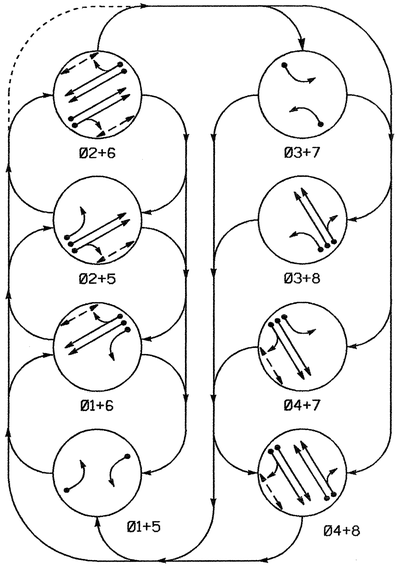
PROJECT REFERENCE NO.	SHEET NO.
U-4736	Sig.59

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

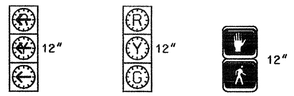
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE								
	Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø3+7	Ø3+8	Ø4+7	Ø4+8	FLASH
11	~~←~~	~~←~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
21,22	R	R	G	G	R	R	R	R	Y
31	~~R~~	~~R~~	~~R~~	~~R~~	~~←~~	~~←~~	~~R~~	~~R~~	~~R~~
41,42	R	R	R	R	R	R	G	G	R
51	~~←~~	~~R~~	~~←~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
61,62	R	G	R	G	R	R	R	R	Y
71	~~R~~	~~R~~	~~R~~	~~R~~	~~←~~	~~R~~	~~←~~	~~R~~	~~R~~
81,82	R	R	R	R	R	R	G	R	G	R
P21,P22	DW	DW	W	W	DW	DW	DW	DW	DRK
P41,P42	DW	DW	DW	DW	DW	DW	W	W	DRK
P61,P62	DW	W	DW	W	DW	DW	DW	DW	DRK

SIGNAL FACE I.D.

Denotes L.E.D.



11	21,22	P21,P22
31	41,42	P41,P42
51	61,62	P61,P62
71	81,82	

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	6x60	2-4-2	0	—	1	Y	Y	—	—	—	3	Y
2A, 2B	6x6	4	300	—	2	Y	Y	—	—	1.8	—	Y
2C, 2D	6x6	4	90	—	2	Y	Y	—	—	—	—	Y
3A	6x60	2-4-2	0	—	3	Y	Y	—	—	—	3	Y
4A, 4B	6x6	4	300	—	4	Y	Y	—	—	4	—	Y
4C	6x60	2-4-2	0	—	4	Y	Y	—	—	—	—	Y
4D	6x60	2-4-2	0	—	4	Y	Y	—	—	—	10	Y
5A	6x60	2-4-2	0	—	5	Y	Y	—	—	—	3	Y
6A, 6B	6x6	4	300	—	6	Y	Y	—	—	1.8	—	Y
6C, 6D	6x6	4	90	—	6	Y	Y	—	—	—	—	Y
7A	6x60	2-4-2	0	—	7	Y	Y	—	—	—	3	Y
8A, 8B	6x6	4	300	—	8	Y	Y	—	—	4	—	Y
8C	6x60	2-4-2	0	—	8	Y	Y	—	—	—	—	Y
8D	6x60	2-4-2	0	—	8	Y	Y	—	—	—	10	Y

8 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. Phase 1 or phase 5 may be lagged.
4. Phase 3 or phase 7 may be lagged.
5. Set all detector units to presence mode.
6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
7. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
8. Pavement markings are existing.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
10. City system data: Controller Asset #0053.

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	→
⬡	Pedestrian Signal Pedestal	⬢
Ⓐ	"NO TURN ON RED" Sign (R10-11)	Ⓐ

2070L TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green 1 *	7	12	7	7	7	12	7	7
Extension 1 *	1.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0
Max Green 1 *	15	60	15	30	15	60	15	30
Yellow Clearance	4.0	4.7	4.0	4.7	4.0	4.7	4.0	4.7
Red Clearance	2.9	2.0	2.2	1.5	2.7	2.0	2.2	1.5
Walk 1 *	-	4	-	4	-	4	-	-
Don't Walk 1	-	18	-	24	-	22	-	-
Seconds Per Actuation *	-	-	-	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-	-	-
Recall Mode	-	SOFT RECALL	-	-	-	SOFT RECALL	-	-
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW	-	-
Dual Entry	-	ON	-	-	-	ON	-	-
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.

Signal Upgrade

Prepared in the Offices of: Traffic Engineering and Safety Systems Branch, Traffic Engineering Unit, Division of Highways, North Carolina Department of Transportation, Signals and Geometrics Section, 1122 N. McDowell St., Raleigh, NC 27603

NC 279 (New Hope Road) at NC 7 (Ozark Avenue)

Division 12 Gaston County Gastonia

PLAN DATE: November 2004 REVIEWED BY:

PREPARED BY: C. Pierce REVIEWED BY: D. Y. Ishak

REVISIONS	INIT.	DATE

SCALE 0 50 1"=50'

SEAL — NORTH CAROLINA PROFESSIONAL SEAL 024202 ENGINEER RICHARD E. MULLINAX

SIGNATURE DATE

SIG. INVENTORY NO. 12-0053

22-FEB-2005 09:44
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ZMcTitle