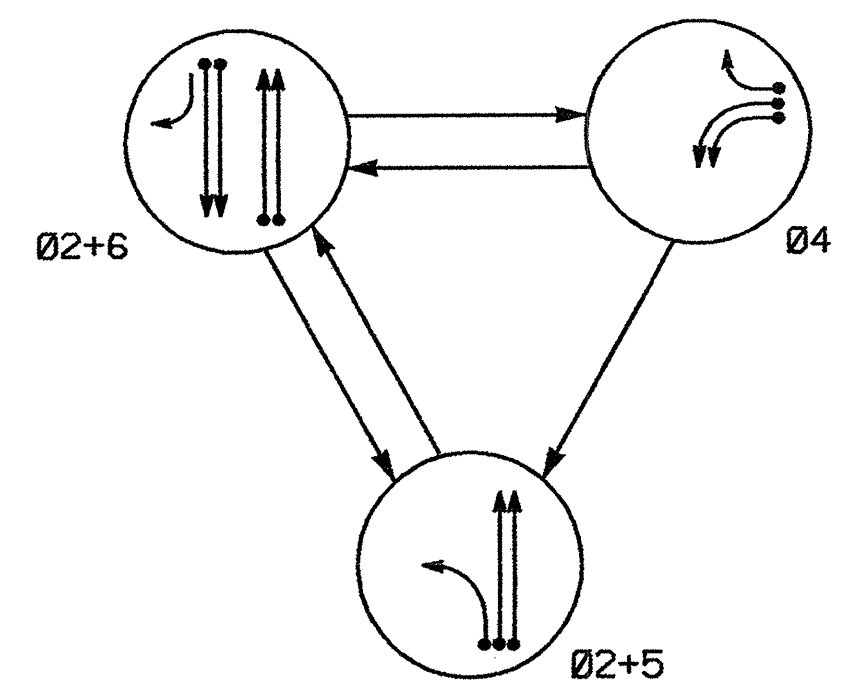


PHASING DIAGRAM



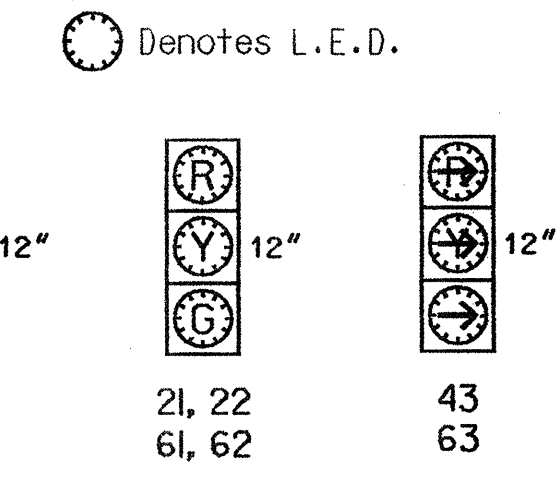
PHASING DIAGRAM DETECTION LEGEND

- ←●→ DETECTED MOVEMENT
- ←○→ UNDETECTED MOVEMENT (OVERLAP)
- ←---→ UNSIGNALIZED MOVEMENT
- ←- - -> PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE			
	Ø2+5	Ø2+6	Ø4	Ø4
21, 22	G	G	R	Y
41, 42	R	R	-	R
43	R	R	-	R
51	-	R	R	R
61, 62	R	G	R	Y
63	R	-	R	Y

SIGNAL FACE I.D.



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
2A	Existing	Existing	Existing	2	Y	Y	-	-	1.8	-	Y
2B	Existing	Existing	Existing	2	Y	Y	-	-	-	-	Y
4A	Existing	Existing	Existing	4	Y	Y	-	-	-	-	Y
4B	Existing	Existing	Existing	4	Y	Y	-	-	-	-	Y
4C	Existing	Existing	Existing	4	Y	Y	-	-	-	10	Y
5A	Existing	Existing	Existing	5	Y	Y	-	-	-	3	Y
6A	Existing	Existing	Existing	6	Y	Y	-	-	1.8	-	Y
6B	Existing	Existing	Existing	6	Y	Y	-	-	-	-	Y

3 Phase Fully Actuated (Gastonia City System)

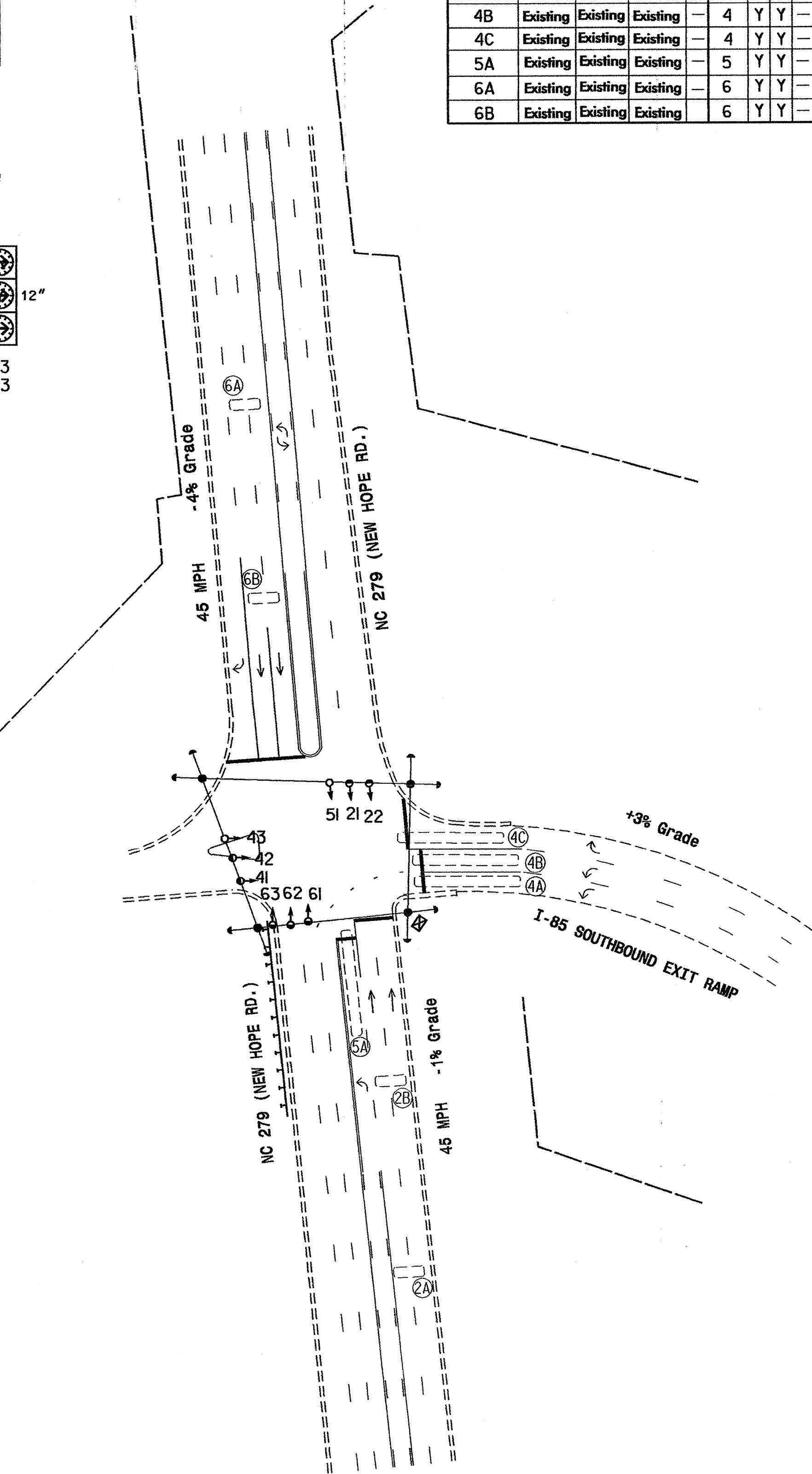
NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 5 may be lagged.
- Set all detector units to presence mode.
- 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.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- City system data: Controller Asset 0194.

2070L TIMING CHART

FEATURE	PHASE			
	2	4	5	6
Min Green 1 *	12	7	7	12
Extension 1 *	2.0	3.0	1.0	2.0
Max Green 1 *	45	30	20	45
Yellow Clearance	4.7	4.0	4.0	4.7
Red Clearance	1.5	2.0	1.7	1.5
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	-	-	-	-
Max Variable Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Recall Mode	MIN RECALL	-	-	MIN RECALL
Vehicle Call Memory	YELLOW	-	-	YELLOW
Dual Entry	-	-	-	-
Simultaneous Gap	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	●→ N/A
●→ Modified Signal Head	■→ 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
□→ 2-in Underground Conduit	□→ N/A
N/A → Right of Way	---→ N/A
→ Directional Arrow	→ N/A
→ Pavement Marking Arrow	→ N/A

Signal Upgrade

Prepared in the Offices of:

I-85 Southbound Ramp at NC 279 (New Hope Rd.)
 Division 12 Gaston County Gastonia
 PLAN DATE: December 2004 REVIEWED BY:
 PREPARED BY: C. Pierce REVIEWED BY: D. Y. Ishak
 SCALE: 1"=50'
 REVISIONS: _____ INIT. DATE
 SIGNATURE: _____ DATE: _____
 SEAL: _____
 SIG. INVENTORY NO. 12-0194