

3 PHASE FULLY ACTUATED GASTONIA CITY SIGNAL SYSTEM

PLAN QUANTITIES	
Pay Item	Meters
Signal Cable	90
Messenger Cable	0
Loop Lead-in Cable	400

- #### NOTES
1. Refer to "Roadway Standard Drawings NCD01" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
 2. Set all detector units to presence mode.
 3. Maximum times shown in timing chart are for free run operation only. Coordinated signal system timing values shall supersede these values.
 4. System data: Controller Asset #: 0928
 5. During coordination, Phase 1 may be lagged.
 6. Do not program for late night flashing operation unless otherwise directed by the engineer.

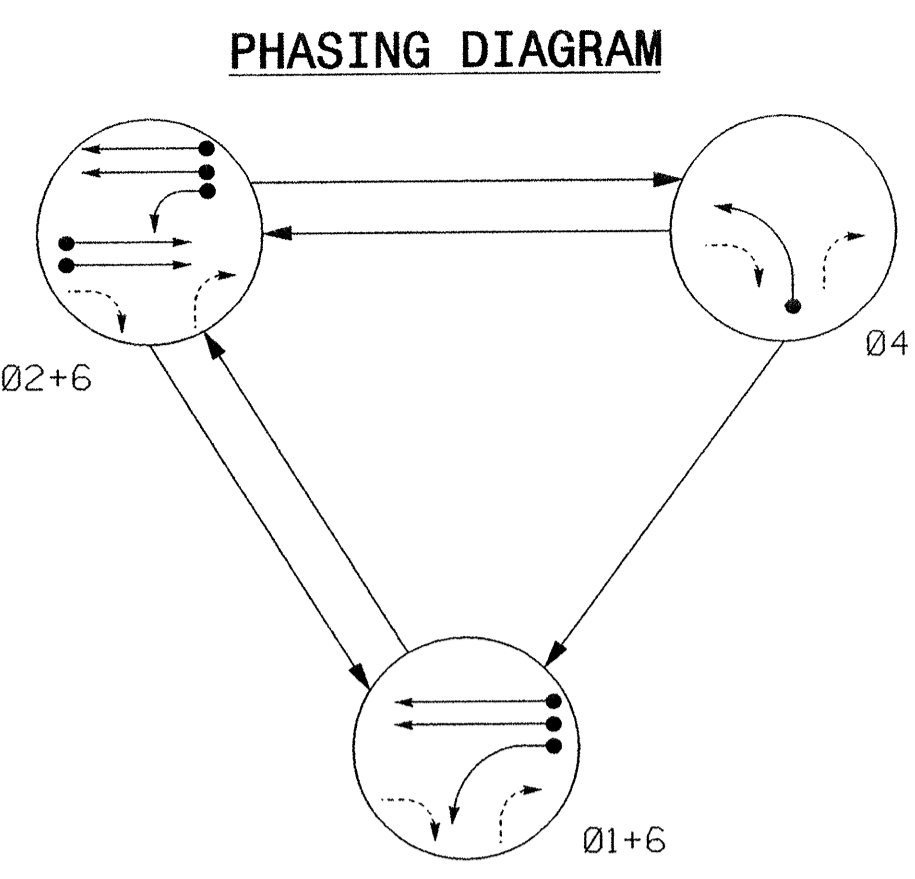
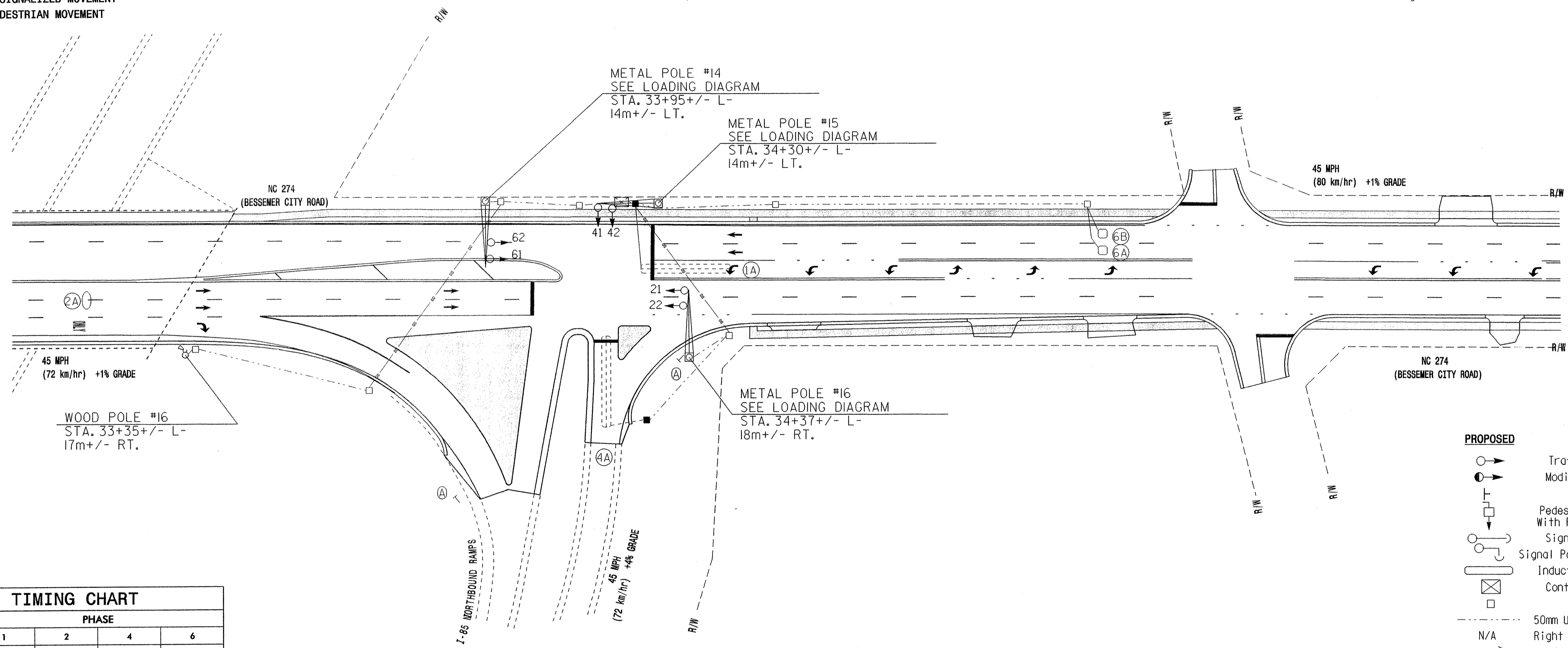
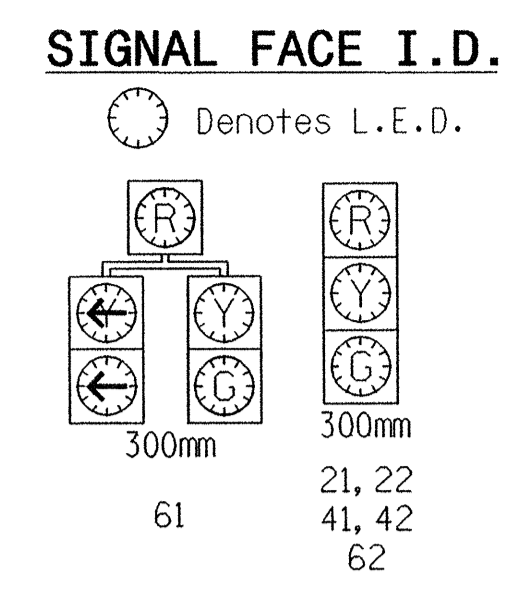


TABLE OF OPERATION

SIGNAL FACE	PHASE			
	Ø 1+6	Ø 2+6	Ø 4	FLASH
21,22	R	G	R	Y
41,42	R	R	G	R
61		G	R	Y
62	G	G	R	Y



2070L TIMING CHART

FEATURE	PHASE			
	1	2	4	6
Min Green 1 *	7	12	7	12
Extension 1 *	1.0	6.0	1.0	6.0
Max Green 1 *	15	90	20	90
Yellow Clearance	4.7	4.7	4.0	4.7
Red Clearance	1.0	1.0	1.5	1.0
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	-	1.8	-	1.8
Max Variable Initial *	-	34	-	34
Time Before Reduction *	-	15	-	15
Time To Reduce *	-	30	-	30
Minimum Gap	-	3.0	-	3.0
Recall Mode	-	MIN RECALL	-	MIN RECALL
Vehicle Call Memory	-	YELLOW	-	YELLOW
Dual Entry	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON

2070L LOOP & DETECTOR INSTALLATION

LOOP	SIZE (m)	TURNS	DISTANCE FROM STOPBAR (m)	NEW LOOP	DETECTOR PROGRAMMING						NEW CARD	
					PHASE	CALLING	EXTENSION	FULL TIME DELAY	SYSTEM LOOP	STRETCH TIME		DELAY TIME
1A	1.8 X 1.8	2-4-2	+2	-	1	Y	Y	-	-	-	15	-
2A*	*	*	90	*	2	Y	Y	-	-	-	-	Y
4A	1.8 X 1.8	2-4-2	0	-	4	Y	Y	-	-	-	10	-
6A,6B	1.8 X 1.8	4	90	Y	6	Y	Y	-	-	-	-	Y

* MICROWAVE

LEGEND

PROPOSED	EXISTING
◉ Traffic Signal Head	◉ N/A
◉ Modified Signal Head	◉ N/A
◉ Signal	◉ N/A
◉ Pedestrian Signal Head With Push Button & Sign	◉ N/A
◉ Signal Pole with Guy	◉ N/A
◉ Signal Pole with Sidewalk Guy	◉ N/A
◉ Inductive Loop Detector	◉ N/A
◉ Controller & Cabinet	◉ N/A
◉ Junction Box	◉ N/A
◉ 50mm Underground Conduit	◉ N/A
◉ Right of Way with Marker	◉ N/A
◉ Directional Arrow	◉ N/A
◉ Pavement Marking Arrow	◉ N/A
◉ Metal Pole with Mast Arm	◉ N/A
◉ Microwave Detection Area	◉ N/A
◉ "YIELD" Sign (R1-2)	◉ N/A
◉ Directional Drill	◉ N/A
◉ 2 - 50mm Polyethylene Conduit	◉ N/A

SIGNAL UPGRADE - FINAL DESIGN

Prepared In the Office of:

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Raleigh, North Carolina 27609

SCALE
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**N.C. 274 (BESSEMER CITY ROAD)
AT
I-85 NORTHBOUND RAMP & LOOP**

DIVISION 12 GASTON COUNTY GASTONIA

PLAN DATE: **OCT. 30, 2003** REVIEWED BY: **R. DUBNICKA, P.E.**

PREPARED BY: **RGL** REVIEWED BY:

REVISIONS: _____ INIT. DATE _____

SIGNATURE: *Robert J. Dubnicka 8-9-04* DATE: _____

SIG. INVENTORY NO. 12-0928

08-1115-2004 13-07
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rduan150c

* 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.