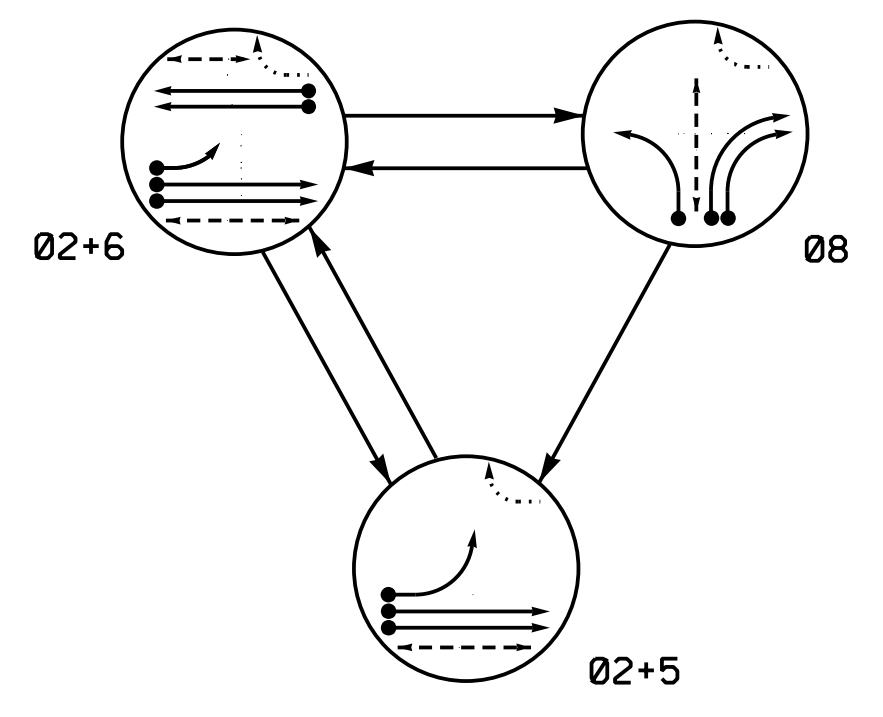
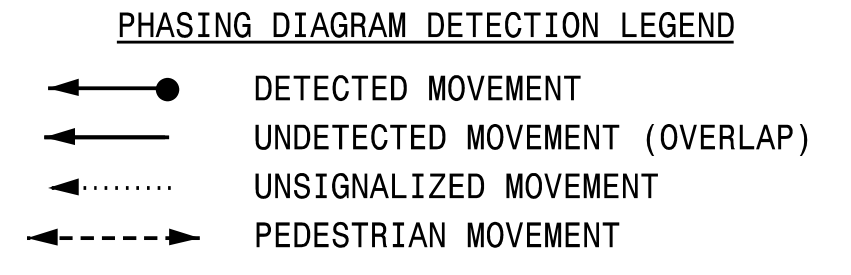
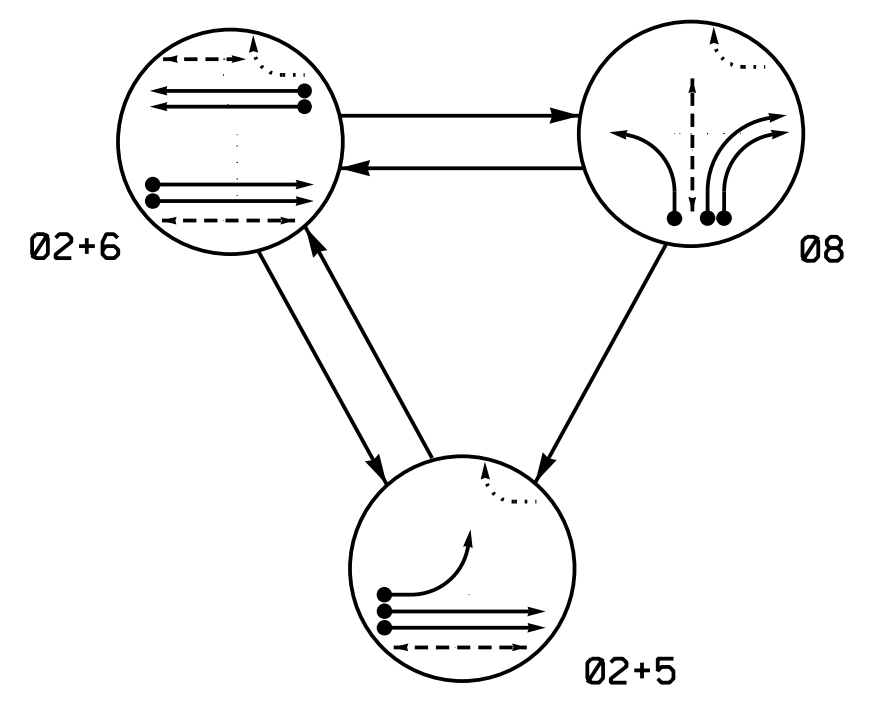


DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE			
	02+5	02+6	08	F
21	G	G	R	Y
22	↑	↑	R	Y
51	—	—	R	Y
61	R	↑	R	Y
62	R	G	R	Y
81,82	—R	—R	—	—R
83,84	R	R	—	R
P21,P22,P23,P24	W	W	DW	DRK
P61,P62	DW	W	DW	DRK
P81,P82,P83,P84	DW	DW	W	DRK

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE			
	02+5	02+6	08	F
21	G	G	R	Y
22	↑	↑	R	Y
51	—	—	R	Y
61	R	↑	R	Y
62	R	G	R	Y
81,82	—R	—R	—	—R
83,84	R	R	—	R
P21,P22,P23,P24	W	W	DW	DRK
P61,P62	DW	W	DW	DRK
P81,P82,P83,P84	DW	DW	W	DRK

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			DELAY TIME
5A	6x40	0	*	*	5	Y	Y	-	15**	-	-
8A	6x40	0	*	*	8	Y	Y	-	-	-	-
8B	6x40	0	*	*	8	Y	Y	-	-	-	-
8C	6x40	0	*	*	8	Y	Y	-	-	-	-

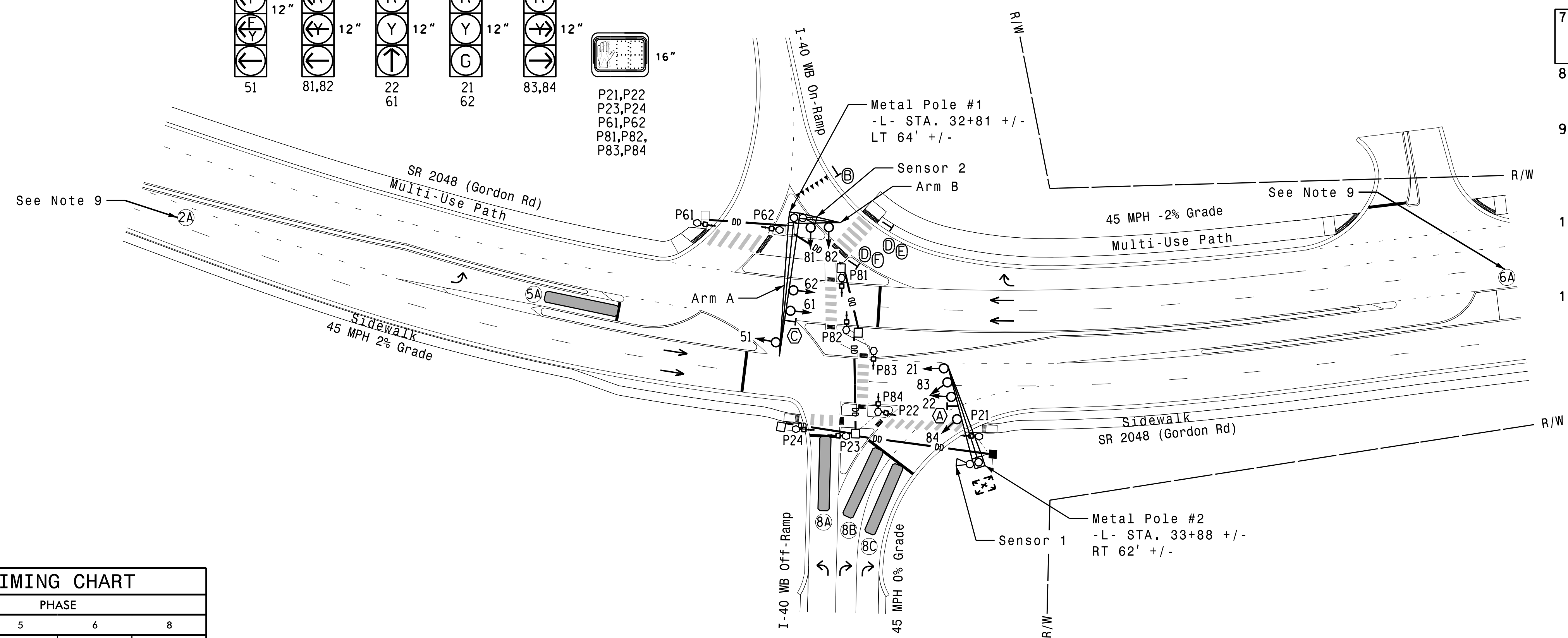
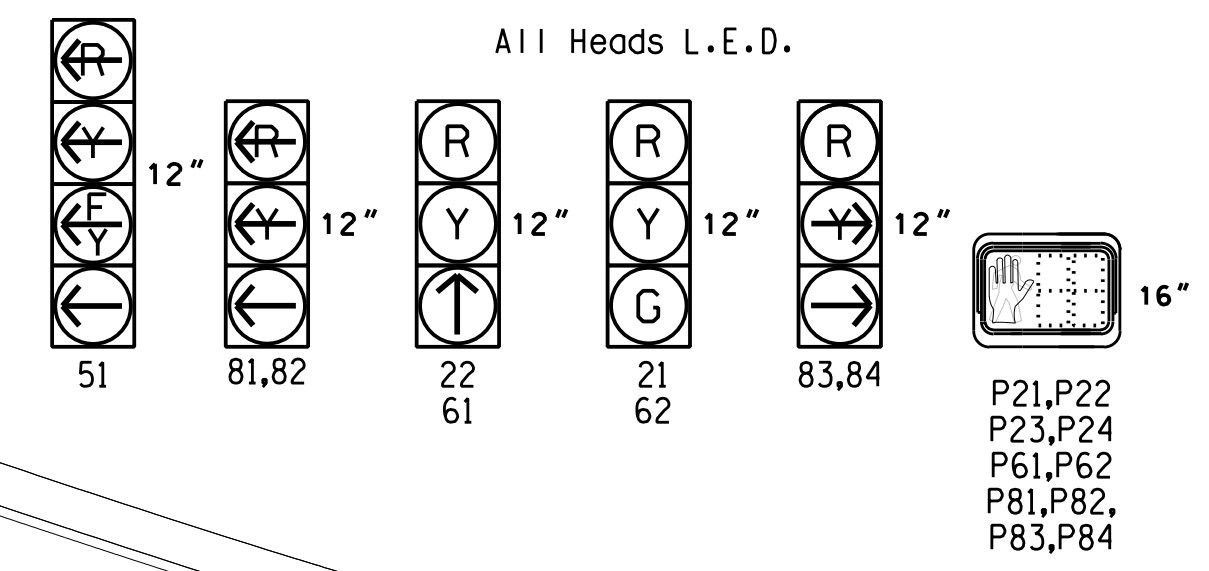
\* Multizone Microwave Detection  
 \*\* Disable Delay During Alternate Phasing Operation.  
 # Disable phase call for loop(s) during alternate phasing.

3 Phase Fully Actuated Wilmington Signal System

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 5 may be lagged.
- Set all detector units to presence mode.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- All pedestrian pushbuttons shall be located in the field by the Division Traffic Engineer before installation.
- The Division (City) Traffic Engineer will determine the hours of use for each phasing plan.
- This intersection uses multizone microwave detection. Install the detectors according to the manufacturer's instructions to achieve the desired detection.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Signal system data: Controller Asset #0258.

SIGNAL FACE I.D.



OASIS 2070 TIMING CHART

FEATURE	PHASE			
	2	5	6	8
Min Green 1 *	12	5	12	5
Extension 1 *	2.0	2.0	2.0	2.0
Max Green 1 *	90	30	90	35
Yellow Clearance	4.7	3.0	4.7	3.0
Red Clearance	2.2	2.3	2.2	4.3
Red Revert	5.0	2.0	5.0	2.0
Walk 1 *	7	-	7	7
Don't Walk 1	9	-	4	5
Advanced Walk *	-	-	-	-
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	-	-	-	-
Simultaneous Gap	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.

RADAR DETECTION SYSTEM

FUNCTION	Sensor 1	Sensor 2
Channel	1	1
Phase	2	6
Direction of Travel	EB	WB
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	1.0-6.5

LEGEND

PROPOSED	EXISTING
○ Traffic Signal Head	● Traffic Signal Head
○ Modified Signal Head	○ N/A
⊥ Sign	⊥ Sign
⊥ Pedestrian Signal Head	⊥ Pedestrian Signal Head
○ Signal Pole with Guy	○ Signal Pole with Guy
○ Signal Pole with Sidewalk Guy	○ Signal Pole with Sidewalk Guy
○ Microwave Detection Zone	○ Microwave Detection Zone
○ Out of Pavement Detector	○ Out of Pavement Detector
□ Controller & Cabinet	□ Controller & Cabinet
□ Junction Box	□ Junction Box
○ 2-in Underground Conduit	○ 2-in Underground Conduit
N/A Right of Way	--- Right of Way
→ Directional Arrow	→ Directional Arrow
○ Directional Drill	○ N/A
○ Metal Pole with Mastarm	○ Metal Pole with Mastarm
○ Type II Signal Pedestal	○ Type II Signal Pedestal
N/A Curb Ramp	△ Curb Ramp
⊙ No Right Turn Sign (R3-1)	⊙ No Right Turn Sign (R3-1)
⊙ "YIELD" Sign (R1-2)	⊙ "YIELD" Sign (R1-2)
⊙ No U-Turn/No Left Turn Sign (R3-18)	⊙ No U-Turn/No Left Turn Sign (R3-18)
⊙ Pedestrian Crossing Sign (W11-2)	⊙ Pedestrian Crossing Sign (W11-2)
⊙ Diagonal Arrow Plaque (W16-7pL)	⊙ Diagonal Arrow Plaque (W16-7pL)
⊙ Diagonal Arrow Plaque (W16-7pR)	⊙ Diagonal Arrow Plaque (W16-7pR)

Signal Upgrade - Final Design

SR 2048 (Gordon Road) at I-40 WB Ramps

Division 3 New Hanover County Wilmington

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

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

REVISIONS: INITI. DATE

DocuSigned by: *Natasha R. Simmons* 5/17/2024

SIGNATURE DATE

SIG. INVENTORY NO. 03-0258