PHASING DIAGRAM

06   04+8

ALL RED

RED REST

PHASING DIAGRAM DETECTION LEGEND

- ●——▶ DETECTED MOVEMENT
- ——▶ UNDETECTED MOVEMENT (OVERLAP)
- ◀— — UNSIGNALIZED MOVEMENT
- ◀- - -▶ PEDESTRIAN MOVEMENT
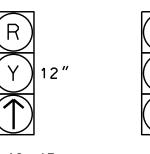
TABLE OF OPERATION

SIGNAL FACE	PHASE			
	Ø6	Ø4+8	RED REST	FLASH
41, 42, 43	R	↑	R	R
44	↗	╱	↗	R
61, 62	↑	R	R	R
63	↖	↘	↖	R
81, 82, 83	↗	↘	↗	R
P41, P42	DW	W	DW	DRK
P61, P62	W	DW	DW	DRK

W – Walk
DW – Don't Walk
DRK – Dark

SIGNAL FACE I.D.

All Heads L.E.D.

R / Y / ↑ (12")
41, 42, 43
61, 62

↗ / ↗ / ↙ (12")
63
81, 82, 83

↗ / ↗ / ↗ (12")
44

(16")
P41, P42
P61, P62

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
4A	6X40	0	2-4-2	–	4	Y	Y	–	–	–	–	–
4B	6X40	0	2-4-2	–	4	Y	Y	–	–	–	–	–
4C	6X40	0	2-4-2	Y	4	Y	Y	–	–	–	–	Y
6A/S4	6X6	300	5	–	6	–	Y	–	–	–	Y	–
6B/S5	6X6	300	5	–	6	–	Y	–	–	–	Y	–
6C	6X40	0	2-4-2	–	6	Y	Y	–	–	–	–	–
6D	6X40	0	2-4-2	–	6	Y	Y	–	–	–	–	–
8A	6X40	0	2-4-2	–	8	Y	Y	–	–	–	–	–

2 Phase
Fully Actuated
(NC 119 CLS)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
4. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
5. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
6. Pedestrian pedestals are conceptual and shown for reference only. See sheets P1-P3 for pushbutton location details.
7. Program all phases for Red Rest.
8. Program controller to start up in phase 6 green.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
10. Closed loop system data: Controller Asset #: 0441.

Metal Pole #7

Metal Pole #8

45 MPH (Design Speed 30 MPH) -2% Grade

45 MPH 1% Grade

NC 119

NC 119

35 MPH 0% Grade

I-40 WB/I-85 SB Ramps

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	—▶
N/A	Guardrail	–□□–
N/A	Directional Drill	N/A
⬭▷	Metal Pole with Mastarm	□▷
N/A	Curb Ramp	●
○	Type II Signal Pedestal	
Ⓐ	No Right Turn Sign (R3-1)	Ⓐ
Ⓑ	No Left Turn Sign (R3-2)	Ⓑ
Ⓒ	"YIELD" Sign (R1-2)	Ⓒ
Ⓓ	Pedestrian Crossing Sign (W11-2)	Ⓓ

OASIS 2070 TIMING CHART

FEATURE	PHASE		
	4	6	8
Min Green 1 *	12	12	12
Extension 1 *	2.0	6.0	2.0
Max Green 1 *	60	60	60
Yellow Clearance	3.6	4.4	3.8
Red Clearance	2.3	3.7	1.0
Red Revert	2.0	2.0	2.0
Walk 1 *	4	4	
Don't Walk 1	9	24	
Seconds Per Actuation *	–	–	–
Max Variable Initial *	–	–	–
Time Before Reduction *	–	15	–
Time To Reduce *	–	30	–
Minimum Gap	–	3.0	–
Recall Mode	–	–	–
Vehicle Call Memory	–	–	–
Dual Entry	ON	–	ON
Simultaneous Gap	ON	ON	ON
Red Rest	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phase 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

Signal Upgrade - Final Design

NC 119
at
I-40 WB/I-85 SB Ramps

Division 7   Alamance County   Mebane

PLAN DATE: November 2016   REVIEWED BY:
PREPARED BY: I. O. Umozurike   REVIEWED BY:

SCALE	
0 50	
1"=50'	

SIG. INVENTORY NO. 07-0441

REVISIONS | INIT. | DATE

SIGNATURE   DATE   1/25/2017

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

27-JAN-2017 12:51
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