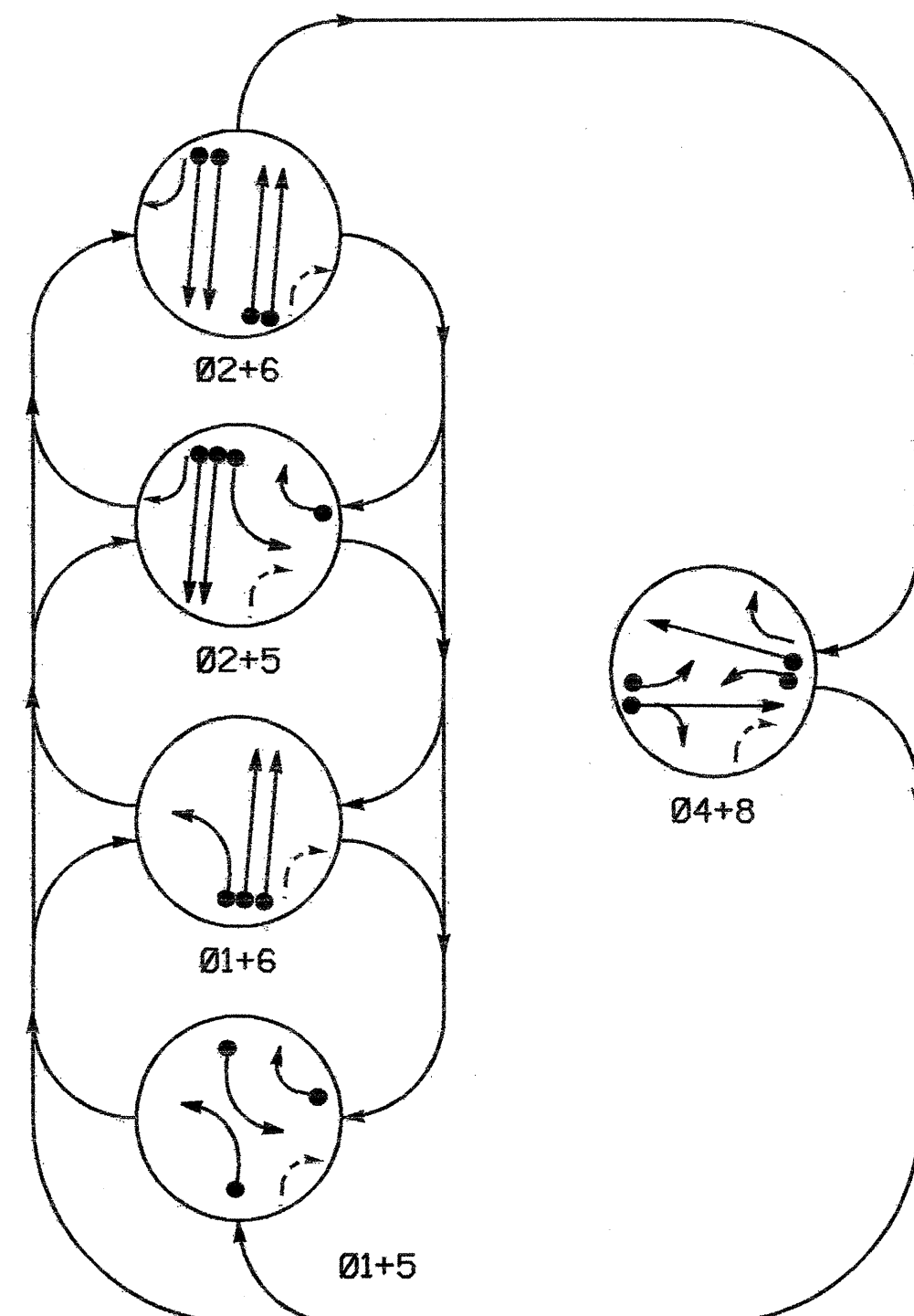


5 Phase Fully Actuated Gastonia City Signal System

PHASING DIAGRAM

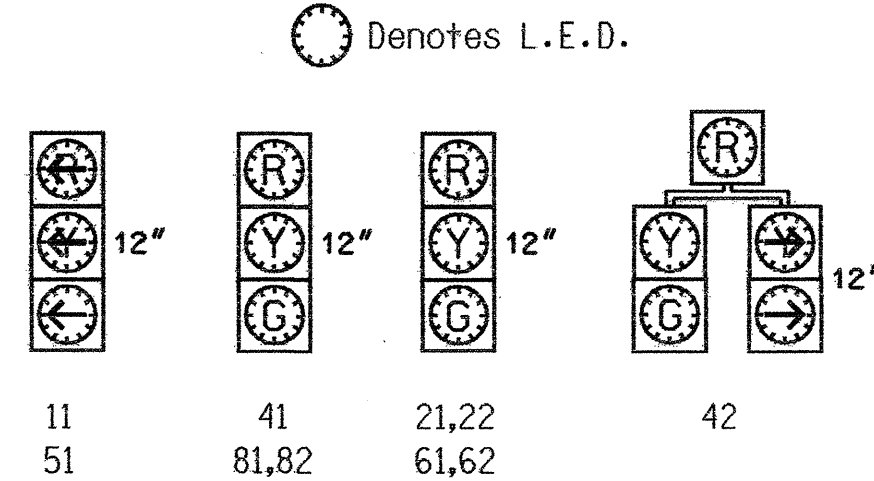


PHASING DIAGRAM DETECTION LEGEND

- ◄● (solid arrow) DETECTED MOVEMENT
- ◄ (dashed arrow) UNDETECTED MOVEMENT (OVERLAP)
- ◄ (dotted arrow) UNSIGNALIZED MOVEMENT
- ◄ (dashed arrow with circle) PEDESTRIAN MOVEMENT

| SIGNAL FACE | PHASE |       |       |       |       |
|-------------|-------|-------|-------|-------|-------|
|             | Ø 1+5 | Ø 1+6 | Ø 2+5 | Ø 2+6 | Ø 4+8 |
| 11          | ←     | ←     | ←     | ←     | ←     |
| 21,22       | R     | R     | G     | G     | R     |
| 41          | R     | R     | R     | R     | G     |
| 42          | R     | R     | R     | R     | G     |
| 51          | ←     | ←     | ←     | ←     | ←     |
| 61,62       | R     | G     | R     | G     | R     |
| 81,82       | R     | R     | R     | R     | G     |

SIGNAL FACE I.D.



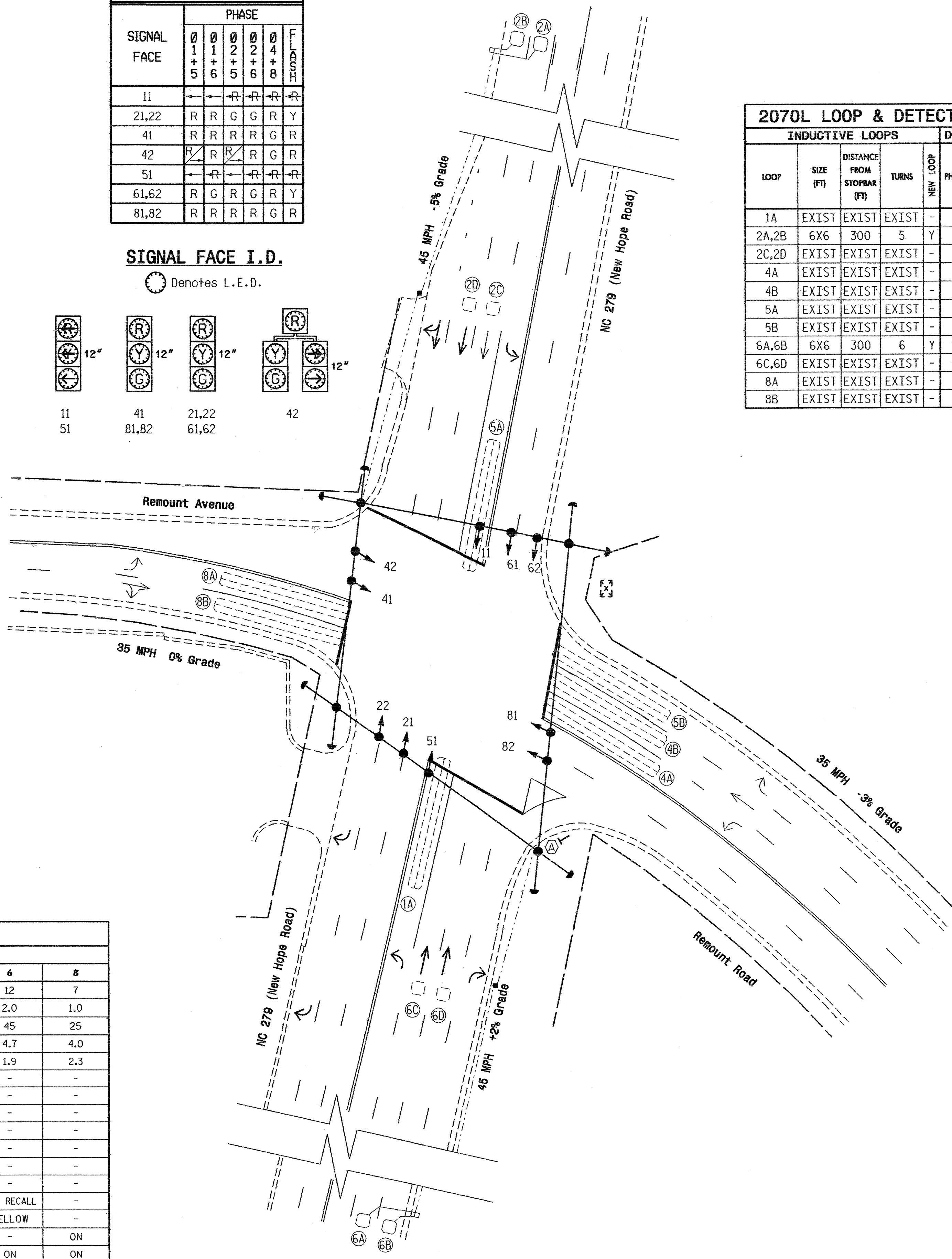
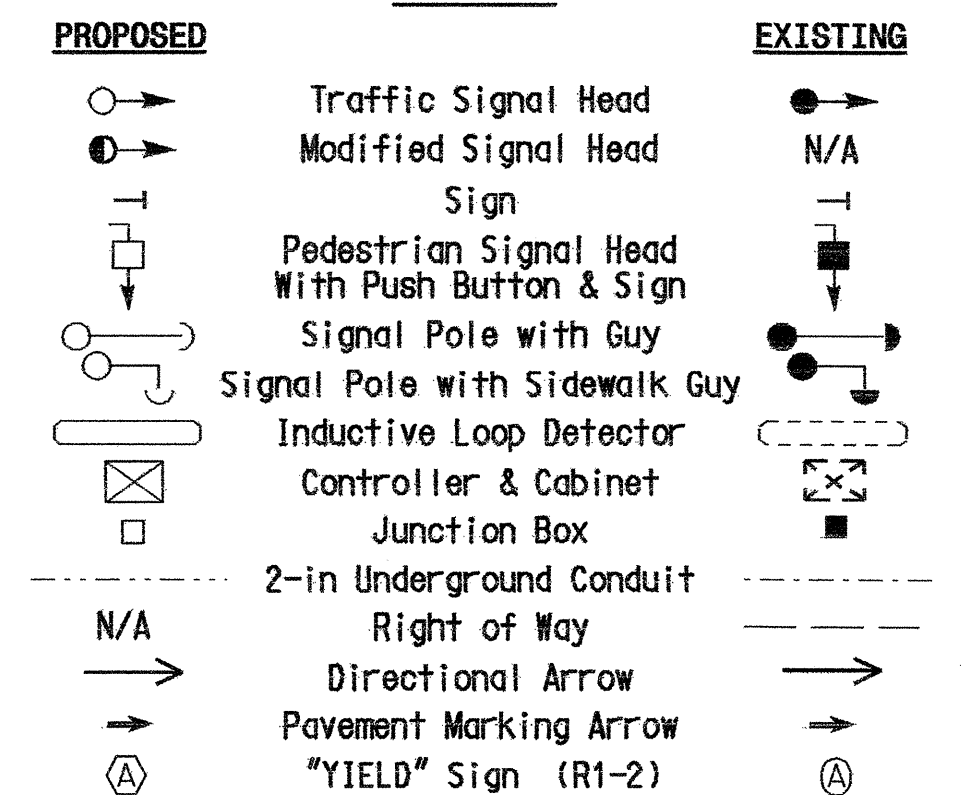
2070L LOOP & DETECTOR INSTALLATION

| LOOP  | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | DETECTOR PROGRAMMING |         |           |                 |              |            |             |          |
|-------|-----------|----------------------------|-------|----------|----------------------|---------|-----------|-----------------|--------------|------------|-------------|----------|
|       |           |                            |       |          | PHASE                | CALLING | EXTENSION | FULL TIME DELAY | STRETCH TIME | DELAY TIME | SYSTEM LOOP | NEW CARD |
| 1A    | EXIST     | EXIST                      | EXIST | -        | 1                    | Y       | Y         | -               | -            | 3          | -           | Y        |
| 2A,2B | 6X6       | 300                        | 5     | Y        | 2                    | Y       | Y         | -               | 1.8          | -          | -           | Y        |
| 2C,2D | EXIST     | EXIST                      | EXIST | -        | 2                    | Y       | Y         | -               | -            | -          | -           | Y        |
| 4A    | EXIST     | EXIST                      | EXIST | -        | 4                    | Y       | Y         | -               | -            | -          | -           | Y        |
| 4B    | EXIST     | EXIST                      | EXIST | -        | 4                    | Y       | Y         | -               | -            | -          | -           | Y        |
| 5A    | EXIST     | EXIST                      | EXIST | -        | 5                    | Y       | Y         | -               | -            | 3          | -           | Y        |
| 5B    | EXIST     | EXIST                      | EXIST | -        | 5                    | Y       | Y         | -               | -            | 15         | -           | Y        |
| 6A,6B | 6X6       | 300                        | 6     | Y        | 6                    | Y       | Y         | -               | 1.8          | -          | -           | Y        |
| 6C,6D | EXIST     | EXIST                      | EXIST | -        | 6                    | Y       | Y         | -               | -            | -          | -           | Y        |
| 8A    | EXIST     | EXIST                      | EXIST | -        | 8                    | Y       | Y         | -               | -            | -          | -           | Y        |
| 8B    | EXIST     | EXIST                      | EXIST | -        | 8                    | Y       | Y         | -               | -            | 10         | -           | Y        |

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 1 or phase 5 may be lagged.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Remove existing "Left Turn Signal" sign(s)-(R10-10L).
- 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 #1535.

LEGEND



| FEATURE                 | 2070L TIMING CHART |            |     |     |            |     |  |
|-------------------------|--------------------|------------|-----|-----|------------|-----|--|
|                         | PHASE              |            |     |     |            |     |  |
|                         | 1                  | 2          | 4   | 5   | 6          | 8   |  |
| Min Green 1 *           | 7                  | 12         | 7   | 7   | 12         | 7   |  |
| Extension 1 *           | 1.0                | 2.0        | 1.0 | 1.0 | 2.0        | 1.0 |  |
| Max Green 1 *           | 15                 | 45         | 25  | 15  | 45         | 25  |  |
| Yellow Clearance        | 4.0                | 4.7        | 4.0 | 4.0 | 4.7        | 4.0 |  |
| Red Clearance           | 2.4                | 1.9        | 2.3 | 2.5 | 1.9        | 2.3 |  |
| 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              | -                  | -          | ON  | -   | -          | ON  |  |
| 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 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

Signal Upgrade

Prepared in the Offices of: **STATE OF NORTH CAROLINA** Department of Transportation, Traffic Engineering and Safety Services Division, Signal and Geometric Section.

**NC 279 (New Hope Road) at Remount Road**

Division 12 Gaston County Gastonia  
 PLAN DATE: February 2005 REVIEWED BY: D.Y. Ishak  
 PREPARED BY: Z.M. Little REVIEWED BY:  
 REVISIONS: \_\_\_\_\_ INIT: \_\_\_\_\_ DATE: \_\_\_\_\_

SCALE: 1"=30'

SIGNATURE: \_\_\_\_\_ DA: \_\_\_\_\_  
 SIG. INVENTORY NO. 12-1535