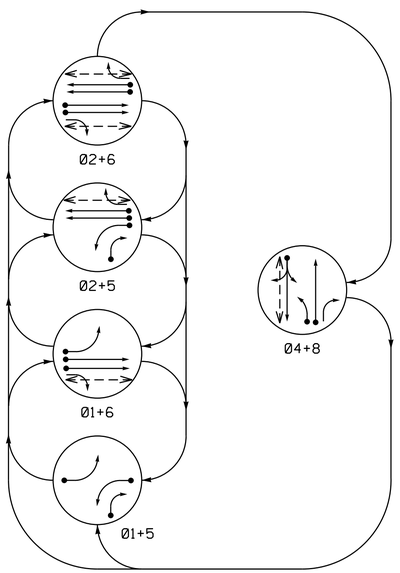
PROJECT REFERENCE NO.	SHEET NO.
EB-3314F	Sig. 1.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

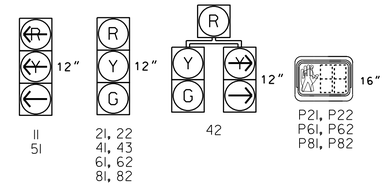
TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	04+8	FLASH
11	~~←~~	~~←~~	~~R~~	~~R~~	~~R~~	~~R~~
21, 22	R	R	G	G	R	Y
41, 43	R	R	R	R	G	R
42	R/	R	R/	R	G	R
51	~~←~~	~~R~~	~~←~~	~~R~~	~~R~~	~~R~~
61, 62	R	G	R	G	R	Y
81, 82	R	R	R	R	G	R
P21, P22	DW	DW	W	W	DW	DRK
P61, P62	DW	W	DW	W	DW	DRK
P81, P82	DW	DW	DW	DW	W	DRK

W - Walk
DW - Don't Walk
DRK - Dark

SIGNAL FACE I.D.

All Heads L.E.D.



NEMA LOOP & DETECTOR INSTALLATION CHART

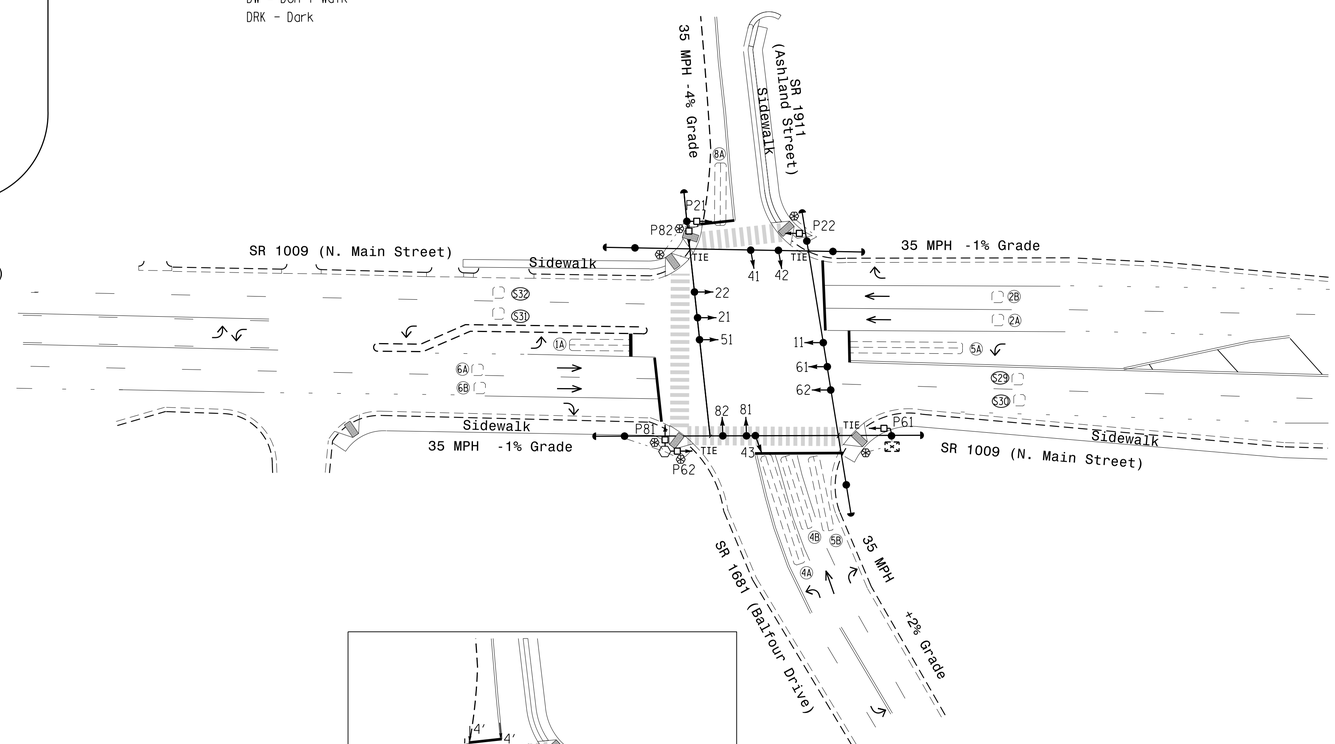
with TS-2 CABINET

INDUCTIVE LOOPS						DETECTOR UNITS					
LOOP NO.	SIZE (ft)	DIST. FROM STOPBAR (ft)	TURNS	NEW	EXISTING	NEMA PHASE	NEW	EXISTING	TIMING FEATURE	TIMING TIME	INHIBIT DELAY DURING GREEN?
1A	6X33	0	2-4-2	-	X	1	-	X	-	-	NO
2A, 2B	6X6	90	4	-	X	2	-	X	-	-	NO
4A	6X60	0	2-4-2	-	X	4	-	X	DELAY	3	YES
4B	6X40	0	2-4-2	-	X	4	-	X	-	-	NO
5A	6X60	0	2-4-2	-	X	5	-	X	DELAY	3	YES
5B	6X40	0	2-4-2	-	X	5	-	X	DELAY	15	YES
6A, 6B	6X6	90	4	-	X	6	-	X	-	-	NO
8A	6X33	0	2-4-2	-	X	8	-	X	DELAY	10	YES
S29	6X6	+180	4	-	X	SYSTEM DETECTOR					
S30	6X6	+180	4	-	X	SYSTEM DETECTOR					
S31	6X6	+180	4	-	X	SYSTEM DETECTOR					
S32	6X6	+180	4	-	X	SYSTEM DETECTOR					

5 Phase
Fully Actuated
(High Point Signal System)

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. Program phase 4 and phase 8 for dual entry.
5. Set all detector units to presence mode.
6. 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.
7. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
8. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
9. Pedestrian pedestals are conceptual and shown for reference only. See sheets P1-P3 for pushbutton location details.
10. Pavement markings are existing unless otherwise shown.
11. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



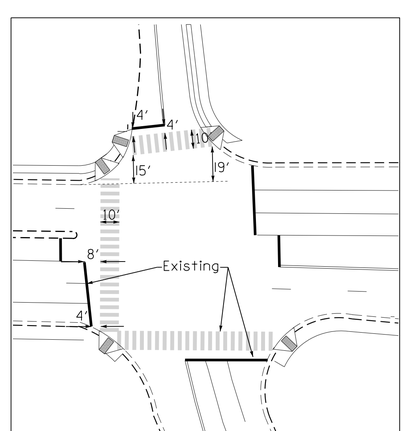
LEGEND

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	
	Type I Pushbutton Post	
	Type II Signal Pedestal	

NEMA TIMING CHART

FEATURE	PHASE 01	02	04	05	06	08
MINIMUM GREEN *	7 SEC.	10 SEC.	7 SEC.	7 SEC.	10 SEC.	7 SEC.
PASSAGE/GAP *	2.0 SEC.	4.0 SEC.	2.0 SEC.	2.0 SEC.	4.0 SEC.	2.0 SEC.
YELLOW CHANGE INT.	3.0 SEC.	3.9 SEC.	3.7 SEC.	3.0 SEC.	3.9 SEC.	4.1 SEC.
RED CLEARANCE	2.9 SEC.	1.5 SEC.	2.3 SEC.	3.1 SEC.	1.6 SEC.	2.2 SEC.
MAX. 1 *	20 SEC.	60 SEC.	30 SEC.	20 SEC.	60 SEC.	30 SEC.
RECALL POSITION	NONE	MIN. RECALL	NONE	NONE	MIN. RECALL	NONE
VEHICLE CALL MEMORY	NONLOCK	LOCK	NONLOCK	NONLOCK	LOCK	NONLOCK
WALK *	– SEC.	7 SEC.	– SEC.	– SEC.	7 SEC.	7 SEC.
FLASHING DON'T WALK	– SEC.	9 SEC.	– SEC.	– SEC.	22 SEC.	21 SEC.

* 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.



Proposed Stopbar & Crosswalk Locations

Signal Upgrade

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

SCALE 0 40
1"=40'

SR 1009 (N. Main Street)
at
SR 1911 (Ashland Street)/
SR 1681 (Balfour Drive)

Division 8 Randolph County Archdale

PLAN DATE: July 2014 REVIEWED BY:
PREPARED BY: C.E. Carter REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 36833 ENGINEER RYAN W. HOUGH
DocuSigned by: Ryan W. Hough
SIGNATURE 8/20/2014 DATE
SIG. INVENTORY NO. 08-0504

20-AUG-2014 08:49
S:\TMS\CALMTS\Signals\Signal Design Section\Central Region\Div 8\08-0504\080504_sig_dsn_20140819.dgn
Fwhough