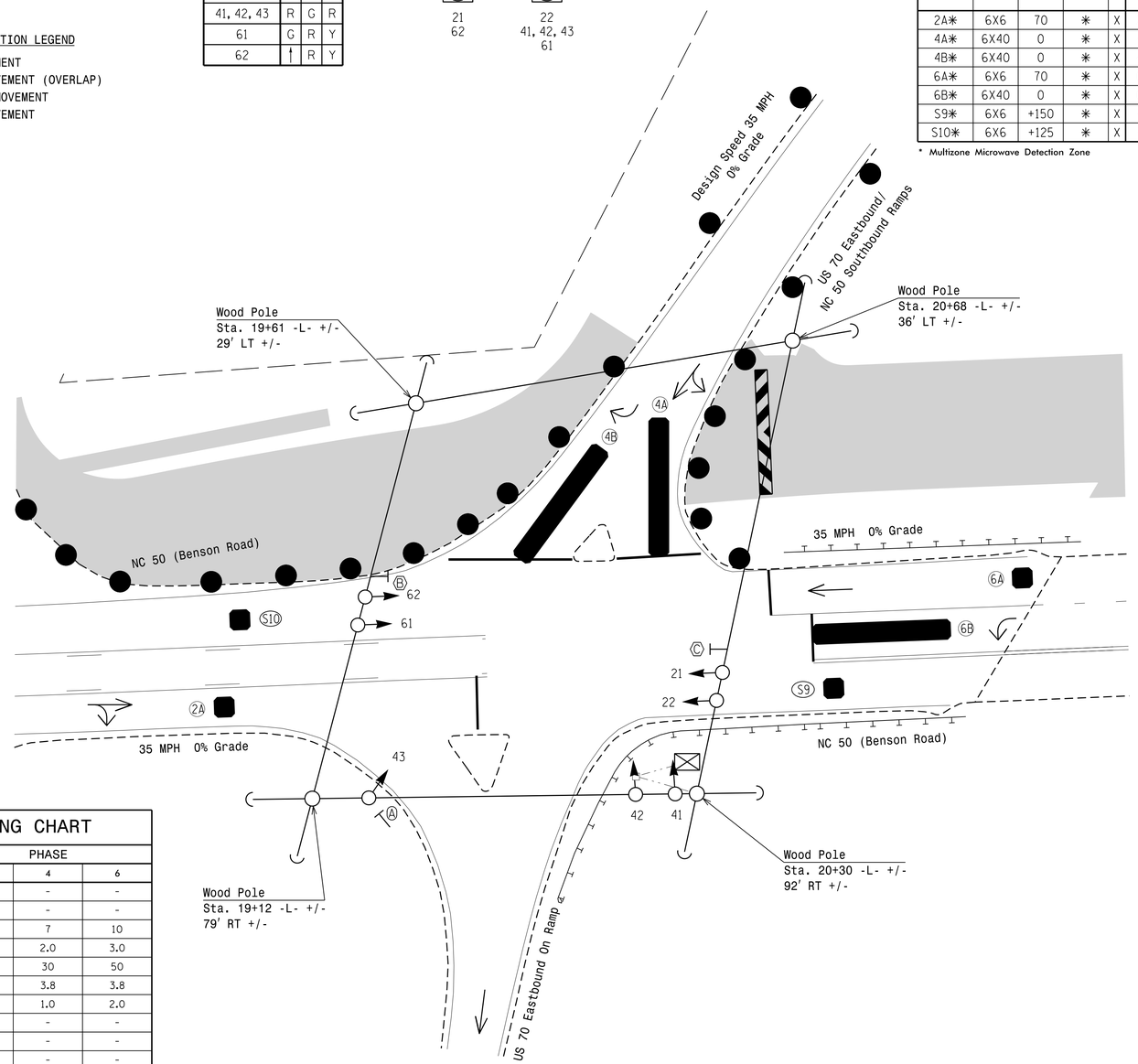
DETECTOR					PROGRAMMING						
ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
2A*	6X6	70	*	X	2	-	-	X	-	X	-	*
4A*	6X40	0	*	X	4	-	-	X	-	X	-	*
4B*	6X40	0	*	X	4	15	-	X	-	X	-	*
6A*	6X6	70	*	X	6	-	-	X	-	X	-	*
6B*	6X40	0	*	X	6	-	-	X	-	X	-	*
S9*	6X6	+150	*	X	-	-	-	-	-	-	-	*
S10*	6X6	+125	*	X	-	-	-	-	-	-	-	*

* Multizone Microwave Detection Zone

2 Phase
Fully Actuated
(US 70 (Garner Signal System A))
Signal System #: D05-10_Garner

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. Set all detector units to presence mode.
4. Pavement markings are existing.
5. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
6. 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	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Construction Zone Drums	
	Construction Zone	
	Microwave Detection Zone	
A	"YIELD" Sign (R1-2)	A
B	No Right Turn Sign (R3-1)	B
C	No Left Turn Sign (R3-2)	C

MAXTIME TIMING CHART

FEATURE	PHASE 2	PHASE 4	PHASE 6
Walk *	-	-	-
Ped Clear	-	-	-
Min Green *	10	7	10
Passage *	3.0	2.0	3.0
Max 1 *	50	30	50
Yellow Change	3.8	3.8	3.8
Red Clear	1.4	1.0	2.0
Added Initial *	-	-	-
Maximum Initial *	-	-	-
Time Before Reduction *	-	-	-
Time To Reduce *	-	-	-
Minimum Gap	-	-	-
Advance Walk	-	-	-
Non Lock Detector	-	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.

Signal Upgrade - Temporary Design 1 (TMP Phase I & II)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

NC 50 (Benson Road)
at
US 70 Eastbound/
NC 50 Southbound Ramps

Division 5 Wake County Garner

PLAN DATE:	May 2023	REVIEWED BY:
PREPARED BY:	J.A. Lohr	REVIEWED BY:

SCALE 0 20 1"=20'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 026486 ENGINEER ROBERT J. ZIEMBA

DocuSigned by: Robert J. Ziemba 05/17/2023
DATE

SIG. INVENTORY NO. 05-0810T1

20-DEC-2023 14:30
S:\TMS\Signals\Signal Design Section\Central Region\Div 5\B-4654\MAXTIME\D5081011_sig_dsn_20230517.dgn
rziemba