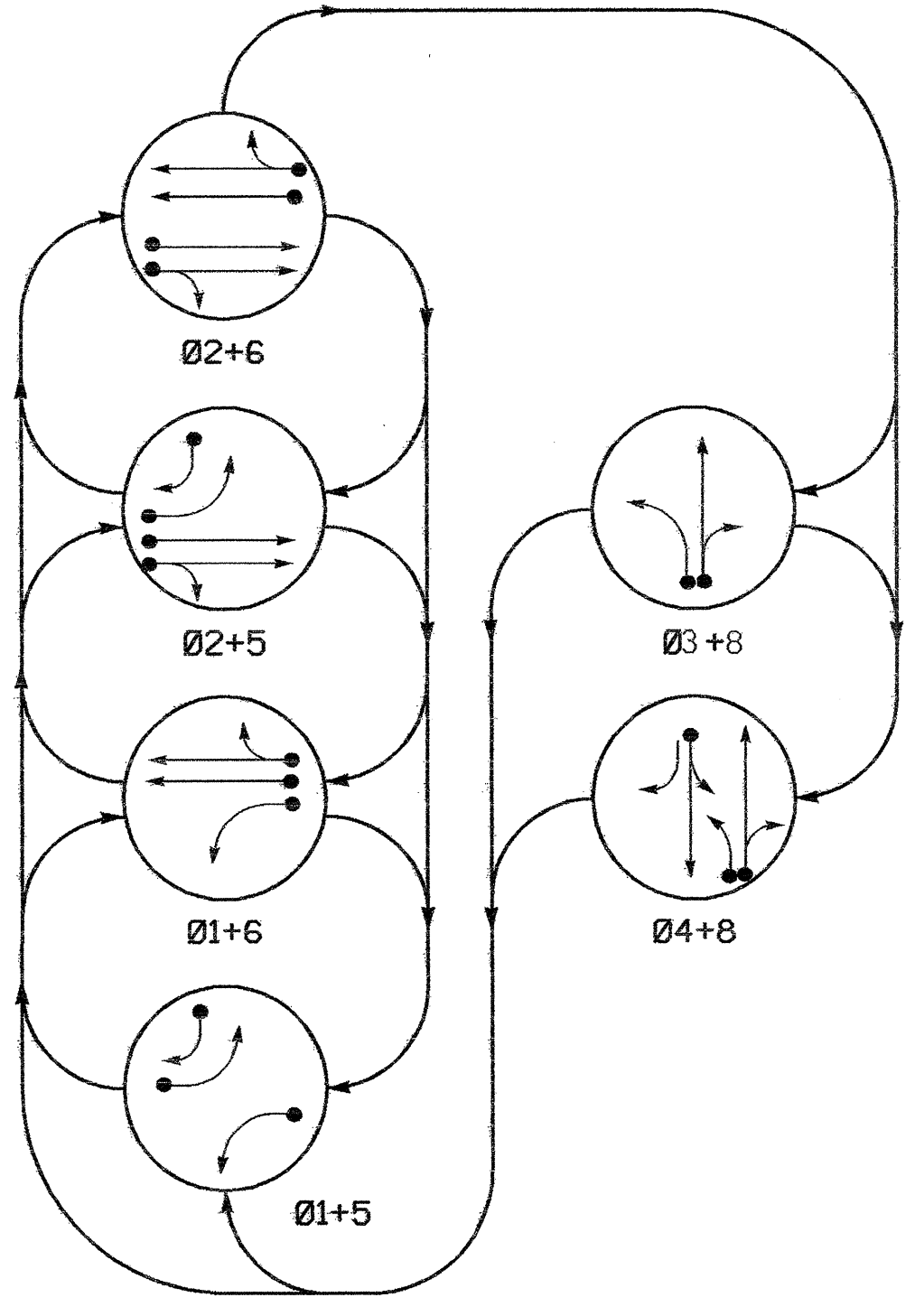


**PHASING DIAGRAM**

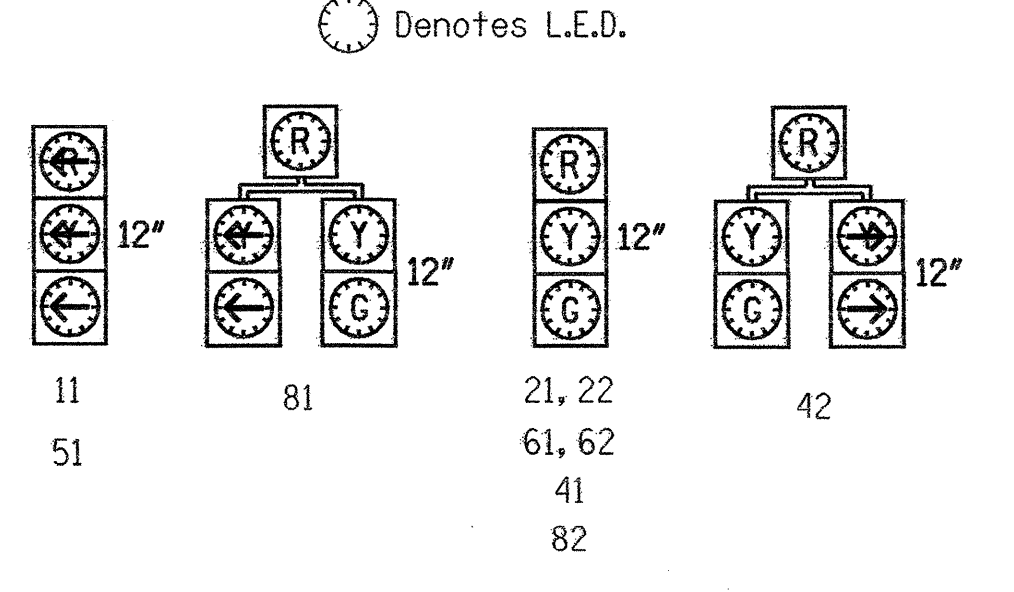


**PHASING DIAGRAM DETECTION LEGEND**  
 ←•→ DETECTED MOVEMENT  
 ←—→ UNDETECTED MOVEMENT (OVERLAP)  
 - - - - UNSIGNALIZED MOVEMENT  
 ←---→ PEDESTRIAN MOVEMENT

**TABLE OF OPERATION**

SIGNAL FACE	PHASE							
	Ø 1 + 5	Ø 2 + 5	Ø 2 + 6	Ø 3 + 8	Ø 4 + 8	F	L	S
11	←	←	←	←	←	←	←	←
21, 22	R	R	G	G	R	R	Y	
41	R	R	R	R	R	G	R	
42	R	R	R	R	R	G	R	
51	←	←	←	←	←	←	←	
61, 62	R	G	R	G	R	R	Y	
81	R	R	R	R	R	G	R	
82	R	R	R	R	G	G	R	

**SIGNAL FACE I.D.**

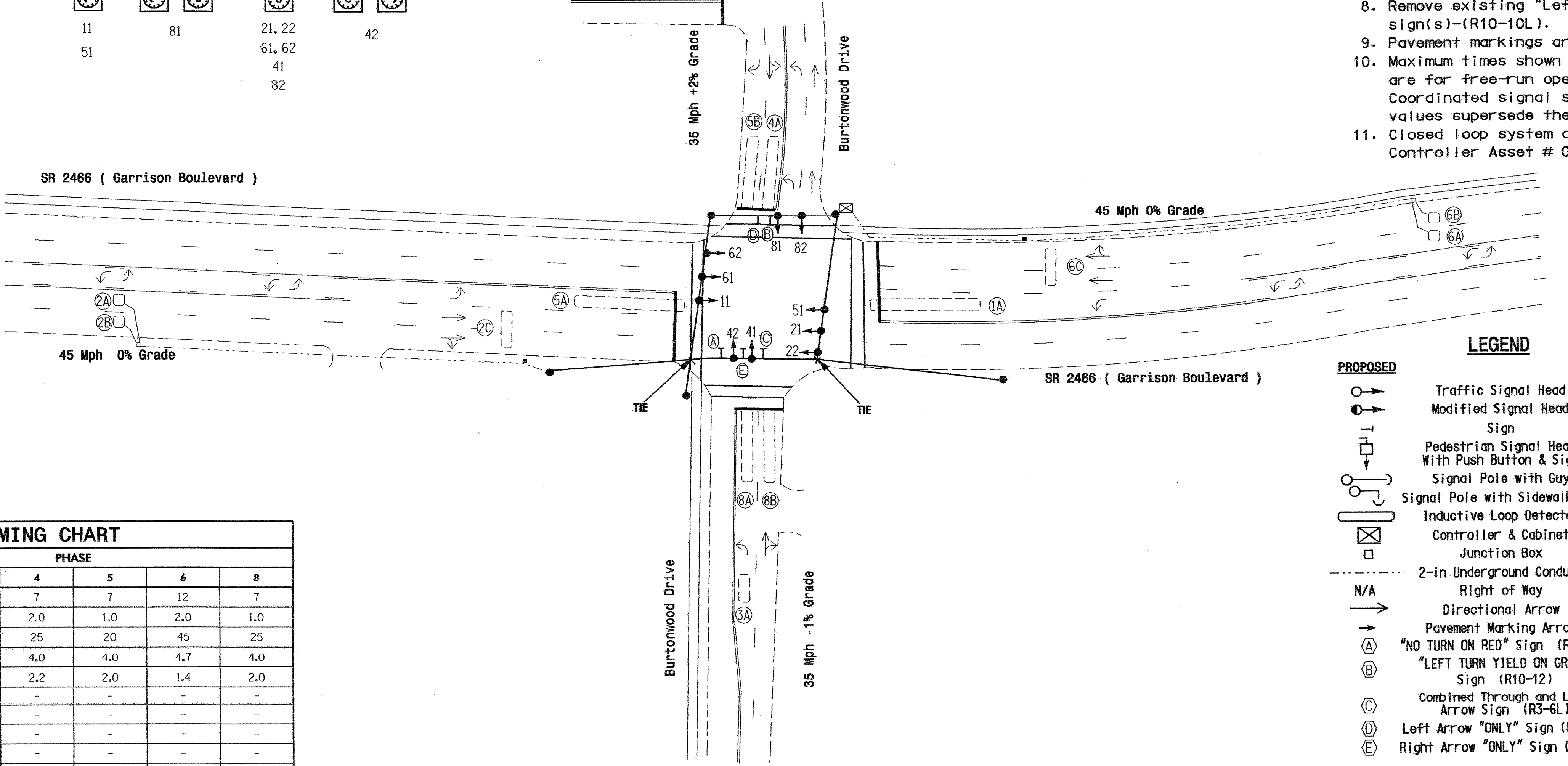


**2070L LOOP & DETECTOR INSTALLATION**

LOOP	SIZE (FT)	INDUCTIVE LOOPS			DETECTOR PROGRAMMING							
		TURNS	DISTANCE FROM STOPBAR (FT)	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	LOOP SYSTEM	STRETCH TIME	DELAY TIME	NEW CABD
1A	6X60	Existing	Existing	-	1	Y	Y	-	-	-	3	Y
2A, 2B	6X6	6	300	Y	2	Y	Y	-	-	1.8	-	Y
2C	6X20	Existing	Existing	-	2	Y	Y	-	-	-	-	Y
3A	6X15	Existing	Existing	-	3	Y	Y	-	-	-	-	Y
4A	6X40	Existing	Existing	-	4	Y	Y	-	-	-	-	Y
5A	6X60	Existing	Existing	-	5	Y	Y	-	-	-	3	Y
5B	6X40	Existing	Existing	-	5	Y	Y	-	-	-	15	Y
6A, 6B	6X6	4	300	Y	6	Y	Y	-	-	1.8	-	Y
6C	6X20	Existing	Existing	-	6	Y	Y	-	-	-	-	Y
8A	6X40	Existing	Existing	-	8	Y	Y	-	-	-	-	Y
8B	6X40	Existing	Existing	-	8	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 3 during phase 4 on.
  4. Phase 1 or phase 5 may be lagged.
  5. Set all detector units to presence mode.
  6. In the event of loop replacement, refer to the current Signals and Geometrics Design Manual and submit a Plan of Record to the Signals and Geometrics Section.
  7. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
  8. Remove existing "Left Turn Signal" sign(s)-(R10-10L).
  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. Closed loop system data: Controller Asset # 0634.



**2070L TIMING CHART**

FEATURE	PHASE							
	1	2	3	4	5	6	8	
Min Green 1 *	7	12	7	7	7	12	7	
Extension 1 *	1.0	2.0	1.0	2.0	1.0	2.0	1.0	
Max Green 1 *	20	45	20	25	20	45	25	
Yellow Clearance	4.0	4.7	4.0	4.0	4.0	4.7	4.0	
Red Clearance	2.7	1.4	1.8	2.2	2.0	1.4	2.0	
Walk 1 *	-	-	-	-	-	-	-	
Don't Walk 1	-	-	-	-	-	-	-	
Seconds Per Actuation *	-	-	-	-	-	-	-	
Max Variable Initial *	-	-	-	-	-	-	-	
Time Before Reduction *	-	-	-	-	-	-	-	
Time To Reduction *	-	-	-	-	-	-	-	
Minimum Gap	-	-	-	-	-	-	-	
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL	-	
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW	-	
Dual Entry	-	-	-	ON	-	-	ON	
Simultaneous Gap	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.

**LEGEND**

PROPOSED	EXISTING
	Traffic Signal Head
	Modified Signal Head
	N/A
	Pedestrian Signal Head
	Signal Pole with Guy
	Signal Pole with Sidewalk Guy
	Inductive Loop Detector
	Controller & Cabinet
	Junction Box
	2-in Underground Conduit
	Right of Way
	Directional Arrow
	Pavement Marking Arrow
	"NO TURN ON RED" Sign (R10-11)
	"LEFT TURN YIELD ON GREEN" Sign (R10-12)
	Combined Through and Left Arrow Sign (R3-6L)
	Left Arrow "ONLY" Sign (R3-5L)
	Right Arrow "ONLY" Sign (R3-5R)

**Signal Upgrade**

	<p><b>SR 2466 (Garrison Boulevard) At Burtonwood Drive</b></p>	<p><b>SEAL</b></p>
<p>122 N. McDowell St., Raleigh, NC 27603</p>	<p>Divison 12     Gaston County     Gastonia</p>	<p>PLAN DATE: <b>October 2004</b>     REVIEWED BY: <b>D.Y. Ishak</b></p>
<p>SCALE: 1" = 40'</p>	<p>PREPARED BY: <b>J. Mcarthy</b>     REVIEWED BY:</p>	<p>REVISIONS:     INIT.     DATE</p>
<p><b>12-0634</b></p>	<p><b>12-0634</b></p>	<p><b>12-0634</b></p>