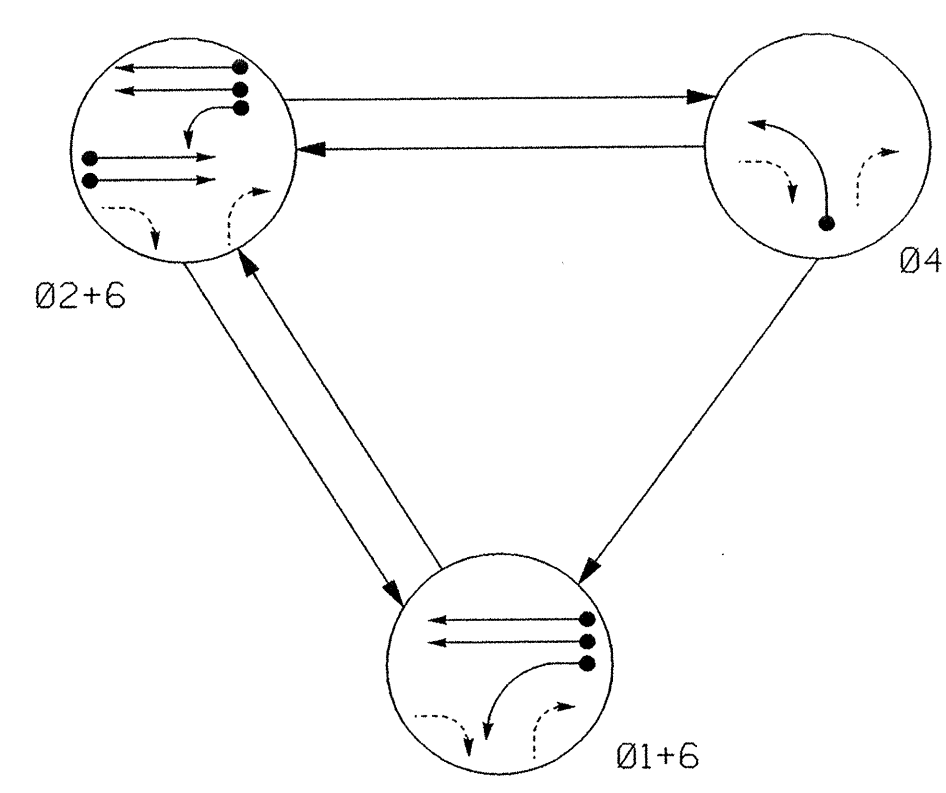


PHASING DIAGRAM

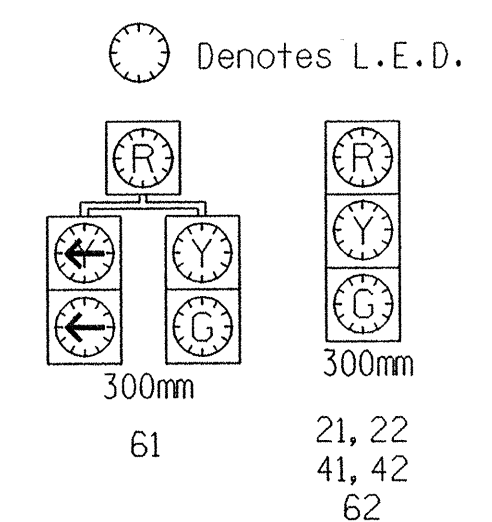


SIGNAL FACE	PHASE			
	Ø 1 + 6	Ø 2 + 6	Ø 4	FLASH
21,22	R	G	R	Y
41,42	R	R	G	R
61	G	G	R	Y
62	G	G	R	Y

PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.

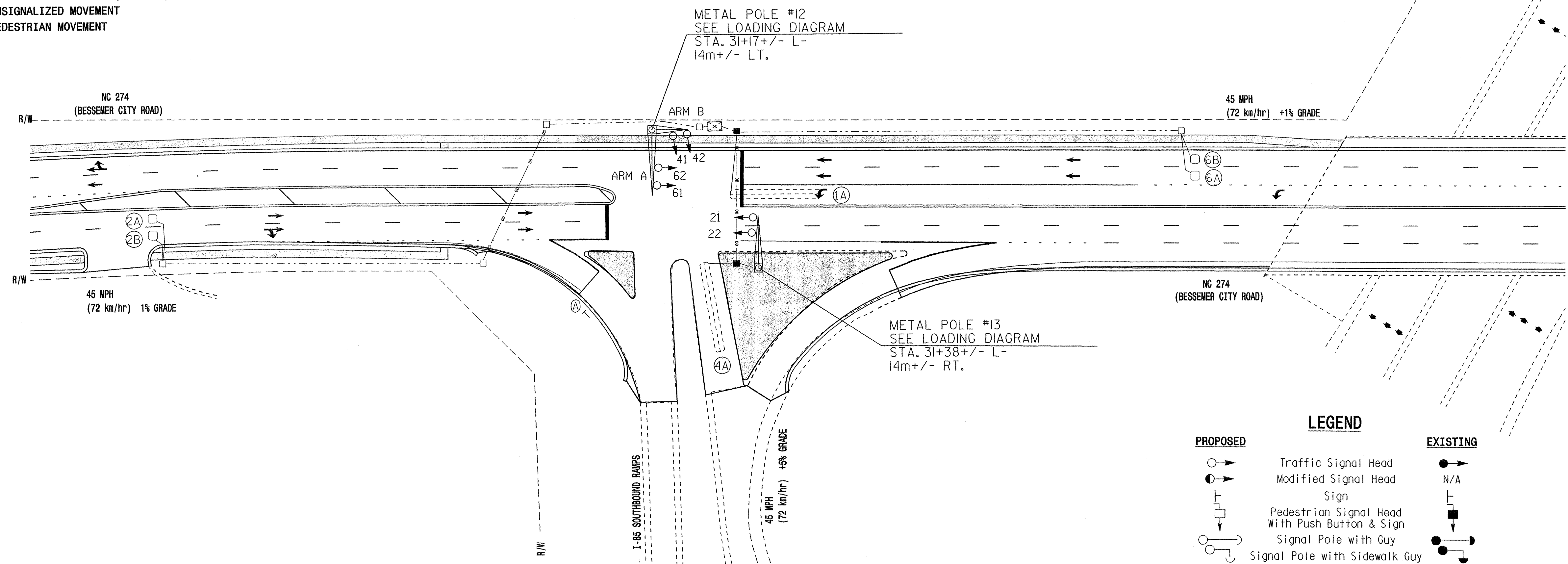


PLAN QUANTITIES	
Pay Item	Meters
Signal Cable	140
Messenger Cable	0
Loop Lead-in Cable	505

3 PHASE FULLY ACTUATED GASTONIA CITY SIGNAL SYSTEM

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
- Set all detector units to presence mode.
- Maximum times shown in timing chart are for free operation only. Coordinated signal system timing values shall supersede these values.
- Closed loop system data: Controller Asset #: 0931
- During coordination, Phase 1 may be lagged.
- Do not program for late night flashing operation unless otherwise directed by the engineer.



LEGEND

- | PROPOSED | EXISTING |
|--|----------|
| ○ Traffic Signal Head | ● N/A |
| ● Modified Signal Head | N/A |
| ⊥ Sign | ⊥ 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 |
| 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 |
| ⊠ "YIELD" Sign (R1-2) | ⊠ N/A |
| --- Directional Drill | --- N/A |
| --- 2 - 50mm Polyethylene Conduit | --- N/A |

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	4.0	4.7	4.0	4.7
Red Clearance	1.5	1.5	1.5	1.5
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							
					PHASE	CALLING	EXTENSION	FULL TIME DELAY	SYSTEM LOOP	STRETCH TIME	DELAY TIME	NEW CARD
1A	1.8 X 18	2-4-2	+2	-	1	Y	Y	-	-	-	15	-
2A	1.8 X 1.8	5	90	Y	2	Y	Y	-	-	-	-	Y
2B	1.8 X 1.8	5	90	Y	2	Y	Y	-	-	-	-	Y
4A	1.8 X 18	2-4-2	0	-	4	Y	Y	-	-	-	-	-
6A	1.8 X 1.8	4	90	Y	6	Y	Y	-	-	-	-	Y
6B	1.8 X 1.8	4	90	Y	6	Y	Y	-	-	-	-	Y

SIGNAL UPGRADE - FINAL DESIGN

Prepared In the Office of:

THE LPA GROUP

TRANSPORTATION CONSULTANTS

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4904 PROFESSIONAL COURT, SUITE 201
Raleigh, North Carolina 27609

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

DIVISION 12 GASTON COUNTY GASTONIA

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

PREPARED BY: RGL REVIEWED BY:

SEAL

ROBERT J. DUBNICKA
ENGINEER
12-0931

SCALE: 1:500

REVISIONS: _____

INIT. DATE

* 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.