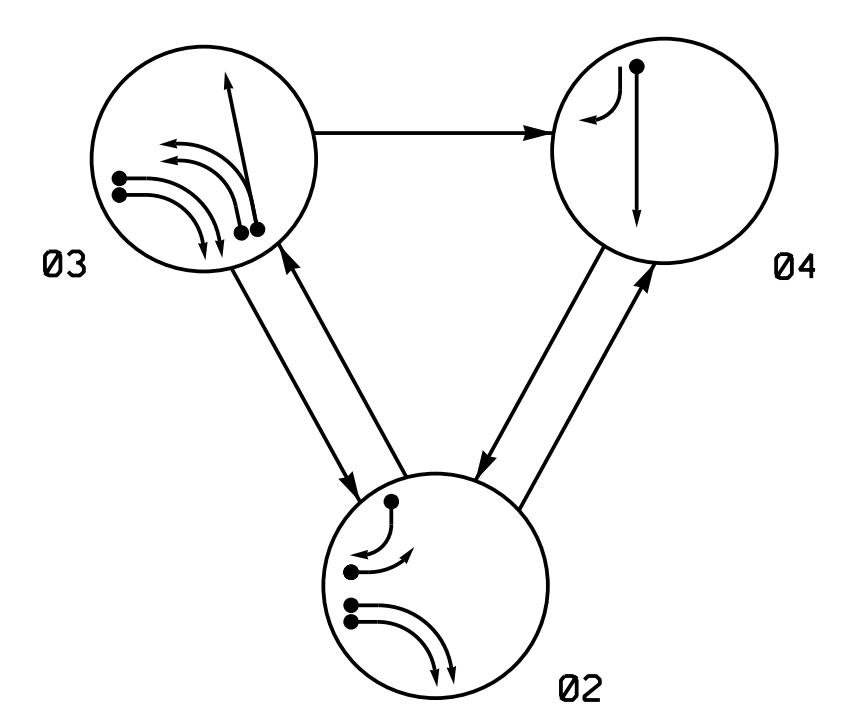


PHASING DIAGRAM

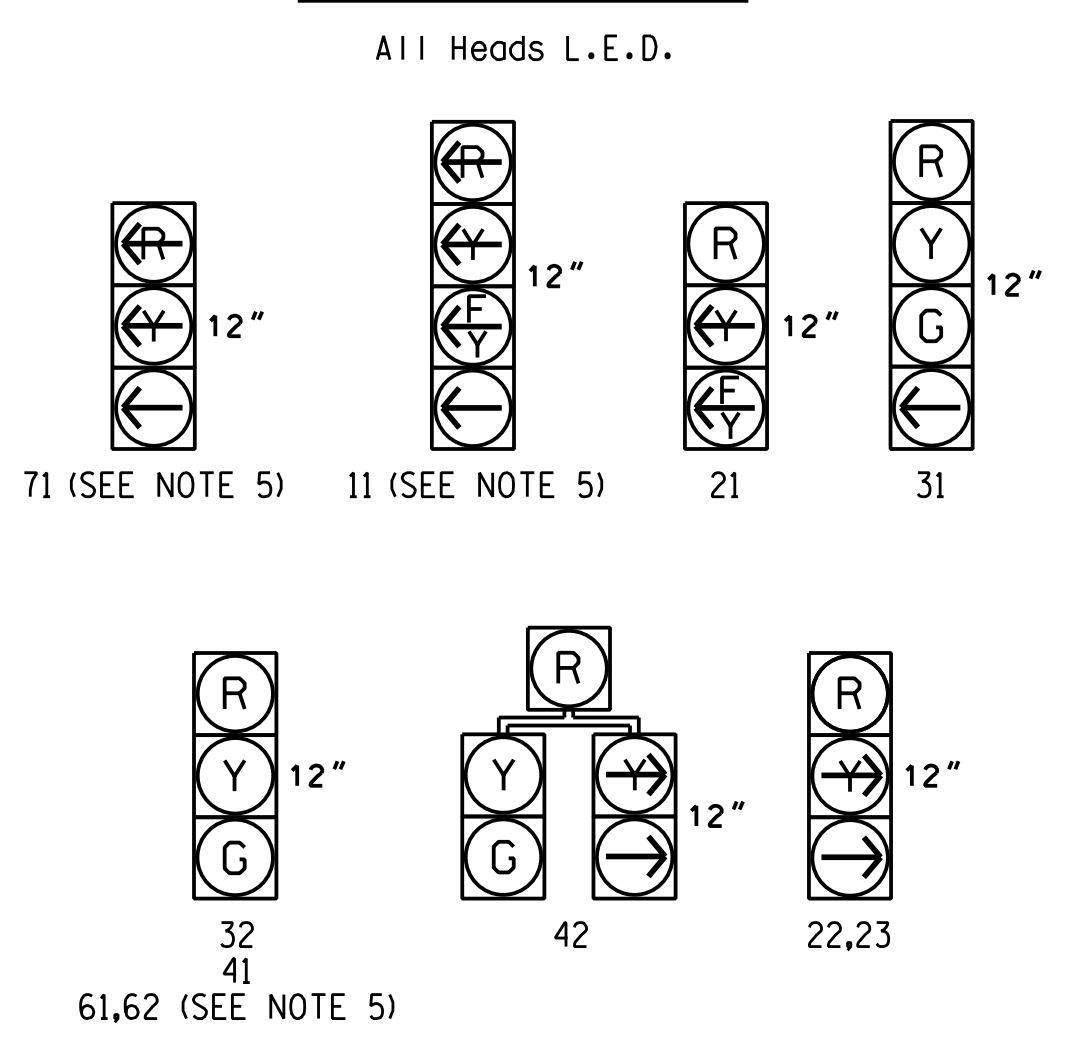


PHASING DIAGRAM DETECTION LEGEND
 ←●→ DETECTED MOVEMENT
 ←○→ UNDETECTED MOVEMENT (OVERLAP)
 ←...→ UNSIGNALIZED MOVEMENT
 ←- - -→ PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE			
	Ø 2	Ø 3	Ø 4	FLASH
21	F	R	R	Y
22,23	-	-	R	Y
31	R	G	R	R
32	R	G	R	R
41	R	R	G	R
42	R	R	G	R

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		
2A	6X6	300	5	-	2	Y	Y	-	-	-	-
2B	6X6	300	5	-	2	Y	Y	-	-	-	-
2C	6X40	0	2-4-2	-	2	Y	Y	-	-	-	-
2D	6X40	0	*	*	2	Y	Y	-	-	-	Y
2E	6X40	0	*	*	2	Y	Y	-	-	-	Y
2F	6X40	0	2-4-2	Y	2	Y	Y	-	-	-	-
3A	6X40	0	*	*	3	Y	Y	-	-	-	-
3B	6X40	0	*	*	3	Y	Y	-	-	-	Y
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	-	-

* Multizone Microwave Detection.

3 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.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- Bag existing signal heads numbered 11,61,62 and 71.
- 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: Controller Asset #: 1035.

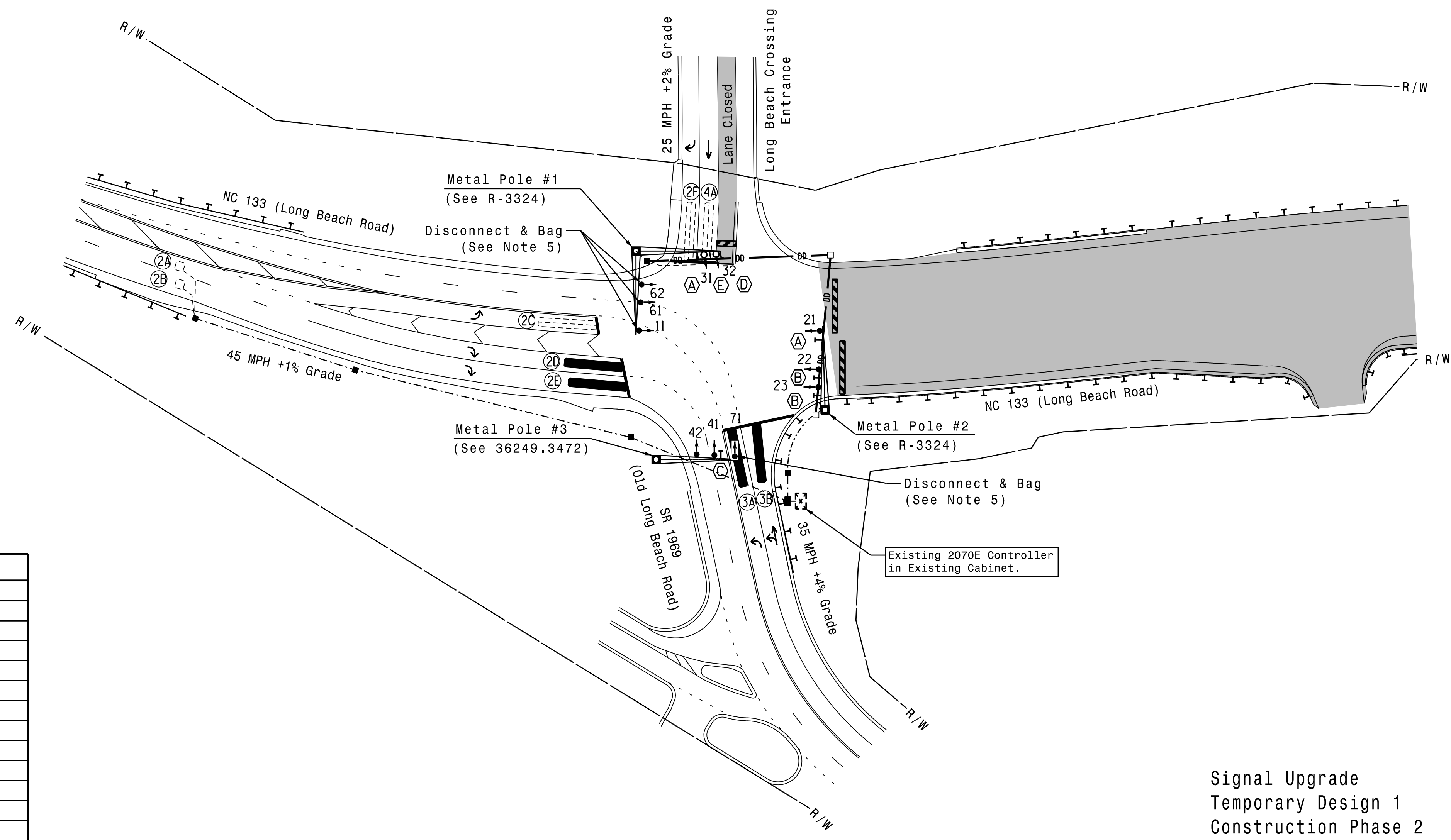
LEGEND

PROPOSED	EXISTING
	N/A
	N/A
	N/A
	N/A
(A)	(A)
(B)	(B)
(C)	(C)
(D)	(D)
(E)	(E)

OASIS 2070 TIMING CHART

FEATURE	PHASE		
	2	3	4
Min Green 1 *	12	7	7
Extension 1 *	2.0	2.0	2.0
Max Green 1 *	30	60	20
Yellow Clearance	3.0	3.6	3.1
Red Clearance	3.3	2.7	2.8
Red Revert	2.0	2.0	2.0
Walk 1 *	-	-	-
Don't Walk 1	-	-	-
Seconds Per Actuation *	-	-	-
Max Variable Initial *	-	-	-
Time Before Reduction *	-	-	-
Time To Reduce *	-	-	-
Minimum Gap	-	-	-
Recall Mode	MIN RECALL	-	-
Vehicle Call Memory	YELLOW	-	-
Dual Entry	-	-	-
Simultaneous Gap	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phase 2 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.



Signal Upgrade
 Temporary Design 1
 Construction Phase 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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	NC 133 (Long Beach Road) at SR 1969 (Old Long Beach Road) / Long Beach Crossing Entrance	
	Division 03 Brunswick Co. Southport PLAN DATE: June 2017 REVIEWED BY: A.D. Klinksiek	PREPARED BY: A.H. Thornburg REVIEWED BY: N.R. Simmons
SCALE 0 50 1" = 50'	REVISIONS INITI. DATE	SIGNATURE DATE 9/10/2021 SIG. INVENTORY NO. 03-1035T1