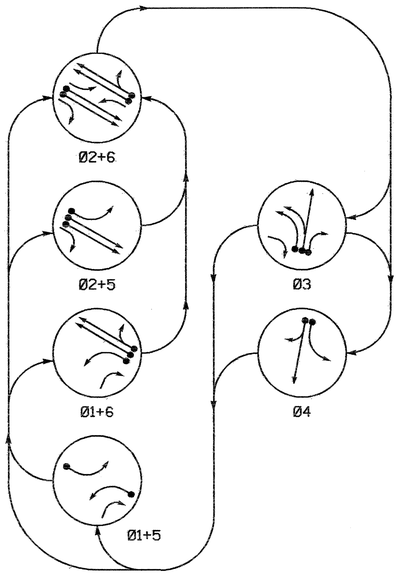
PROJECT REFERENCE NO.	SHEET NO.
U-4736	Sig23C

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

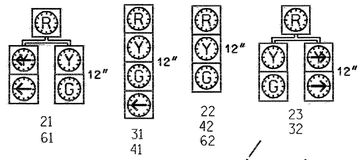
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø3	Ø4	FLASH
21	R	R	G	G	R	R	Y
22	R	R	G	G	R	R	Y
23	R	R	G	G	R	R	Y
31	R	R	R	R	G	R	R
32	R	R	R	R	G	R	R
41	R	R	R	R	R	G	R
42	R	R	R	R	R	G	R
61	R	G	R	G	R	R	Y
62	R	G	R	G	R	R	Y

SIGNAL FACE I.D.

Denotes L.E.D.



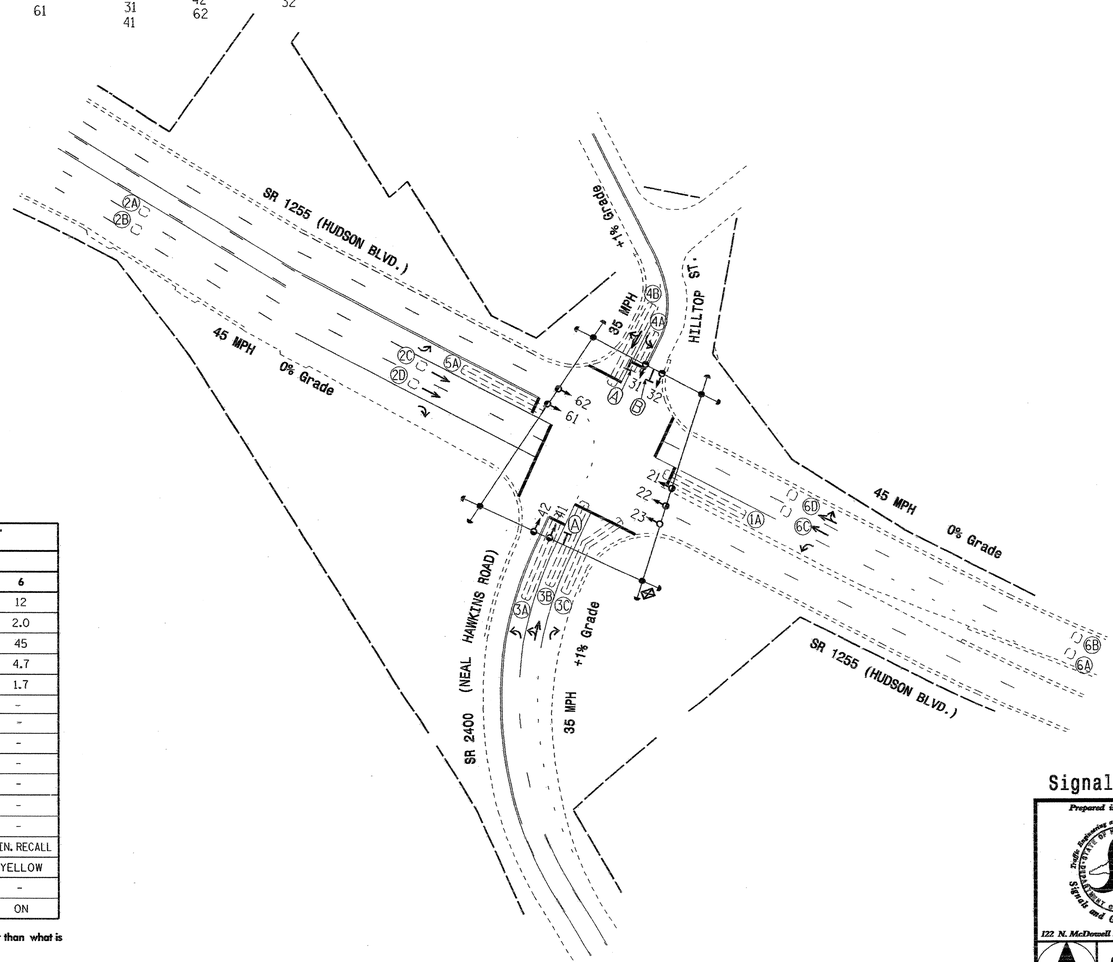
2070L LOOP & DETECTOR INSTALLATION

INDUCTIVE LOOPS					DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	TURNS	DISTANCE FROM STOPBAR (FT)	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	SYSTEM LOOP	STRETCH TIME	DELAY TIME	NEW CARD
1A	EXISTING	EXISTING	EXISTING	-	1	Y	Y	-	-	-	15	Y
				-	6	Y	Y	-	-	-	-	Y
2A, 2B	EXISTING	EXISTING	EXISTING	-	2	Y	Y	-	-	1.8	-	Y
2C, 2D	EXISTING	EXISTING	EXISTING	-	2	Y	Y	-	-	-	-	Y
3A	EXISTING	EXISTING	EXISTING	-	3	Y	Y	-	-	-	3	Y
3B	EXISTING	EXISTING	EXISTING	-	3	Y	Y	-	-	-	-	Y
3C	EXISTING	EXISTING	EXISTING	-	3	Y	Y	-	-	-	10	Y
4A	EXISTING	EXISTING	EXISTING	-	4	Y	Y	-	-	-	3	Y
4B	EXISTING	EXISTING	EXISTING	-	4	Y	Y	-	-	-	10	Y
5A	EXISTING	EXISTING	EXISTING	-	5	Y	Y	-	-	-	15	Y
				-	2	Y	Y	-	-	-	-	Y
6A, 6B	EXISTING	EXISTING	EXISTING	-	6	Y	Y	-	-	1.8	-	Y
6C, 6D	EXISTING	EXISTING	EXISTING	-	6	Y	Y	-	-	-	-	Y

6 Phase
Fully Actuated
(Gastonia City System)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Omit phase 1 during phase 2 on.
4. Omit phase 5 during phase 6 on.
5. Program controller to clear from phase 2+6 to phase 1 and/or 5 by progressing through phase 4 (see Electrical Details).
6. The order of phase 3 and phase 4 may be reversed.
7. Set all detector units to presence mode.
8. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
9. Pavement markings are existing.
10. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
11. City system data: Controller Asset #1410.



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	
	Pavement Marking Arrow	
	Left Arrow "ONLY" Sign (R3-5L)	Ⓐ
	Combined Through and Left Arrow Sign (R3-6L)	Ⓑ

2070L TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6
Min Green 1 *	7	12	7	7	7	12
Extension 1 *	1.0	2.0	1.0	1.0	1.0	2.0
Max Green 1 *	15	45	20	30	20	45
Yellow Clearance	4.0	4.7	4.0	4.0	4.0	4.7
Red Clearance	2.4	1.7	2.0	2.2	1.8	1.7
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

*** 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

Prepared in the Offices of:
Traffic Engineering and Safety Systems Branch
DEPARTMENT OF TRANSPORTATION
Signals and Geometrics Section
122 N. McDowell St., Raleigh, NC 27603

SR1255 (Hudson Boulevard) at SR 2400 (Neal Hawkins Rd.) / HillTop Street

Division 12 Gaston County Gastonia

PLAN DATE: November 2004 REVIEWED BY: D.DSHAH

PREPARED BY: C. Pierce REVIEWED BY:

SCALE 1"=50' (0 — 50)

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 22922 DAVID E. MULLINAX
SIGNATURE 3 JANUARY 05 DATE

SIG. INVENTORY NO. 12-1410

16-MAY-2005 10:02
w:\#peoples-unit#\workgroups#\tip projects#\u-4736#\signal plans#\12-1410#1210410_sig_dsn_20050103.dgn
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