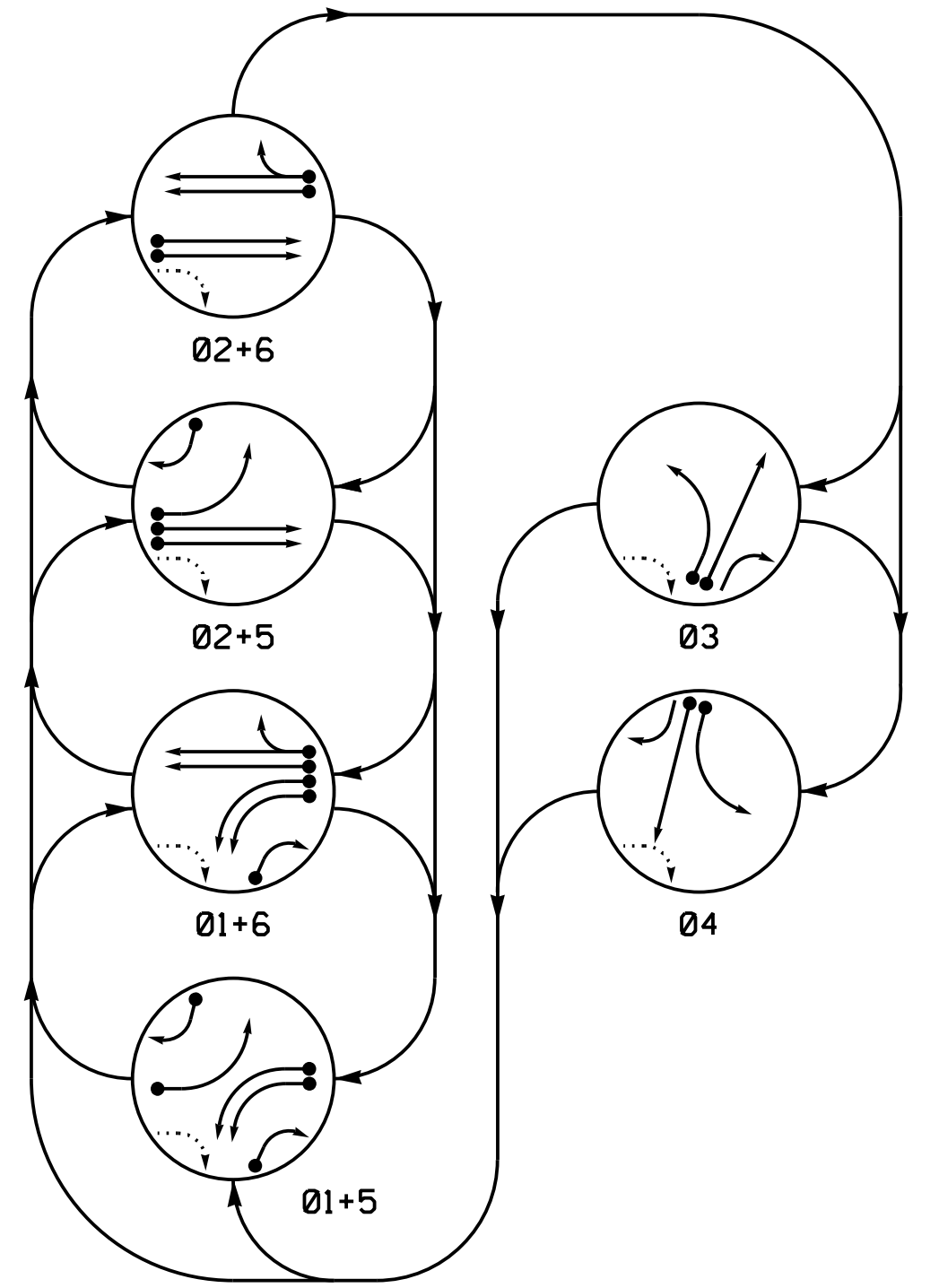


**PHASING DIAGRAM**



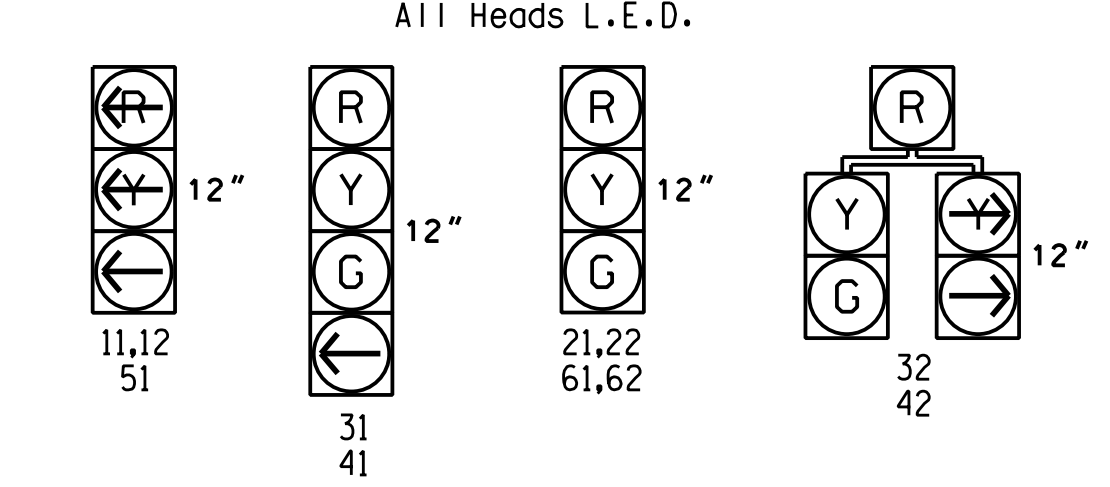
**PHASING DIAGRAM DETECTION LEGEND**

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

**TABLE OF OPERATION**

SIGNAL FACE	PHASE						FLASH
	01+5	01+6	02+5	02+6	03	04	
11,12	—	—	—	—	—	—	—
21,22	R	R	G	G	R	R	Y
31	R	R	R	R	G	R	R
32	R	R	R	R	G	R	R
41	R	R	R	R	R	G	R
42	R	R	R	R	R	G	R
51	—	—	—	—	—	—	—
61,62	R	G	R	G	R	R	Y

**SIGNAL FACE I.D.**



**OASIS 2070 LOOP & DETECTOR INSTALLATION CHART**

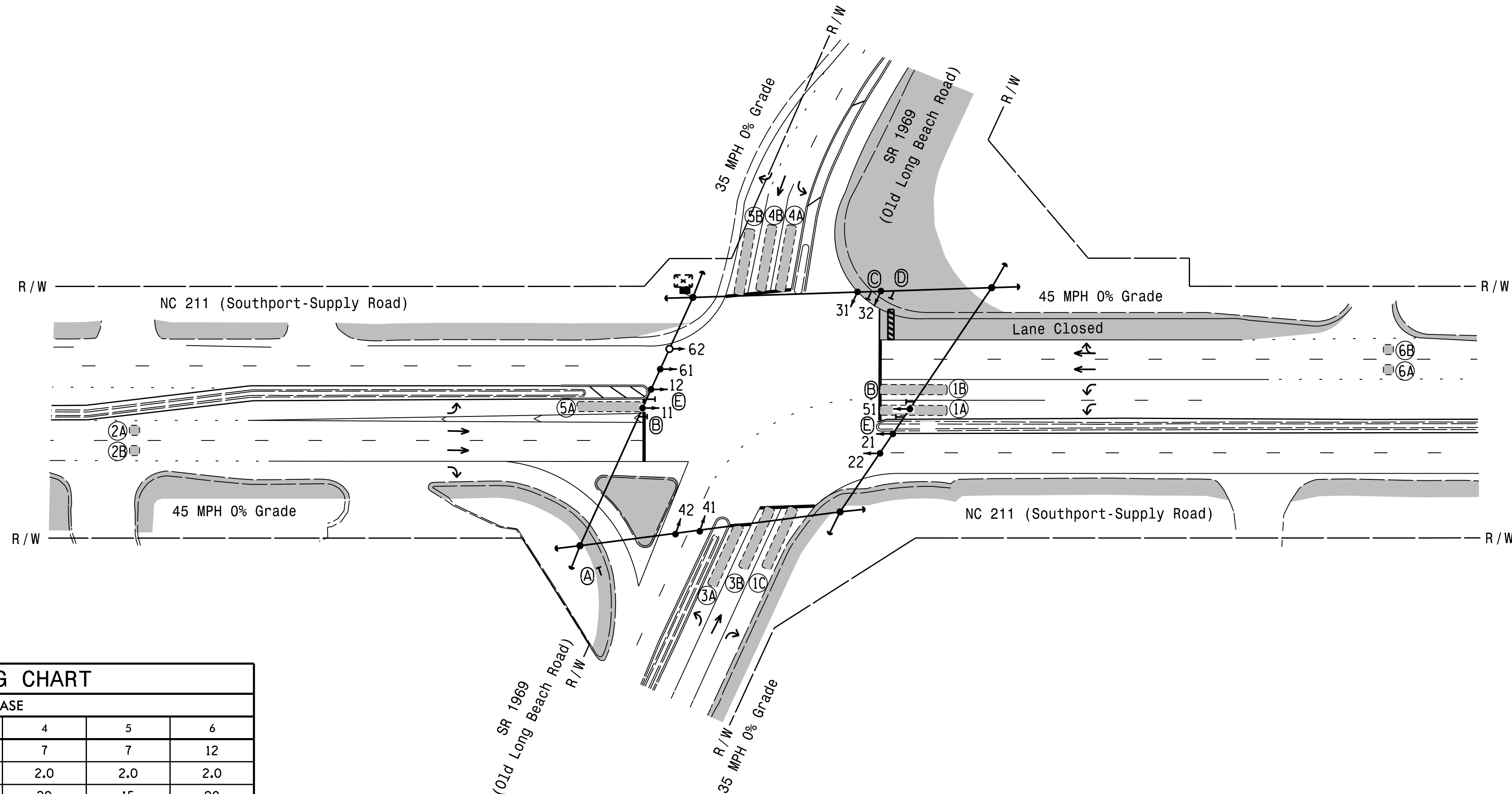
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				SYSTEM LOOP	NEW CARD	
					PHASE	CALLING	EXTENSION	FULL TIME DELAY			STRETCH TIME
1A	6X40	0	*	*	1	Y	Y	-	-	-	-
1B	6X40	0	*	*	1	Y	Y	-	-	-	-
1C	6X40	0	*	*	1	Y	Y	-	-	15	-
2A	6X6	300	*	*	2	Y	Y	-	-	-	-
2B	6X6	300	*	*	2	Y	Y	-	-	-	-
3A	6X40	0	*	*	3	Y	Y	-	-	-	-
3B	6X40	0	*	*	3	Y	Y	-	-	-	-
4A	6X40	0	*	*	4	Y	Y	-	-	-	-
4B	6X40	0	*	*	4	Y	Y	-	-	-	-
5A	6X40	0	*	*	5	Y	Y	-	-	-	-
5B	6X40	0	*	*	5	Y	Y	-	-	15	-
6A	6X6	300	*	*	6	Y	Y	-	-	-	-
6B	6X6	300	*	*	6	Y	Y	-	-	-	-

\* Multizone Microwave Detection.

6 Phase Fully Actuated (NC 133 Closed Loop System)

**NOTES**

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 or 5 may be lagged.
- The order or phase 3 and phase 4 may be reversed.
- Reposition existing signal head numbered 61.
- Set all detector units to presence mode.
- Incorporate Microwave Detection system for vehicle detection.
- Provide the Engineer with the Manufacturer's approved Microwave Detection locations and mounting heights to obtain detection zones as shown.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data: Master Asset #10317 Controller Asset #0626



**OASIS 2070 TIMING CHART**

FEATURE	PHASE					
	1	2	3	4	5	6
Min Green 1 *	7	12	7	7	7	12
Extension 1	2.0	2.0	2.0	2.0	2.0	2.0
Max Green 1 *	15	90	25	20	15	90
Yellow Clearance	3.0	4.5	3.8	3.8	3.0	4.5
Red Clearance	3.4	1.8	2.3	2.4	3.3	1.6
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-
Seconds Per Actuation *	-	1.5	-	-	-	1.5
Max Variable Initial *	-	34	-	-	-	34
Time Before Reduction *	-	15	-	-	-	15
Time To Reduce *	-	45	-	-	-	45
Minimum Gap	-	3.0	-	-	-	3.0
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW
Dual Entry	-	-	-	-	-	-
Simultaneous Gap	ON	ON	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
○ Traffic Signal Head	● Traffic Signal Head
○ Modified Signal Head	● Modified Signal Head
⊥ Sign	⊥ Sign
⊥ Pedestrian Signal Head With Push Button & Sign	⊥ Pedestrian Signal Head With Push Button & Sign
○ Signal Pole with Guy	○ Signal Pole with Guy
⊥ Signal Pole with Sidewalk Guy	⊥ Signal Pole with Sidewalk Guy
⊠ Controller & Cabinet	⊠ Controller & Cabinet
□ Junction Box	□ Junction Box
⋯ 2-in Underground Conduit	⋯ 2-in Underground Conduit
— Right of Way	— Right of Way
→ Directional Arrow	→ Directional Arrow
▬ Microwave Detection Zone	▬ Microwave Detection Zone
▬ Construction Zone	▬ Construction Zone
▬ Construction Barricade	▬ Construction Barricade
(A) "YIELD" Sign (R1-2)	(A) "YIELD" Sign (R1-2)
(B) "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	(B) "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)
(C) Through "ONLY" Sign (R3-5A)	(C) Through "ONLY" Sign (R3-5A)
(D) Right Arrow "ONLY" Sign (R3-5R)	(D) Right Arrow "ONLY" Sign (R3-5R)
(E) No U-turn "Trucks and Buses" Sign	(E) No U-turn "Trucks and Buses" Sign

Signal Upgrade  
Temporary Design 2  
Construction Phase 1

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

	Prepared For: TRANSPORTATION MOBILITY AND SAFETY DIVISION NORTH CAROLINA DEPARTMENT OF TRANSPORTATION SIGNAL DESIGN SECTION 750 N. Greenfield Pkwy, Garner, NC 27529	NC 211 (Southport-Supply Road) at SR 1969 (Old Long Beach Road) Division 03 Brunswick Co. Southport PLAN DATE: June 2017 REVIEWED BY: A.D. Klinksiek PREPARED BY: A.H. Thornburg REVIEWED BY: N.R. Simmons	SEAL  Natasha R. Simmons 9/10/2021 SIGNATURE DATE SIG. INVENTORY NO. 03-0626T2
	HNTB NORTH CAROLINA, P.C. 343 E. Six Forks Road, Suite 200 Raleigh, North Carolina 27609 NC License No: C-1554 (919) 546-8997	SCALE 0 50 1"=50'	REVISIONS INIT. DATE