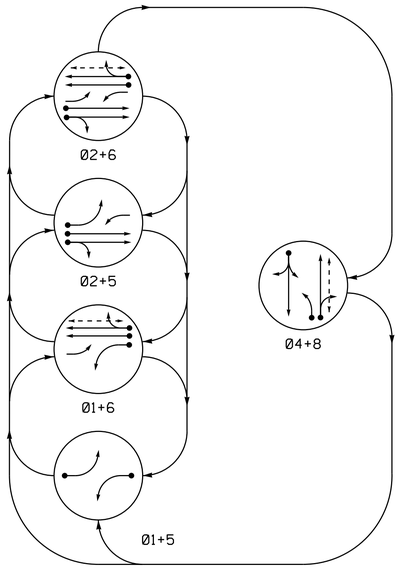
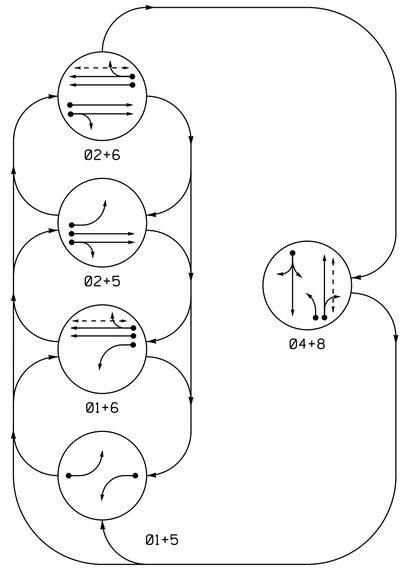
PROJECT REFERENCE NO.	SHEET NO.
W-5705D	Sig. 1.0

5 Phase
Fully Actuated
W/ Emergency Vehicle Preemption
(Isolated)

DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM

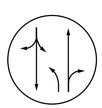


PHASING DIAGRAM DETECTION LEGEND

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

EV PREEMPT PHASES

(Medium Priority)



EVP 3
(Ø4+8)

DEFAULT TABLE OF OPERATION

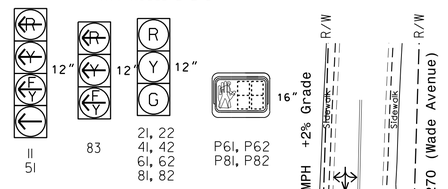
SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	04+8	EVP3	FLASH
11	←—	←—	F Y	F Y	~~R~~	~~R~~	~~Y~~
21, 22	R	R	G	G	R	R	Y
41, 42	R	R	R	G	G	G	R
51	←—	F Y	←—	F Y	~~R~~	~~R~~	~~Y~~
61, 62	R	G	R	G	R	R	Y
81, 82	R	R	R	G	G	G	R
83	~~R~~	~~R~~	~~R~~	~~R~~	F Y	F Y	~~R~~
P61, P62	DW	W	DW	W	DW	DW	DRK
P81, P82	DW	DW	DW	DW	W	DW	DRK

ALTERNATE TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	04+8	EVP3	FLASH
11	←—	←—	~~R~~	~~R~~	~~R~~	~~R~~	~~Y~~
21, 22	R	R	G	G	R	R	Y
41, 42	R	R	R	G	G	G	R
51	←—	~~R~~	←—	~~R~~	~~R~~	~~R~~	~~Y~~
61, 62	R	G	R	G	R	R	Y
81, 82	R	R	R	G	G	G	R
83	~~R~~	~~R~~	~~R~~	~~R~~	F Y	F Y	~~R~~
P61, P62	DW	W	DW	W	DW	DW	DRK
P81, P82	DW	DW	DW	DW	W	DW	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



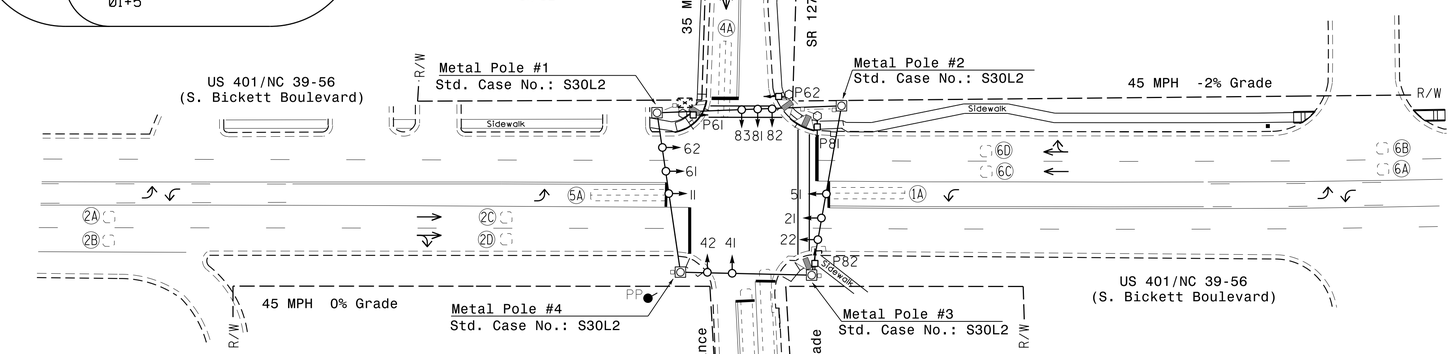
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

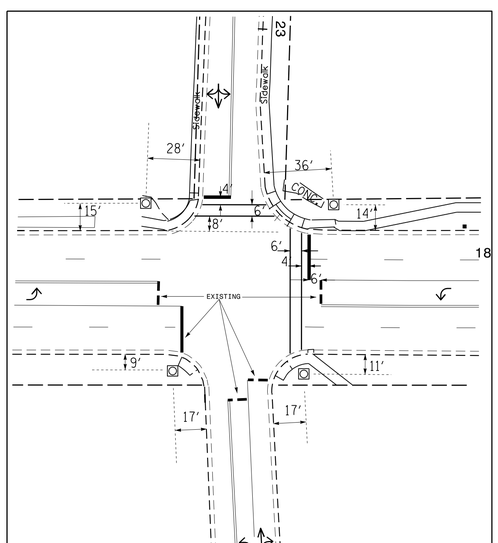
INDUCTIVE LOOPS					DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	-	1	Y	Y	-	-	15*	-	-
					6#	Y	Y	-	-	-	-	-
2A, 2B	6X6	304	EXISTING	-	2	Y	Y	-	1.6	-	-	-
2C, 2D	6X6	94	EXISTING	-	2	Y	Y	-	-	-	-	-
4A	6X60	+10	2-4-2	-	4	Y	Y	-	-	10	-	-
5A	6X40	0	2-4-2	-	5	Y	Y	-	-	15*	-	-
					2#	Y	Y	-	-	-	-	-
6A, 6B	6X6	296	EXISTING	-	6	Y	Y	-	1.6	-	-	-
6C, 6D	6X6	86	EXISTING	-	6	Y	Y	-	-	-	-	-
8A	6X60	+5	EXISTING	-	8	Y	Y	-	-	3	-	-
8B	6X60	+5	EXISTING	-	8	Y	Y	-	-	10	-	-

* Disable delay during alternate phasing.
# Disable phase 2 call for loop 5A, Disable phase 6 call for loop 1A

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. In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
8. Pavement markings are existing unless otherwise shown.
9. The Division Traffic Engineer will determine the Delay before Preempt and Preempt Dwell Min Green time for the emergency vehicle preemption timing.
10. The Division Traffic Engineer will determine the hours of use for each phasing plan.





Proposed Metal Pole, Crosswalk, and Stopline Locations

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	2.0	2.0	2.0	2.0	2.0
Max Green 1 *	25	60	40	25	60	40
Yellow Clearance	3.0	4.7	3.9	3.0	4.7	3.9
Red Clearance	2.4	1.0	2.5	2.1	1.0	2.5
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	7	7
Don't Walk 1	-	-	-	-	6	15
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	-	-	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.

OASIS 2070 EV PREEMPT

FUNCTION	PRE 3
Interval 1 – Dwell Green	255
Interval 1 – Dwell Yellow	0.0*
Interval 1 – Dwell Red	0.0*
Interval 5 – Exit Green	1
Interval 5 – Yellow	0.0
Interval 5 – Red	0.0
Exit Phase(s)	2, 6
Priority	MED
Delay Time	**
Min Green Before Pre	1
Ped Clear Before Pre	0
Yellow Clear Before Pre	0.0*
Red Clear Before Pre	0.0*
Dwell Min Time	**
Enable Backup Protection	N
Ped Clear Through Yellow	Y
Omit Overlaps	-

* Time defaults to time used for phase during normal operation
** See Note #10

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	
	Metal Strain Pole	
	Type II Signal Pedestal	

Signal Upgrade

Prepared in the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

US 401/NC 39-56 (Bickett Blvd.)
at
SR 1270 (Wade Avenue) and
Shannon Village Shopping Center
Division 5 Franklin County Louisburg

PLAN DATE: June 2017 REVIEWED BY:
PREPARED BY: C.E. Carter REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 036833 ENGINEER RYAN W. HOUGH

DocuSigned by: Ryan W. Hough 430320FAA2B54C8... 7/12/2017
DATE

SIG. INVENTORY NO. 05-0756

22-DEC-2017 12:29
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rwhough