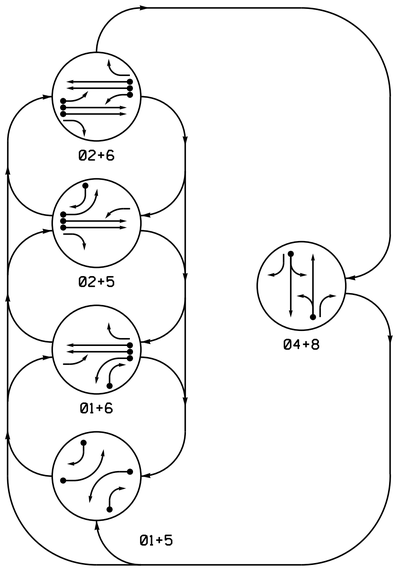
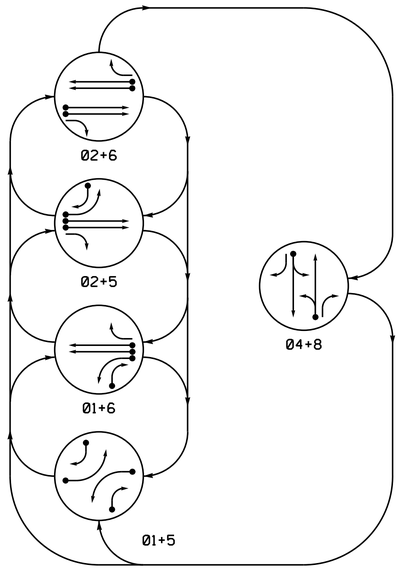
PROJECT REFERENCE NO.	SHEET NO.
U-4902D	Sig. 12.0

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
81,82	R	R	R	R	G	R
83	~~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
81,82	R	R	R	R	G	R
83	~~F Y~~	~~F Y~~	R	R	~~F Y~~	R

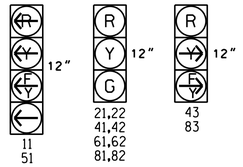
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

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	*	*	1	Y	Y	-	-	***10	-	-
					**6	Y	Y	Y	-	3	-	-
1B	6X40	0	*	*	1	Y	Y	-	-	15	-	-
2A	6X6	300	*	*	2	Y	Y	-	-	-	-	-
2B	6X6	300	*	*	2	Y	Y	-	-	-	-	-
4A	6X40	0	*	*	4	Y	Y	-	-	-	-	-
5A	6X40	0	*	*	5	Y	Y	-	-	***10	-	-
					**2	Y	Y	Y	-	3	-	-
5B	6X40	0	*	*	5	Y	Y	-	-	15	-	-
6A	6X6	300	*	*	6	Y	Y	-	-	-	-	-
6B	6X6	300	*	*	6	Y	Y	-	-	-	-	-
8A	6X40	0	*	*	8	Y	Y	-	-	-	-	-

* Multizone Microwave Detection
** Disable phase 2 or 6 call for loops 1A and 5A during alternate phasing operation.
*** Reduce delay to 3 seconds during alternate phasing operation.

SIGNAL FACE I.D.

All Heads L.E.D.



5 Phase
Fully Actuated
Wilmington Signal 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 5 may be lagged.
4. Set all detector units to presence mode.
5. Reposition existing signal head numbered 41.
6. The Division Traffic Engineer will determine the hours of use for each phasing plan.
7. Incorporate Microwave Detection system for vehicle detection.
8. Provide the Engineer with the Manufacturer's approved Microwave Detection locations and mounting heights to obtain detection zones as shown.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
10. Signal system data: Controller Asset #1027

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
▬	Microwave Detection Zone	▭
▭	Construction Zone	N/A
Ⓐ	"RIGHT TURN MUST YIELD TO U-TURN" Sign	Ⓐ

OASIS 2070 TIMING CHART

FEATURE	PHASE 1	2	4	5	6	8
Min Green 1 *	5	12	5	5	12	5
Extension 1 *	2.0	6.0	2.0	2.0	6.0	2.0
Max Green 1 *	15	90	20	15	90	20
Yellow Clearance	3.0	4.5	3.2	3.0	4.5	3.1
Red Clearance	2.8	1.7	3.1	2.9	1.7	3.2
Walk 1 *	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-
Seconds Per Actuation *	-	1.5	-	-	1.5	-
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.

Signal Upgrade
Temporary Design 3
Construction Phase III

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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Prepared For:
Transportation Mobility and Safety Division
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy.Garner,NC 27529

US 17 (Market Street) at
SR 2734 (Marsh Oaks Drive)/
SR 2290 (Mendenhall Drive)

Division 03 | New Hanover Co. | Wilmington

PLAN DATE: February 2018 | REVIEWED BY: A.D. Klinksiek
PREPARED BY: A.H. Thornburg | REVIEWED BY: N.R. Simmons

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 031464 ENGINEER NATASHA R. SIMMONS

DocuSigned by: Natasha R. Simmons 8/1/2018
SIGNATURE DATE

SIG. INVENTORY NO. 03-1027T3