

3 Phase Fully Actuated (NC 133 Closed Loop System)

NOTES

- 1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- 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. The Division Traffic Engineer will determine the hours of use for each phasing plan.
- 6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- 7. Incorporate Microwave Detection system for vehicle detection.
- 8. Provide the Engineer with the Manufacturer's approved Microwave Detection locations and mounting heights to obtain detection zones as shown.

LEGEND

Traffic Signal Head Modified Signal Head

Pedestrian Signal Head With Push Button & Sign Signal Pole with Guy

Signal Pole with Sidewalk Guy Controller & Cabinet Junction Box

Right of Way

Directional Arrow

Guardrail

Construction Zone

Left Arrow "ONLY" Sign (R3-5L)

Right Arrow "ONLY" Sign (R3-5R)

No Left Turn Sign (R3-2)

No Right Turn Sign (R3-1)

DOCUMENT NOT CONSIDERED FINAL

Microwave Detection Zone

- 9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- 10. Closed loop system data: Controller Asset #: 1125.

----- 2-in Underground Conduit

PROPOSED

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OASIS 2070 LOOP & DETECTOR INSTALLATION CHART												
INDUCTIVE LOOPS DETECTOR PROGRAMMING												
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
2∙A	6X6	300	*	*	2	Υ	Υ	-	-	-	-	Υ
2B	6X6	300	*	*	2	Υ	Υ	1	-	-	-	Υ
4·A	6X·40	0	*	*	4	Υ	Υ	-	-	3	-	Υ
5A	6X40	0	*	4	5	Υ	Υ	-	-	*** 15	-	Υ
				*	** 2	Υ	Υ	-	-	-	-	Υ
5B	6X·40	0	*	*	5	Υ	Υ	-	-	15	-	Υ
6·A	6X6	300	*	*	6	Υ	Υ	-	-	-	-	Υ

*** Reduce delay to 0 seconds during alternate

* Multizone Microwave Detection. ** Disable phase 2 call for 5A during alternate

phasing operation.

phasing operation.

- Wood Pole

78′ Lt +/-

Sta. 55+48 +/- -Y14A-

ALTERNATE PHASING

TABLE OF OPERATION

FACE

21,22

51

61,62

PHASE

All Heads L.E.D.

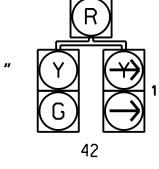
SIGNAL FACE I.D.

12"	R Y 12"
	21 , 22 41
	41 61 , 62

Wood Pole —

88' Lt +/-

Sta. 54+56 +/- -Y14A-



12 " 51	Y 12" 21,22 41 61,62	(Y) (-)
		Southe

DEFAULT PHASING

TABLE OF OPERATION

SIGNAL

FACE

21,22

42

61,62

NC 133 (Long Beach Road)

PHASE

OASIS	2070	TIMING	G CHART	Γ		
	PHASE					
FEATURE	2	4	5	6		
Min Green 1 *	12	7	7	12		
Extension 1 *	6.0	2.0	2.0	6.0		
Max Green 1 *	60	30	20	60		
Yellow Clearance	4.5	3.0	3.0	4.5		
Red Clearance	2.5	3.4	3.6	2.5		
Red Revert	2.0	2.0	2.0	2.0		
Walk 1 *	-	-	-	-		
Don't Walk 1	-	-	-	-		
Seconds Per Actuation *	1.8	-	-	2.5		
Max Variable Initial *	34	-	-	34		
Time Before Reduction *	15	-	-	15		
Time To Reduce *	30	-	-	30		
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		

DEFAULT PHASING DIAGRAM

PHASING DIAGRAM DETECTION LEGEND

UNSIGNALIZED MOVEMENT

UNDETECTED MOVEMENT (OVERLAP)

DETECTED MOVEMENT

→---- PEDESTRIAN MOVEMENT

02+6

ALTERNATE PHASING DIAGRAM

02+6

* 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.

R	Lane Closed 45 MPH +1% Grade A TONIC TO THE TONIC TO	133 (Long Beach Road)
	Wood Pole Sta. 54+10 +/Y14A- 64' Rt +/-	
	Sh 1969 10 Beach Road)	
		New Installation Temporary Design 1 Construction Phase 1

Construction Phase **UNLESS ALL SIGNATURES COMPLETED** NC 133 (Long Beach Road) at SR 1969 (Old Long Beach Road)

- 6A

Southport Crossing Entrance Division 03 Brunswick Co. June 2017 REVIEWED BY: A D Klinksiek 750 N.Greenfleid Pkwy.Garner.NC 27529 PREPARED BY: A.H. Thornburg REVIEWED BY: N.R. Simmons INIT. DATE 50

TH CARO 031464 CACINEER DATE

SIG. INVENTORY NO. 03-1125T

<u>EXISTING</u>

N/A

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N/A

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