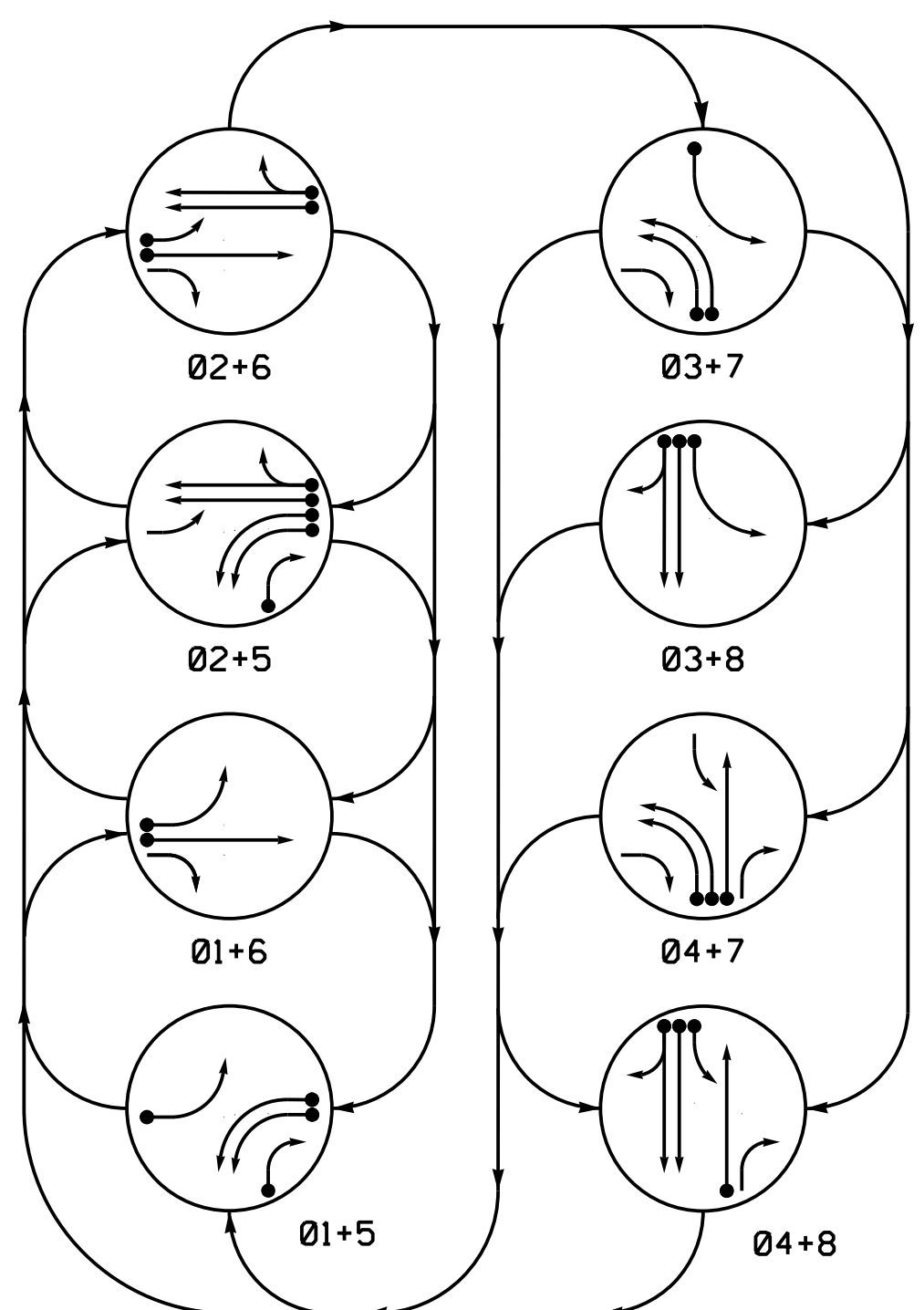
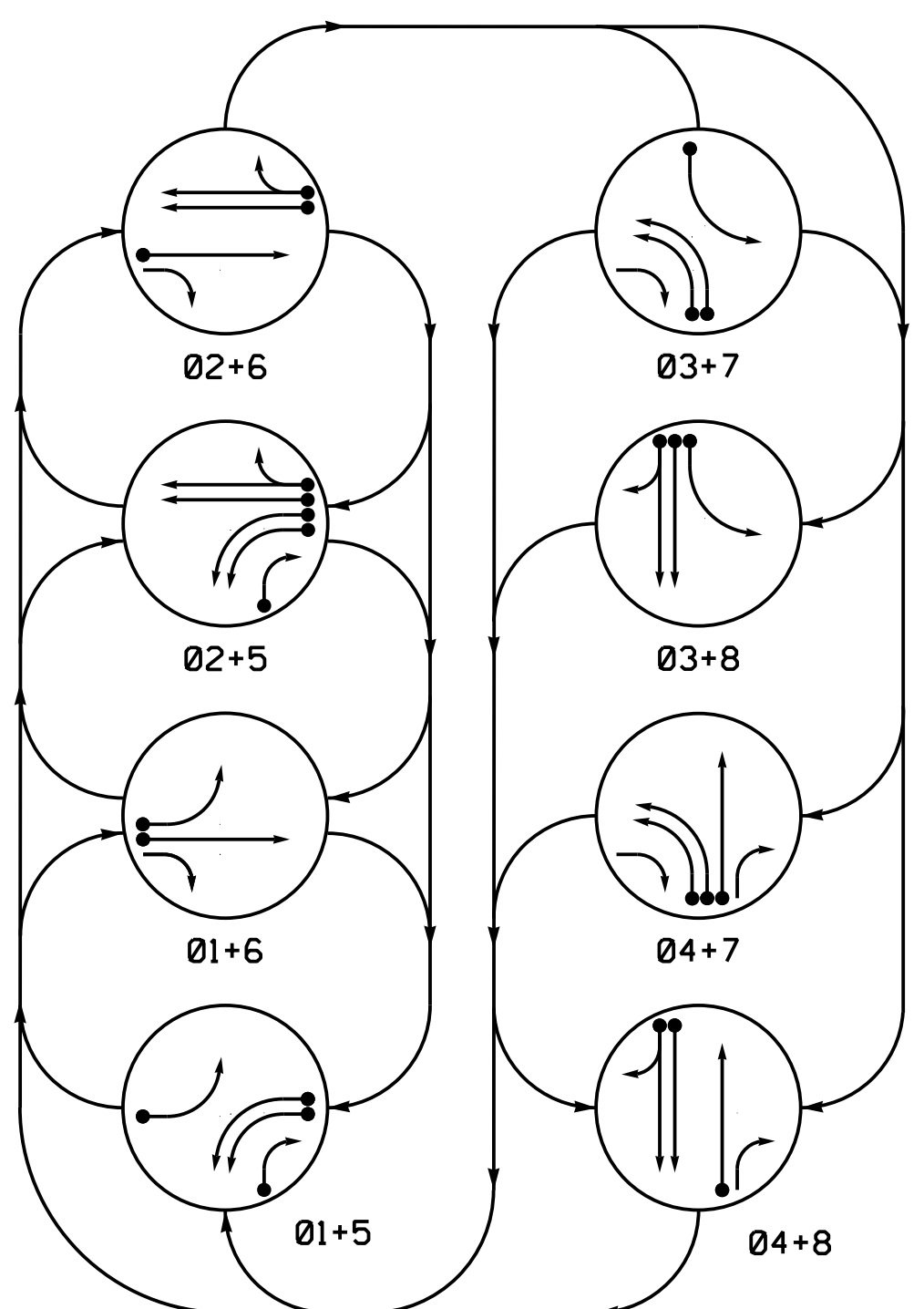


**DEFAULT PHASING DIAGRAM**



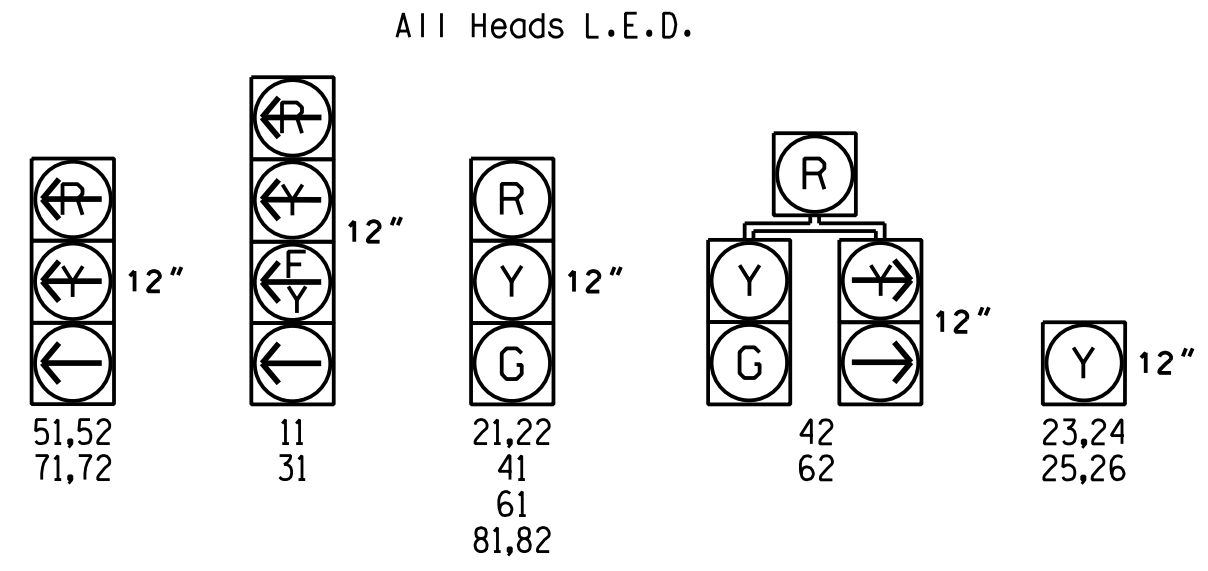
**ALTERNATE PHASING DIAGRAM**



**PHASING DIAGRAM DETECTION LEGEND**

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

**SIGNAL FACE I.D.**



**OASIS 2070 LOOP & DETECTOR INSTALLATION CHART**

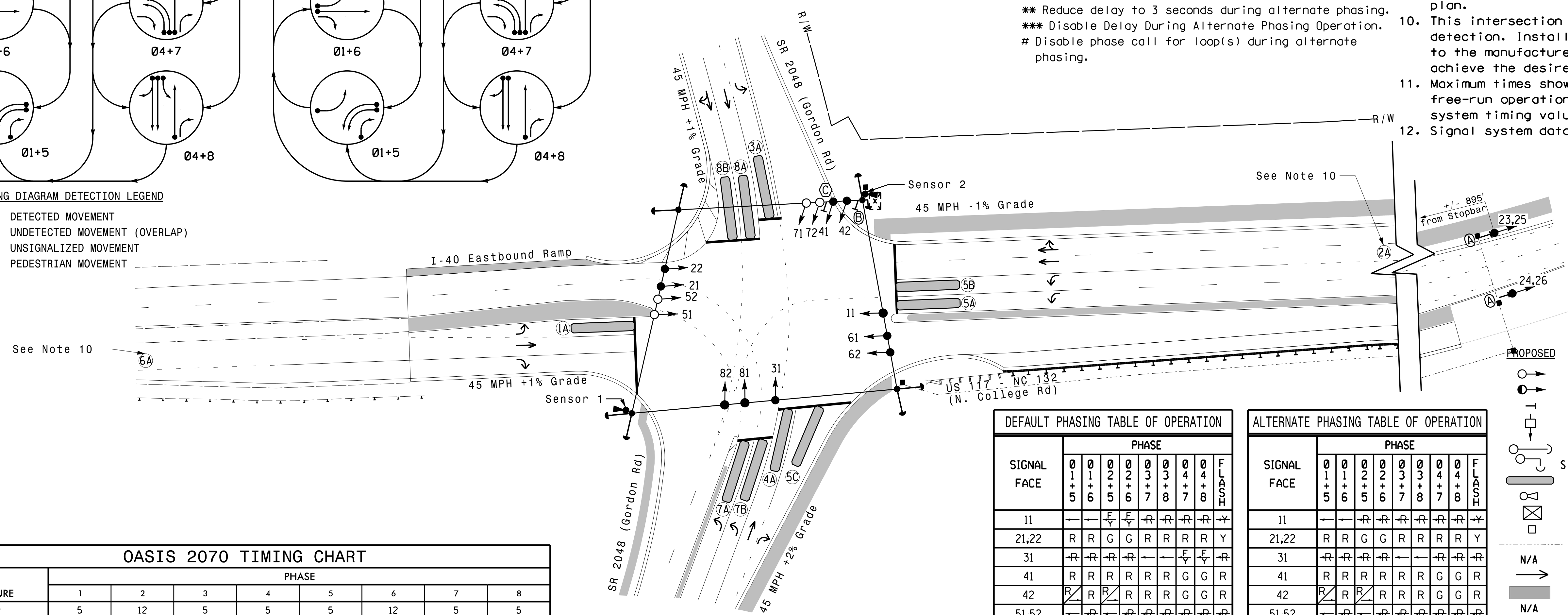
ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				SYSTEM LOOP	NEW CARD
					PHASE	CALLING	EXTENSION	STRETCH TIME		
1A	6X40	0	*	*	1	Y	Y	-	15***	-
					6#	Y	Y	-	-	-
3A	6X40	0	*	*	3	Y	Y	-	15**	-
					8#	Y	Y	-	3	-
4A	6X40	0	*	*	4	Y	Y	-	-	-
5A	6X40	0	*	*	5	Y	Y	-	-	-
5B	6X40	0	*	*	5	Y	Y	-	-	-
5C	6X40	0	*	*	5	Y	Y	-	15	-
7A	6X40	0	*	*	7	Y	Y	-	-	-
7B	6X40	0	*	*	7	Y	Y	-	-	-
8A	6X40	0	*	*	8	Y	Y	-	-	-
8B	6X40	0	*	*	8	Y	Y	-	10	-

- \* Multizone Microwave Detection
- \*\* Reduce delay to 3 seconds during alternate phasing.
- \*\*\* Disable Delay During Alternate Phasing Operation.
- # Disable phase call for loop(s) during alternate phasing.

**8 Phase Fully Actuated Wilmington Signal System**

**NOTES**

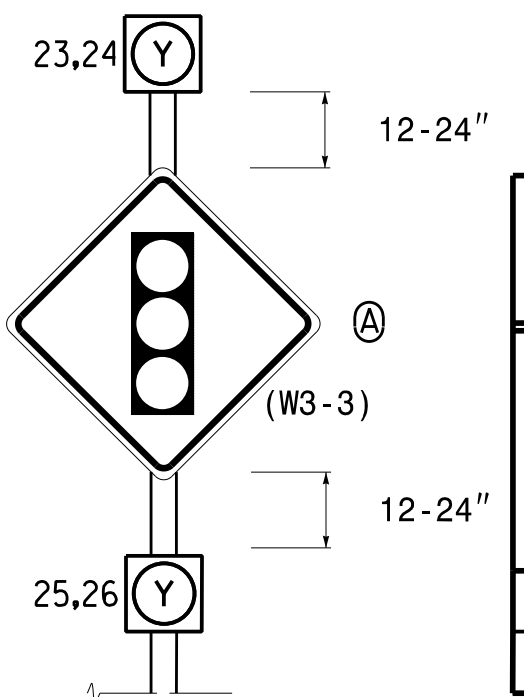
1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. Phase 3 and/or phase 7 may be lagged.
5. Reposition existing signal heads numbered 21 and 22.
6. Set all detector units to presence mode.
7. Flash vertically mounted beacons alternatively.
8. Flash beacons 23,24,25 and 26 at the end of phase 2 green.
9. The Division (City) Traffic Engineer will determine the hours of use for each phasing plan.
10. This intersection uses multi-zone microwave detection. Install the detectors according to the manufacturer's instructions to achieve the desired detection.
11. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
12. Signal system data: Controller Asset #0331.



**OASIS 2070 TIMING CHART**

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green 1 *	5	12	5	5	5	12	5	5
Extension 1 *	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Max Green 1 *	15	90	20	35	20	90	20	35
Yellow Clearance	3.0	4.6	3.0	4.4	3.0	4.6	3.0	4.4
Red Clearance	3.5	2.2	3.2	1.8	3.5	2.2	3.5	1.8
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 *	-	-	-	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-	-	-
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL	-	-
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW	-	-
Dual Entry	-	-	-	ON	-	-	-	ON
Simultaneous Gap	ON	ON	ON	ON	ON	ON	ON	ON

Figure 1



**FLASH TABLE OF OPERATION**

SIGNAL FACE	INTERVAL	
	1	2
23,24	ON	OFF
25,26	OFF	ON

**RADAR DETECTION SYSTEM**

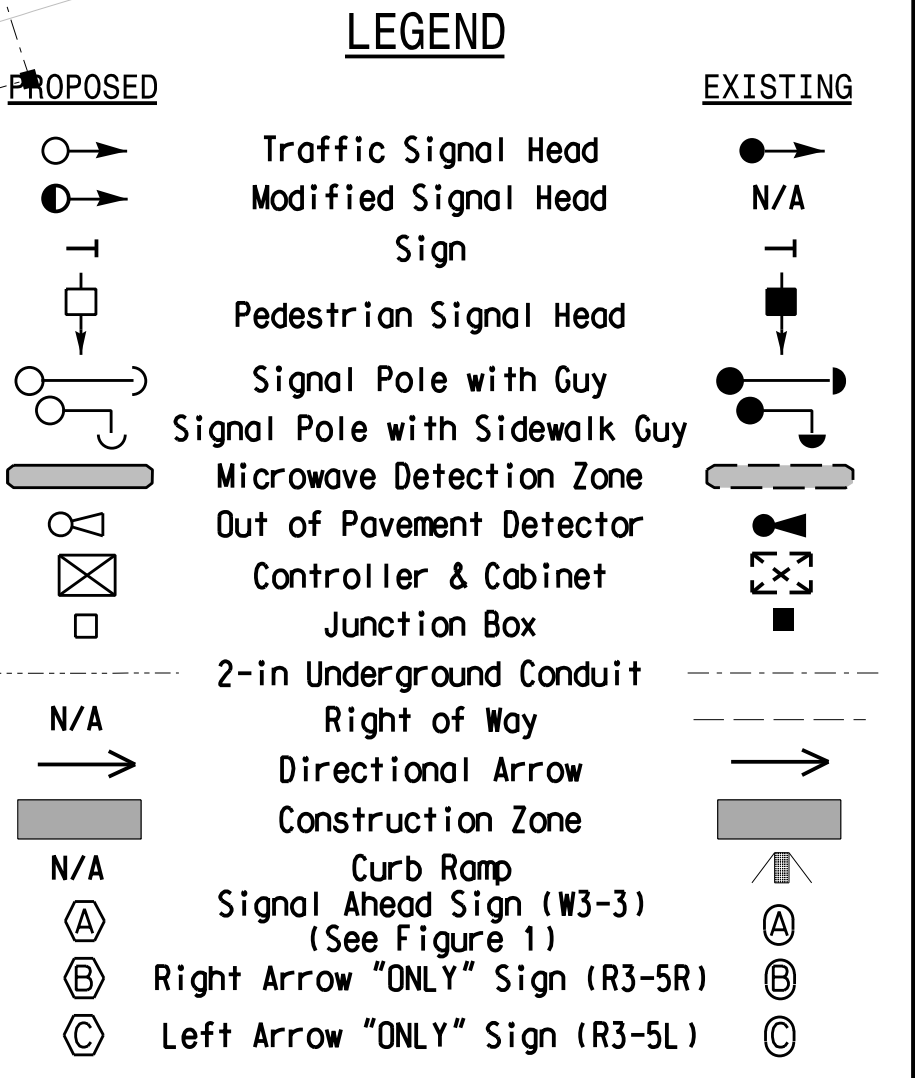
FUNCTION	Sensor 1	Sensor 2
Channel	1	1
Phase	2	6
Direction of Travel	SB	NB
Detection Zone (ft)	100-600	100-600
Enable Speed	Y	Y
Speed Range (mph)	35-100	35-100
Enable Estimated Time of Arrival	Y	Y
Estimated Time of Arrival (sec)	1.0-6.5	2.5-6.5

**DEFAULT PHASING TABLE OF OPERATION**

SIGNAL FACE	PHASE								FLASH	
	0	1	2	3	4	5	6	7		
11	-	-	-	-	-	-	-	-	-	-
21,22	R	R	G	G	R	R	R	R	Y	-
31	-	-	-	-	-	-	-	-	-	-
41	R	R	R	R	R	R	G	G	R	-
42	R	R	R	R	R	R	G	G	R	-
51,52	-	-	-	-	-	-	-	-	-	-
61	R	G	R	G	R	R	R	R	Y	-
62	R	G	R	G	R	R	R	R	Y	-
71,72	-	-	-	-	-	-	-	-	-	-
81,82	R	R	R	R	R	G	R	G	R	-

**ALTERNATE PHASING TABLE OF OPERATION**

SIGNAL FACE	PHASE								FLASH	
	0	1	2	3	4	5	6	7		
11	-	-	-	-	-	-	-	-	-	-
21,22	R	R	G	G	R	R	R	R	Y	-
31	-	-	-	-	-	-	-	-	-	-
41	R	R	R	R	R	R	G	G	R	-
42	R	R	R	R	R	R	G	G	R	-
51,52	-	-	-	-	-	-	-	-	-	-
61	R	G	R	G	R	R	R	R	Y	-
62	R	G	R	G	R	R	R	R	Y	-
71,72	-	-	-	-	-	-	-	-	-	-
81,82	R	R	R	R	R	G	R	G	R	-



Signal Upgrade - Temporary Design 3 (Construction Phase 2)

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

Prepared For: **TRANSPORTATION MOBILITY AND SAFETY DIVISION**

750 N. Greenfield Pkwy, Corner, NC 27529

Scale: 1" = 40'

Division 3 New Hanover County Wilmington

SR 2048 (Gordon Rd)

PLAN DATE: May 2022 REVIEWED BY: N.K. Vlanich

PREPARED BY: E.E. Tiller REVIEWED BY: N.R. Simmons

Signature: *Nelasha R. Simmons* 5/17/2024

SIG. INVENTORY NO. 03-0331T3

\* 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.