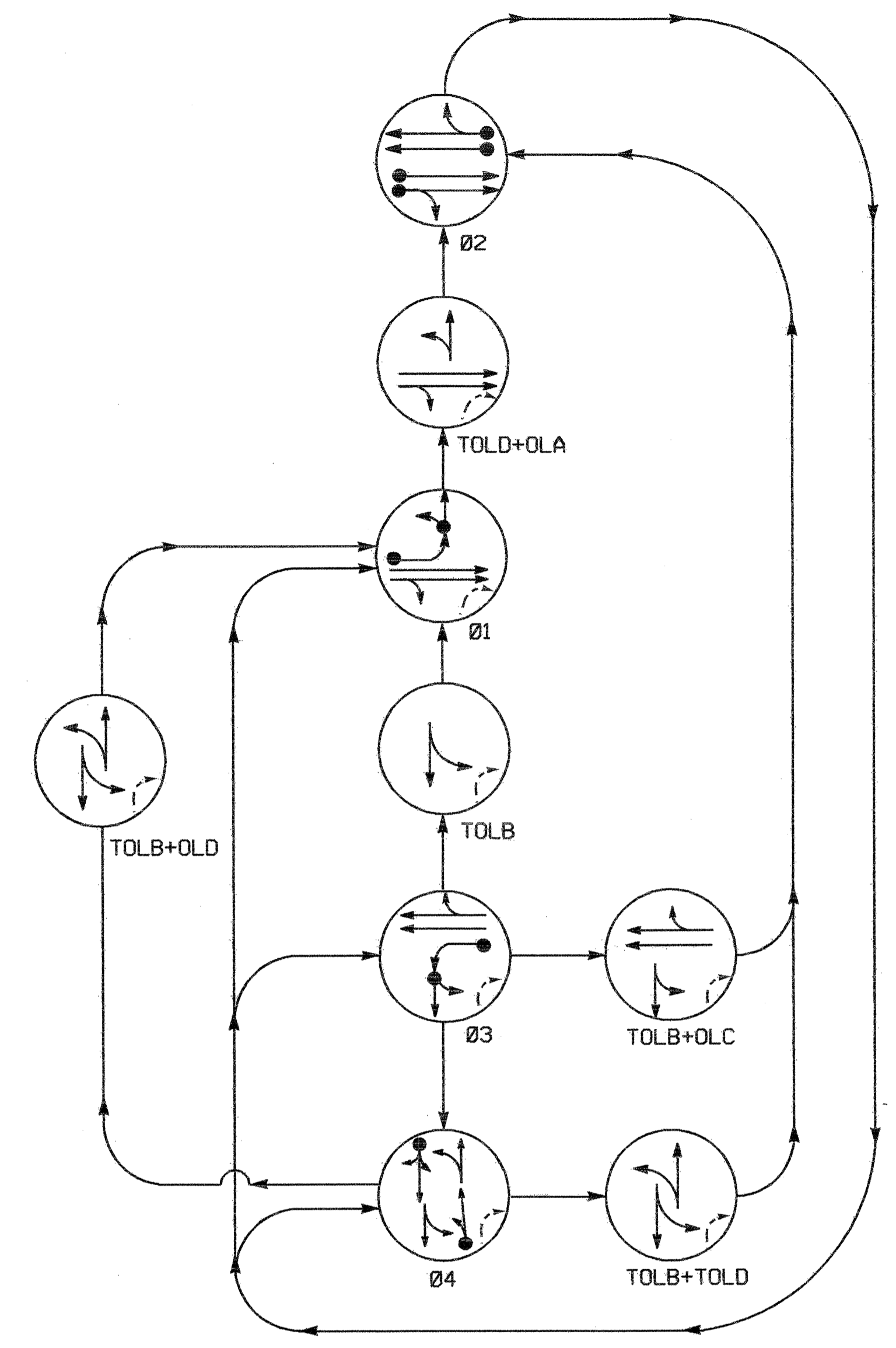


**FOUR PHASE
WITH TWO TIMED OVERLAPS
FULLY ACTUATED
(GASTONIA CITY SYSTEM)**

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. Tether signal heads numbered 41, 42, 45 and 46.
4. Set all detector units to presence mode.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. Pavement markings are existing.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
8. City system data: Controller Asset #: 1124.

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

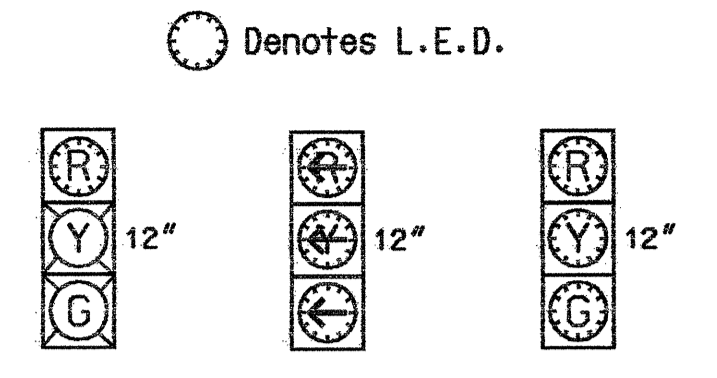
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

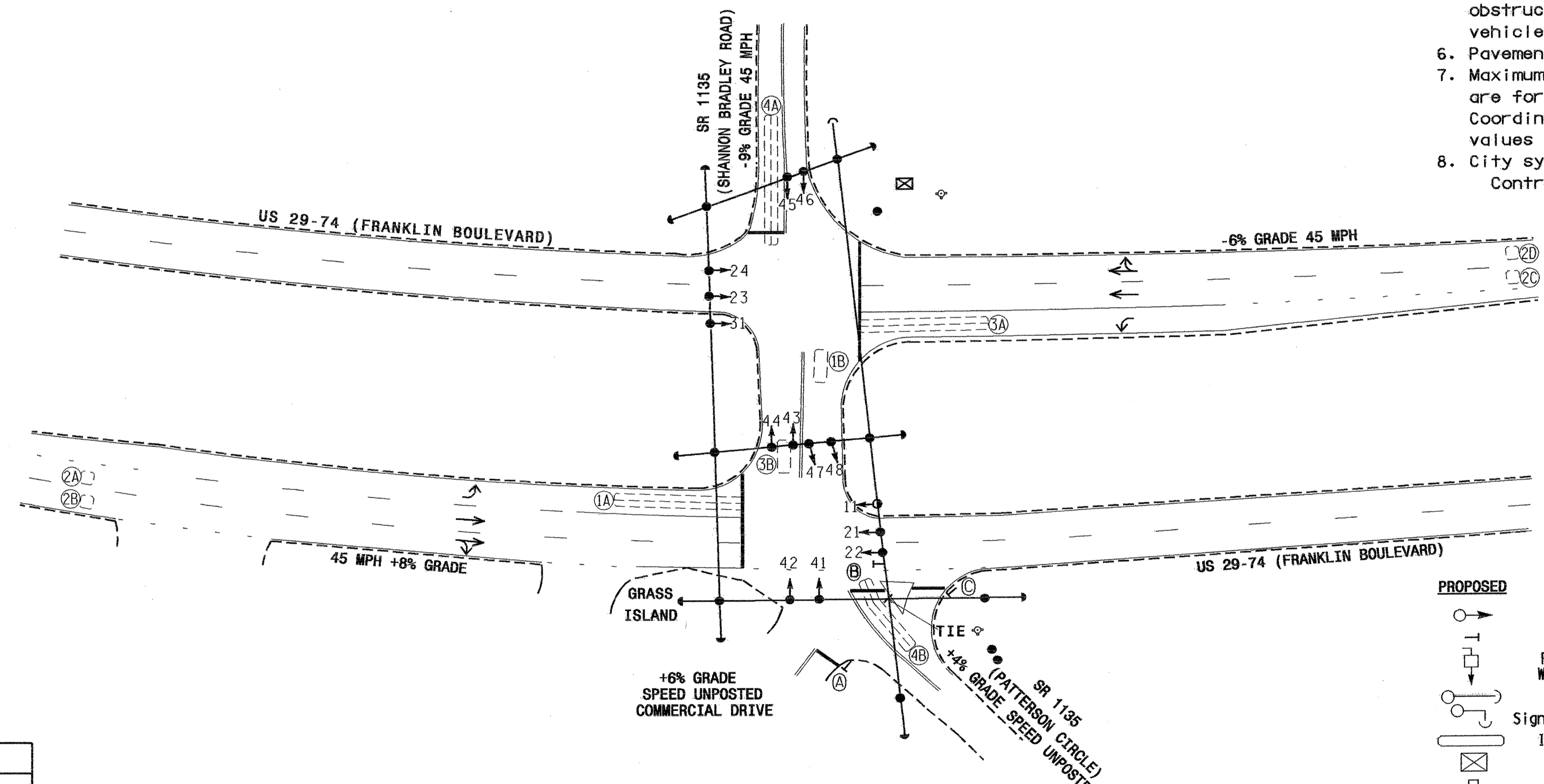
SIGNAL FACE	PHASE						
	Ø 1	Ø 2	Ø 3	Ø 4	TOLB	TOLB+OLA	TOLB+OLC
11	←	←	←	←	←	←	←
21, 22	G	R	R	R	R	G	R
23, 24	R	G	G	R	R	R	G
31	←	←	←	←	←	←	←
* 41, 42	R	R	G	G	G	G	R
43, 44	R	R	R	G	R	R	R
* 45, 46	G	R	R	G	R	G	R
47, 48	R	R	R	G	R	R	R

* See Note 3

SIGNAL FACE I.D.



Denotes L.E.D.
 41, 42
45, 46
 11
31
 21, 22
23, 24
43, 44
47, 48
 (OPTICALLY PROGRAMMED YELLOW AND GREEN SECTIONS)



LEGEND

- | | | | |
|--|-----------------|--|-----------------|
| | PROPOSED | | EXISTING |
| | | | |
| | | | |
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2070L TIMING CHART

FEATURE	PHASE					
	1	2	3	4	TOLB	TOLD
Min Green 1*	7	12	7	7	5	5
Extension 1*	2.0	6.0	1.0	2.0	0.0	0.0
Max Green 1*	20	120	20	25	N/A	N/A
Yellow Clearance	4.0	4.7	4.0	4.0	4.0	4.0
Red Clearance	3.0	1.5	3.4	3.0	2.6	2.6
Walk 1*	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-
Seconds Per Actuation*	-	1.5	-	-	-	-
Max Variable Initial*	-	34	-	-	-	-
Time Before Reduction*	-	15	-	-	-	-
Time To Reduction*	-	30	-	-	-	-
Minimum Gap	-	3.0	-	-	-	-
Recall Mode	-	MIN RECALL	-	-	-	-
Vehicle Call Memory	-	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 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

2070L LOOP & DETECTOR INSTALLATION

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

SIGNAL UPGRADE

<p>122 N. McDowell St., Raleigh, NC 27603</p>	US 29-74 (FRANKLIN BOULEVARD) AT SR 1135 (SHANNON BRADLEY ROAD) / PATTERSON CIRCLE & COMMERCIAL DRIVE			
	DIVISION 12 GASTON COUNTY GASTONIA			
	PLAN DATE: JANUARY 2005	REVIEWED BY: D.V. ISHAK		PREPARED BY: L. BLOUNT
	REVISIONS	INIT.		DATE