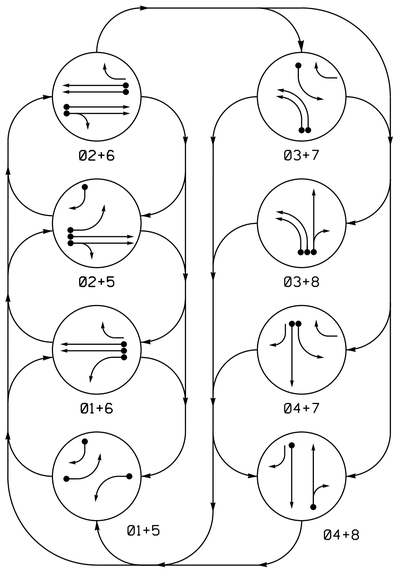
PROJECT REFERENCE NO.	SHEET NO.
B-5105	Sig. 5.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.

All Heads L.E.D.

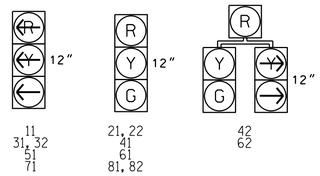


TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8	FLASH
11	←	←	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
21, 22	R	R	G	G	R	R	R	R	Y
31, 32	~~R~~	~~R~~	~~R~~	~~R~~	←	←	~~R~~	~~R~~	~~R~~
41	R	R	R	R	R	R	G	G	R
42	R/←	R	R/←	R	R	R	G	G	R
51	←	~~R~~	←	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
61	R	G	R	G	R	R	R	R	Y
62	R	G	R	G	R/←	R	R/←	R	Y
71	~~R~~	~~R~~	~~R~~	~~R~~	←	~~R~~	←	~~R~~	~~R~~
81,82	R	R	R	R	R	G	R	G	R

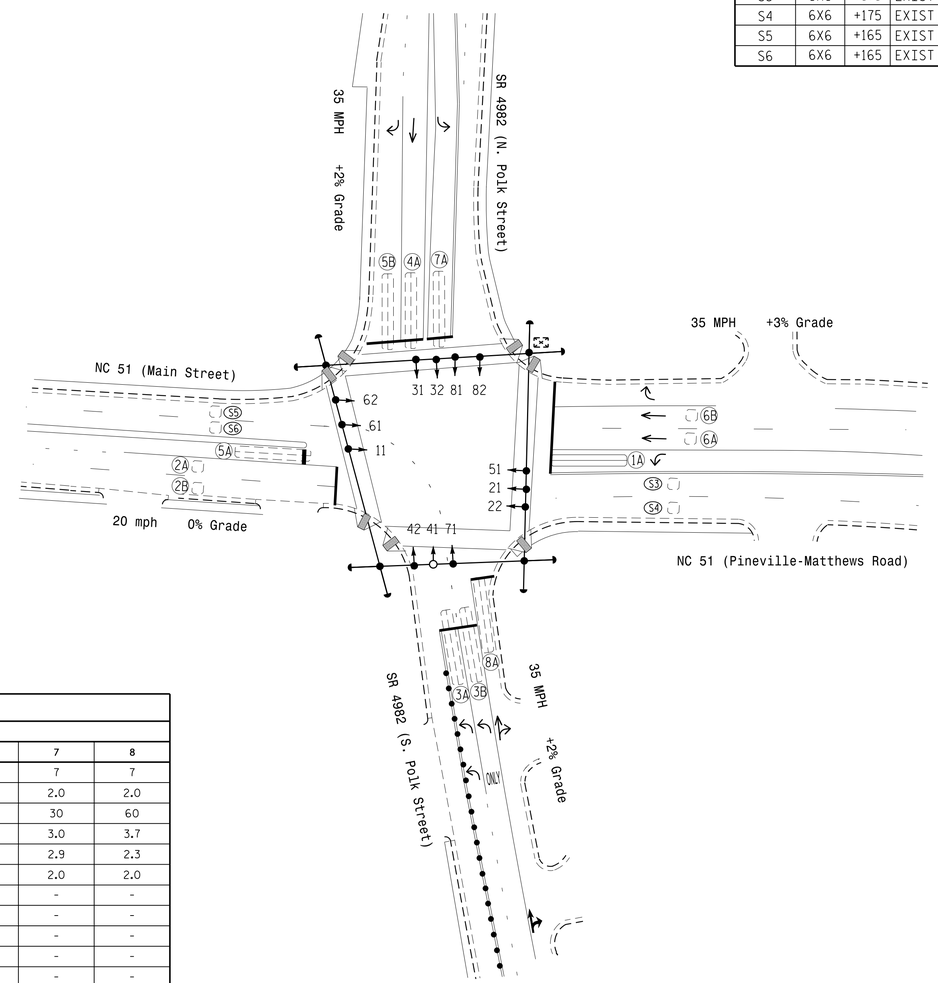
OASIS 2070 LOOP & DETECTOR INSTALLATION

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	-	-	3	-	-
2A	6X6	70	EXIST	-	2	Y	Y	-	-	-	-	-
2B	6X6	70	EXIST	-	2	Y	Y	-	-	-	-	-
3A	6X40	+10	2-4-2	-	3	Y	Y	-	-	3	-	-
3B	6X40	+10	2-4-2	-	3	Y	Y	-	-	-	-	-
4A	6X40	+5	2-4-2	-	4	Y	Y	-	-	-	-	-
5A	6X40	+5	2-4-2	-	5	Y	Y	-	-	3	-	-
5B	6X40	+5	2-4-2	-	5	Y	Y	-	-	15	-	-
6A	6X6	70	EXIST	-	6	Y	Y	-	-	-	-	-
6B	6X6	70	EXIST	-	6	Y	Y	-	-	-	-	-
7A	6X40	+5	2-4-2	-	7	Y	Y	-	-	3	-	-
8A	6X40	+5	2-4-2	-	8	Y	Y	-	-	10	-	-
S3	6X6	+175	EXIST	-	-	-	-	-	-	-	Y	-
S4	6X6	+175	EXIST	-	-	-	-	-	-	-	Y	-
S5	6X6	+165	EXIST	-	-	-	-	-	-	-	Y	-
S6	6X6	+165	EXIST	-	-	-	-	-	-	-	Y	-

8 Phase
Fully Actuated
W/Emergency Preemption
NC 51 (Pineville) 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. Phase 1 and/or phase 5 may be lagged.
4. Phase 3 and/or phase 7 may be lagged.
5. Set all detector units to presence mode.
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: Intersection Number # 254.



OASIS 2070 TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6	7	8
Min Green 1 *	7	10	7	7	7	10	7	7
Extension 1 *	2.0	3.0	2.0	2.0	2.0	3.0	2.0	2.0
Max Green 1 *	25	90	25	60	15	90	30	60
Yellow Clearance	3.0	3.0	3.0	3.7	3.0	3.7	3.0	3.7
Red Clearance	2.8	3.2	3.6	2.0	3.2	2.0	2.9	2.3
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-
Simultaneous Gap	ON	ON	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.

LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head	
	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	
	Optical Detector	

Signal Upgrade - Final Design

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

NC 51 (Main Street)/
NC 51 (Pineville-Matthews Road)
at
SR 4982 (Polk Street)
Division 10 Mecklenburg County Pineville

PLAN DATE: March 2015	REVIEWED BY:
PREPARED BY: C. Pierce	REVIEWED BY:

SCALE 0 40 1" = 40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 24393 ENGINEER TIMOTHY J. WILLIAMS

DocuSigned by: T. J. Williams 97AD7926E8934CA... 4/16/2015
DATE

SIG. INVENTORY NO. 10-0254

16-APR-2015 09:27
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