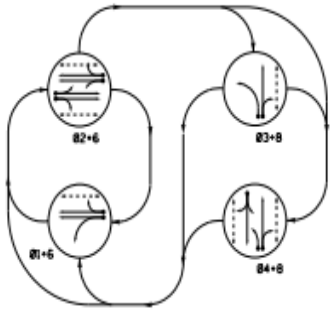
PROJECT REFERENCE NO.	SHEET NO.
	Sig 1.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø1+6	Ø2+6	Ø3+8	Ø4+8	FLASH
21,22	R	G	R	R	R
31	-R-	-R-	—	-Y-	-R-
41,42	R	R	R	G	R
61	G	G	R	R	R
62	G	G	R	R	R
81,82	R	R	G	G	R
P21,P22	DW	W	DW	DW	DFW
P41,P42	DW	DW	DW	W	DFW
P61,P62	W	W	DW	DW	DFW
P81,P82	DW	DW	W	W	DFW

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

INDUCTIVE LOOPS					DETECTOR PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENDING	FULL TIME DELAY	STRETCH (sec)	DELAY (sec)	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	*	1	Y	Y	*	*	15	*	*
				*	6	Y	Y	*	*	*	*	*
2A	6X6	70	3	*	2	Y	Y	*	*	*	*	*
2B	6X6	70	3	*	2	Y	Y	*	*	*	*	*
3A	6X60	0	2-4-2	*	3	Y	Y	*	*	15	*	Y
					8	Y	Y	Y	*	3	*	Y
4A	6X60	0	2-4-2	*	4	Y	Y	*	*	5	*	*
6A	6X6	70	3	*	6	Y	Y	*	*	*	*	*
8A	6X60	0	2-4-2	*	8	Y	Y	*	*	3	*	Y
53	6X6	+125	3	*	*	*	*	*	*	*	Y	*
54	6X6	+138	3	*	*	*	*	*	*	*	Y	*
55	6X6	+138	3	*	*	*	*	*	*	*	Y	*
56	6X6	+95	3	*	*	*	*	*	*	*	Y	*

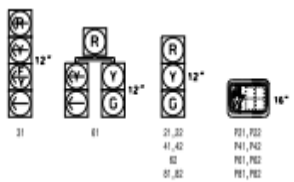
4 Phase
Fully Actuated
(Signal Sytem: D03-05_CarolinaBeach)

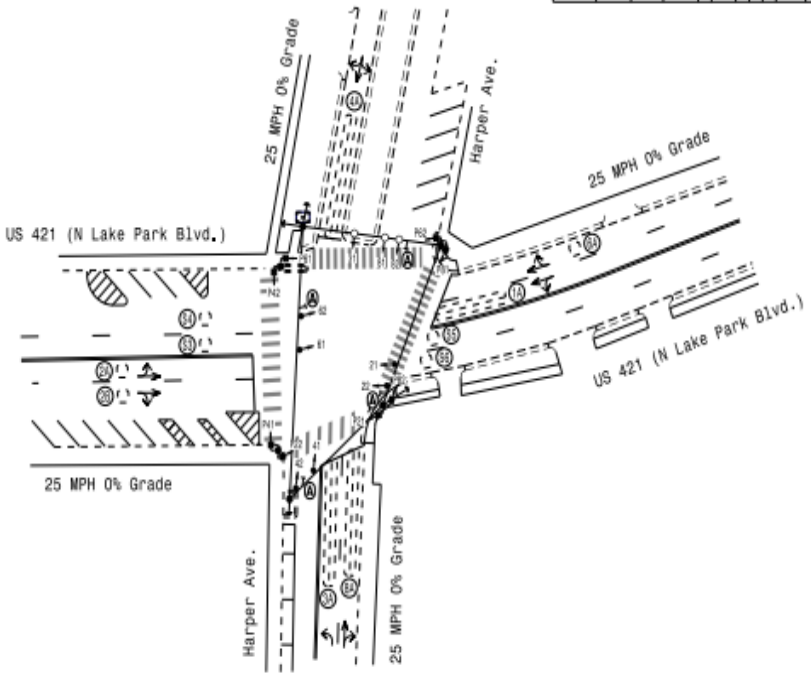
NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024. The PSF can be accessed at the following website: http://connect.ncdot.gov/resources/safety/Pages/ITS-Design-Resources.aspx
2. Do not program signal for flashing/flashing operation unless otherwise directed by the Engineer.
3. Enable backup protect for phase 2 to allow the controller to clear from phase 2-6 to phase 1-6 by progressing through an allred display.
4. Phase 3 may be logged.
5. Set all detectors units to presence mode.
6. Program controller to operate using PWA compact mode.
7. Omit "WALK" and flashing "DON'T WALK" in the pedestrian calls.
8. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
10. Signal system does:
    Controller Asset #0056

SIGNAL FACE I.D.

All Heads L.E.D.





OASIS 2070 TIMING CHART

FEATURE	PHASE 1	2	3	4	6	8
Min Green 1 *	7	10	7	7	10	7
Extension 1 *	2.0	3.0	2.0	2.0	3.0	2.0
Max Green 1 *	15	35	15	20	35	20
Yellow Clearance	3.0	3.2	3.0	3.2	3.2	3.2
Red Clearance	2.1	2.3	2.3	2.6	2.9	2.6
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	7	-	7	7	7
Don't Walk 1	-	13	-	21	18	17
Walk Advance Time *	-	-	-	7	-	7
Seconds Per Actuation *	-	-	-	-	-	-
Max Variable Initial*	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Recall Mode	-	NON RECALL	-	-	NON RECALL	-
Vehicle Call Memory	-	YELLOW	-	-	YELLOW	-
Dual Entry	-	-	-	ON	-	ON
Simultaneous Gap	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 values shown. Min Green for all other phases should not be lower than 4 seconds.

LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Pedestrian Signal Head	
	Sign	
	Signal Pole with Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Directional Arrow	
	Type II Signal Pedestal	
N/A	Curb Ramp	
	"TURNING VEHICLES YIELD TO PEDESTRIANS" Sign (R10-15)	

NC Dept of Transportation
Division of Highways
Final Drawing Date: _____
ITS & Signals Unit

PLANS PREPARED IN THE OFFICE OF:
Kimley»Horn
NC License #F-0102
421 Fayetteville Street, Suite 600
Raleigh, NC 27601
919-677-2000

Signal Upgrade

Prepared For:
NC DEPARTMENT OF TRANSPORTATION

US 421 (N Lake Park Blvd.)
at
Harper Ave.

Division 3 New Hanover County Carolina Beach

PLAN DATE: May 2024 REVISED BY: MC Burke
PREPARED BY: BS Smith REVISED BY: SL Phillips

SCALE: 0 30 1"=30'

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PRELIMINARY PLANS NOT FOR CONSTRUCTION

SIGNATURE DATE

Site Number No. 03-0056