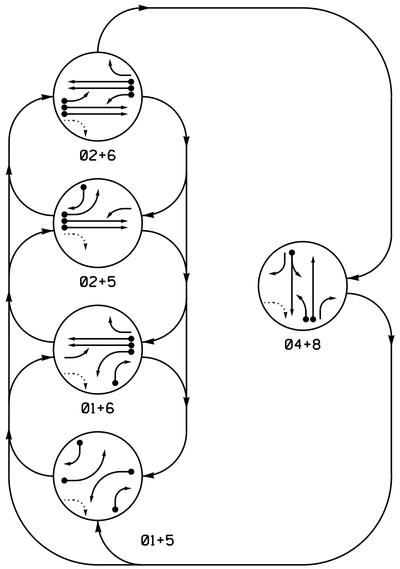
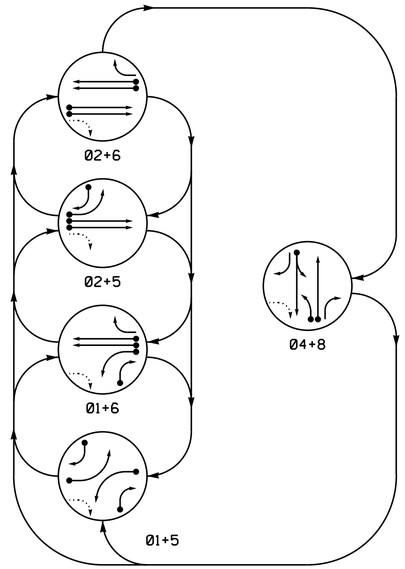
DocuSign Envelope ID: 4D35EB39-7F72-4FAA-8199-A751BC72599F

PROJECT REFERENCE NO.	SHEET NO.
R-5021	Sig. 9.0

DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

DEFAULT PHASING TABLE OF OPERATION

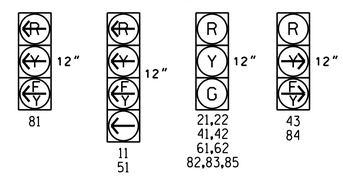
SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	04+8	FLASH
11	—	—	F Y	F Y	R	Y
21,22	R	R	G	G	R	Y
41,42	R	R	R	R	G	R
43	F Y	R	F Y	R	F Y	R
51	—	F Y	—	F Y	R	Y
61,62	R	G	R	G	R	Y
81	R	R	R	R	F Y	R
82,83,85	R	R	R	R	G	R
84	F Y	F Y	R	R	F Y	R

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	04+8	FLASH
11	—	—	R	R	R	Y
21,22	R	R	G	G	R	Y
41,42	R	R	R	R	G	R
43	F Y	R	F Y	R	F Y	R
51	—	R	—	R	R	Y
61,62	R	G	R	G	R	Y
81	R	R	R	R	F Y	R
82,83,85	R	R	R	R	G	R
84	F Y	F Y	R	R	F Y	R

SIGNAL FACE I.D.

All Heads L.E.D.



OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

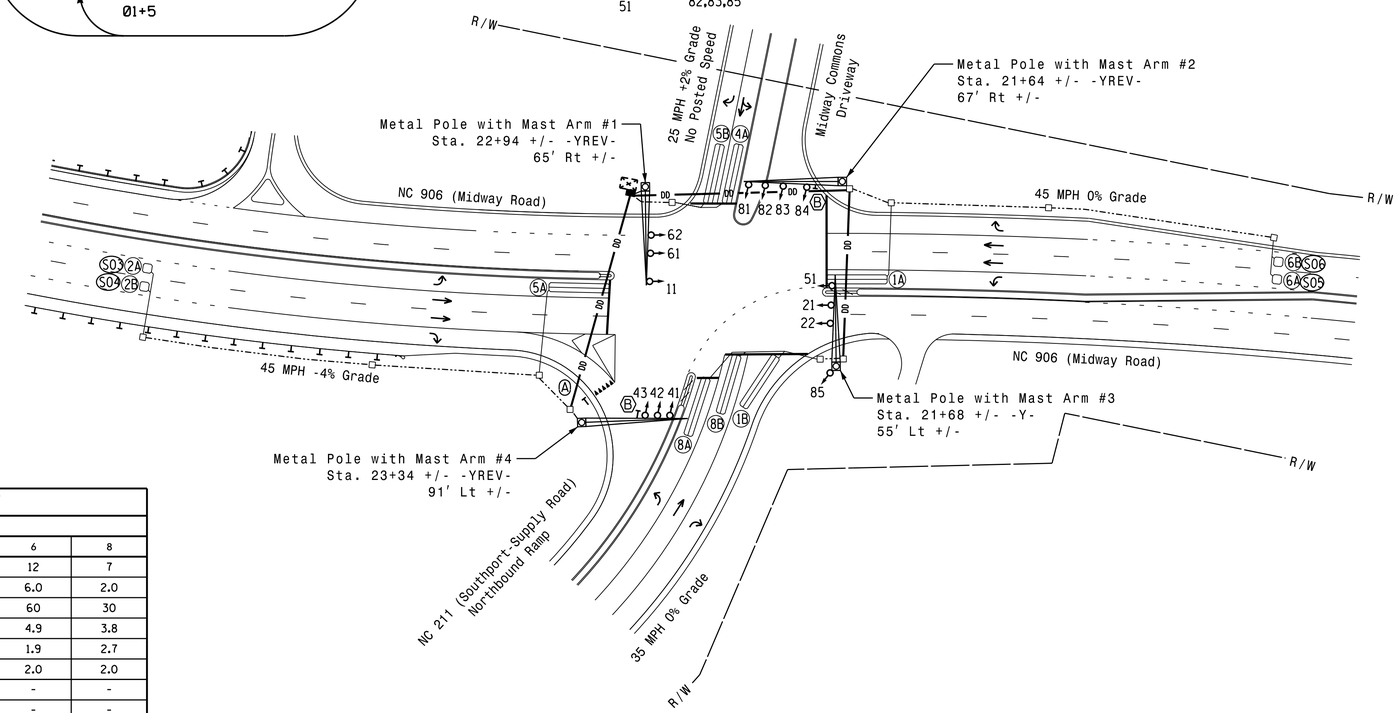
INDUCTIVE LOOPS					DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	Y	1	Y	Y	-	-	**15	-	Y
					*6	Y	Y	-	-	-	-	Y
1B	6X40	0	2-4-2	Y	1	Y	Y	-	-	15	-	Y
2A/SO3	6X6	300	5	Y	2	Y	Y	-	-	-	Y	Y
2B/SO4	6X6	300	5	Y	2	Y	Y	-	-	-	Y	Y
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	-	-	Y
5A	6X40	0	2-4-2	Y	5	Y	Y	-	-	**15	-	Y
					*2	Y	Y	-	-	-	-	Y
5B	6X40	0	2-4-2	Y	5	Y	Y	-	-	15	-	Y
6A/SO5	6X6	300	5	Y	6	Y	Y	-	-	-	Y	Y
6B/SO6	6X6	300	5	Y	6	Y	Y	-	-	-	Y	Y
8A	6X40	0	2-4-2	Y	8	Y	Y	-	-	-	-	Y
8B	6X40	0	2-4-2	Y	8	Y	Y	-	-	-	-	Y

* Disable phase 2 and 6 call for 1A and 5A during alternate phasing operation.
** Reduce delay to 0 seconds during alternate phasing operation.

5 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 1 and/or 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. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
7. Closed loop system data: Controller Asset #: 1122.



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
DD	Directional Drill	N/A
	Metal Pole with Mastarm	
A	"YIELD" Sign (R1-2)	A
B	"RIGHT TURN MUST YIELD TO U-TURN" Sign	B

OASIS 2070 TIMING CHART

FEATURE	PHASE 1	2	4	5	6	8
Min Green 1 *	7	12	7	7	12	7
Extension 1 *	2.0	6.0	2.0	2.0	6.0	2.0
Max Green 1 *	20	60	30	20	60	30
Yellow Clearance	3.0	4.9	3.8	3.0	4.9	3.8
Red Clearance	3.2	1.9	2.7	3.6	1.9	2.7
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-
Seconds Per Actuation *	-	2.5	-	-	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	-	-	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 what is shown. Min Green for all other phases should not be lower than 4 seconds.

New Installation
Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

HNTB
HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554
(919) 546-8997

Prepared for: Transportation Mobility and Safety Division, Signal Design Section, Department of Transportation, State of North Carolina
750 N.Greenfield Pkwy.Garner,NC 27529

SCALE 1"=50' (0 – 50)

NC 906 (Midway Road) at
NC 211 Northbound Ramp/
Midway Commons Driveway

Division 03 Brunswick Co. Southport

PLAN DATE: June 2017	REVIEWED BY: A.D. Klinksiek		
PREPARED BY: A.H. Thornburg	REVIEWED BY: N.R. Simmons		
REVISIONS		INIT.	DATE

SEAL: NORTH CAROLINA PROFESSIONAL SEAL 031464 ENGINEER NATASHA R. SIMMONS

DocuSigned by: Natasha Simmons F6DA8R0F3AD445A... 9/10/2021
SIGNATURE DATE
SIG. INVENTORY NO. 03-1122