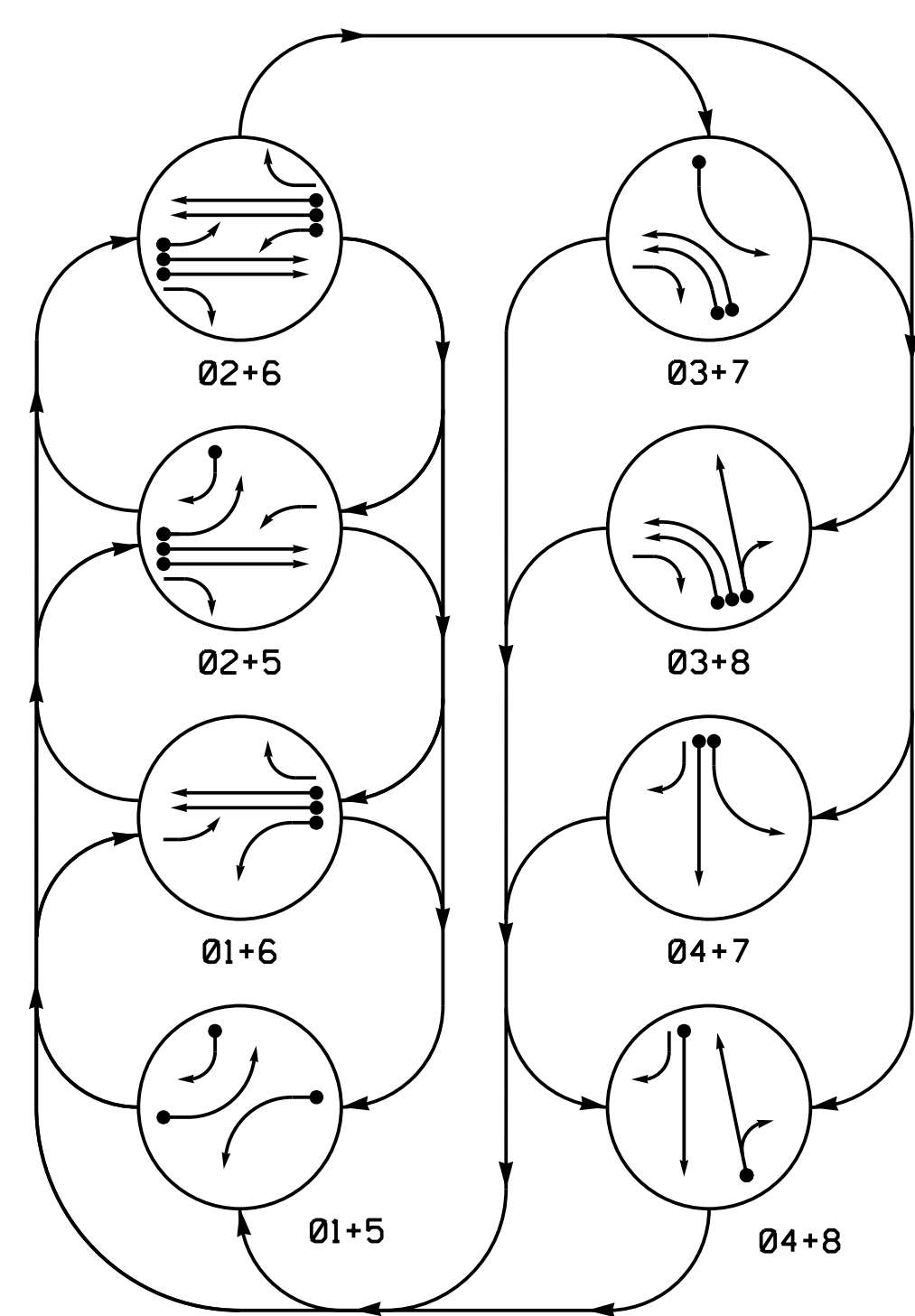


**DEFAULT PHASING DIAGRAM**



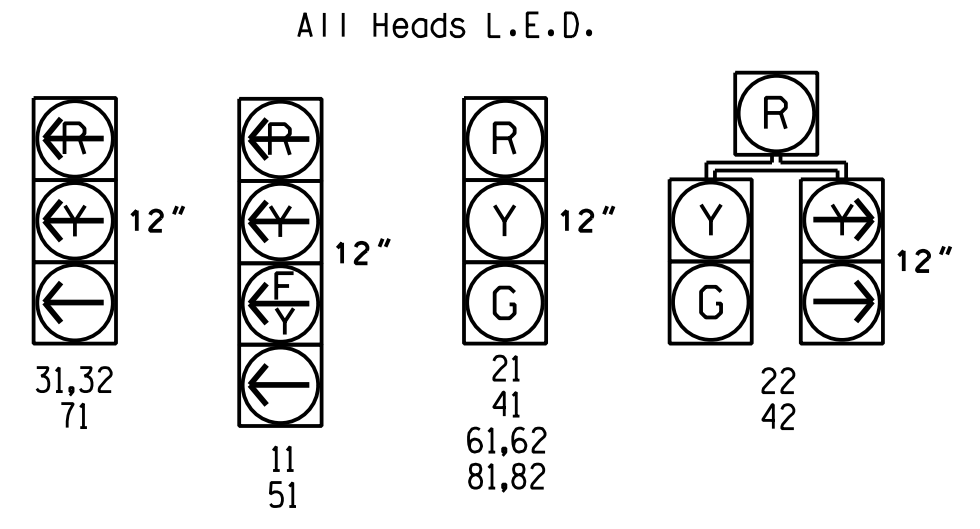
**PHASING DIAGRAM DETECTION LEGEND**

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

**DEFAULT PHASING TABLE OF OPERATION**

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8
11	—	—	F	F	R	R	R	Y
21	R	R	G	G	R	R	R	Y
31,32	R	R	G	G	R	R	R	Y
41	R	R	R	R	R	R	G	R
42	R	R	R	R	R	R	G	R
51	—	F	F	F	R	R	R	Y
61,62	R	G	R	G	R	R	R	Y
71	R	R	R	R	—	—	R	R
81,82	R	R	R	R	R	G	R	G

**SIGNAL FACE I.D.**



**OASIS 2070 LOOP & DETECTOR INSTALLATION CHART**

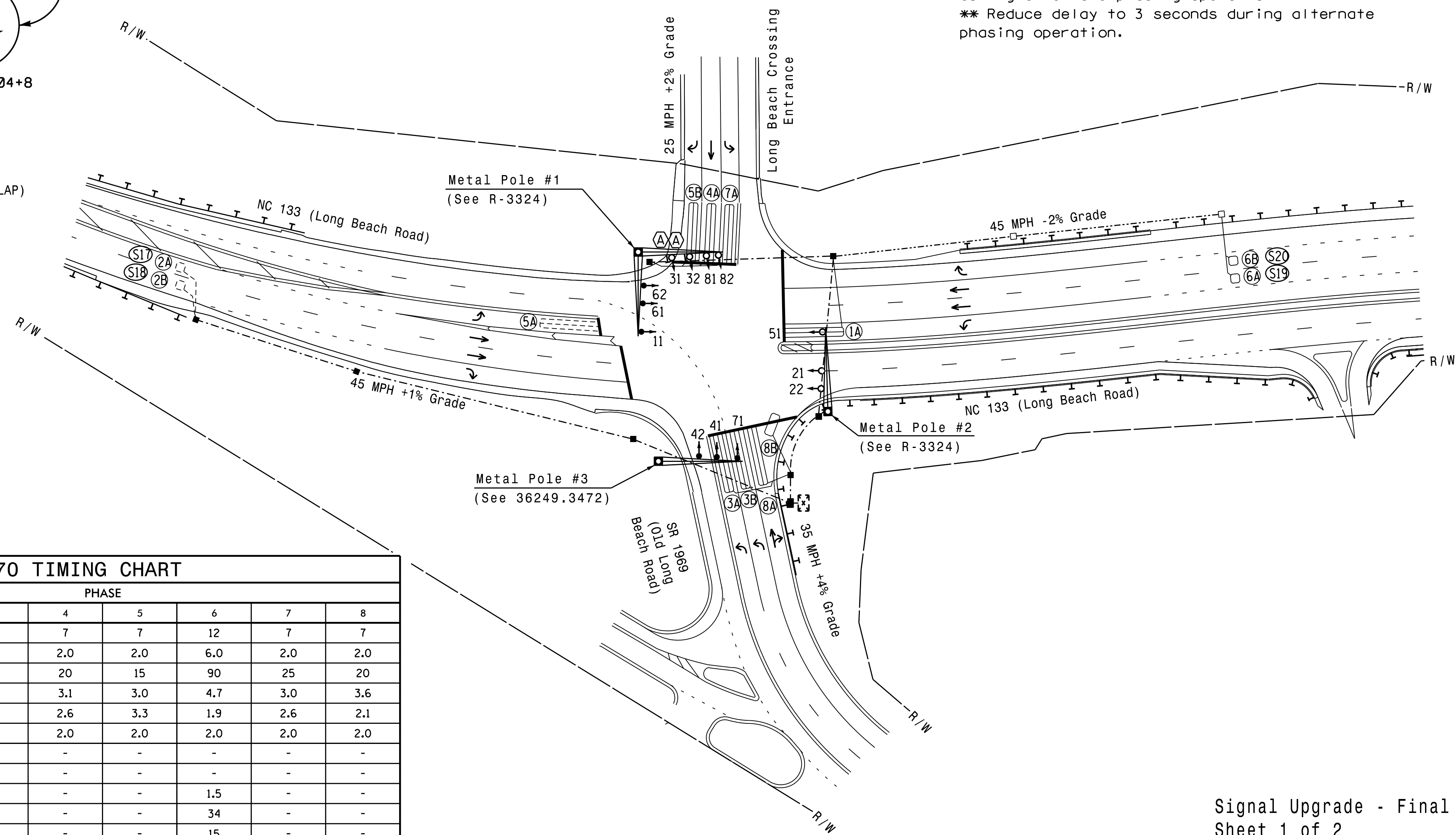
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				SYSTEM LOOP	NEW CARD	
					PHASE	CALLING	EXTENSION	STRETCH TIME			DELAY TIME
1A	6X40	0	2-4-2	Y	1	Y	Y	-	**15	-	Y
2A/S17	6X6	300	5	-	2	Y	Y	-	3	-	Y
2B/S18	6X6	300	5	-	2	Y	Y	-	-	-	Y
3A	6X40	0	2-4-2	Y	3	Y	Y	-	3	-	Y
3B	6X40	0	2-4-2	Y	3	Y	Y	-	-	-	Y
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	-	Y
5A	6X40	0	2-4-2	-	5	Y	Y	-	**15	-	-
5B	6X40	+5	2-4-2	Y	5	Y	Y	-	15	-	-
6A/S19	6X6	300	5	Y	6	Y	Y	-	-	-	Y
6B/S20	6X6	300	5	Y	6	Y	Y	-	-	-	Y
7A	6X40	0	2-4-2	Y	7	Y	Y	-	3	-	Y
8A	6X40	0	2-4-2	Y	8	Y	Y	-	5	-	Y
8B	6X15	+5	1	Y	8	Y	Y	-	15	-	Y

\* Disable phase 2 and 6 call for 1A and 5A during alternate phasing operation.  
 \*\* Reduce delay to 3 seconds during alternate phasing operation.

**8 Phase Fully Actuated (NC 133 Closed Loop System)**

**NOTES**

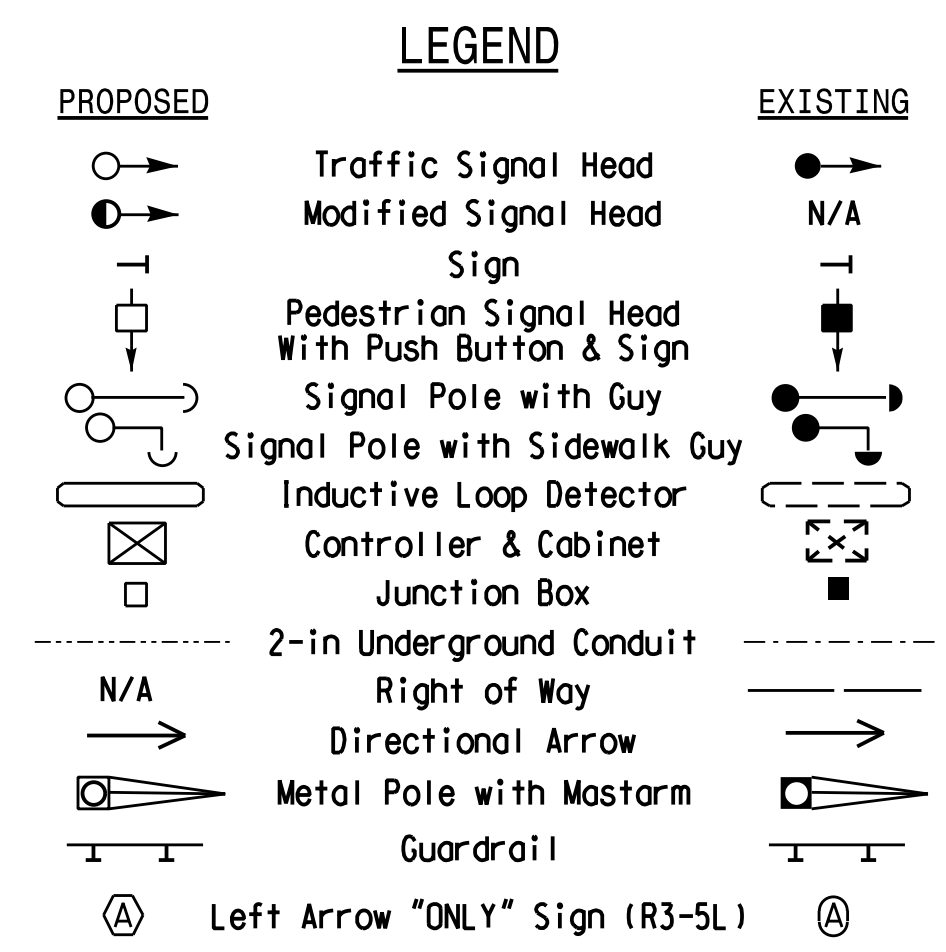
- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Phase 3 and/or phase 7 may be lagged.
- Set all detector units to presence mode.
- The Division Traffic Engineer will determine the hours of use for each phasing plan.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data: Controller Asset #: 1035.



**OASIS 2070 TIMING CHART**

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green 1 *	7	12	7	7	7	12	7	7
Extension 1 *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max Green 1 *	15	90	25	20	15	90	25	20
Yellow Clearance	3.0	4.7	3.0	3.1	3.0	4.7	3.0	3.6
Red Clearance	2.8	1.9	3.2	2.6	3.3	1.9	2.6	2.1
Red Revert	2.0	2.0	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	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.



Signal Upgrade - Final Design  
 Sheet 1 of 2

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

	NC 133 (Long Beach Road) at SR 1969 (Old Long Beach Road) / Long Beach Crossing Entrance		
	Prepared For: Transportation Mobility and Safety Dept. STATE OF NORTH CAROLINA	Division 03 Brunswick Co. Southport	
750 N. Greenfield Pkwy, Garner, NC 27529	PLAN DATE: June 2017	REVIEWED BY: A.D. Klinksiek	REVIEWED BY: N.R. Simmons
PREPARED BY: A.H. Thornburg	REVISIONS	INIT.	DATE
SCALE: 0 50 1"=50'	DATE: 9/10/2021	SIGNATURE:	DATE:
HNTB NORTH CAROLINA, P.C. 343 E. Six Forks Road, Suite 200 Raleigh, North Carolina 27609 NC License No: C-1554 (919) 546-8997	SIG. INVENTORY NO. 03-1035	DATE:	DATE: