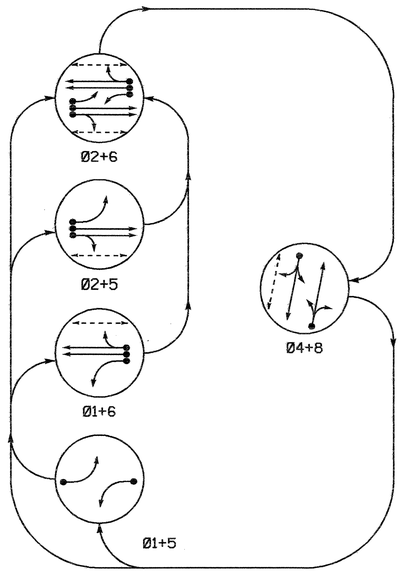
| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-4736 | Sig 147 |

## PHASING DIAGRAM




PHASING DIAGRAM DETECTION LEGEND

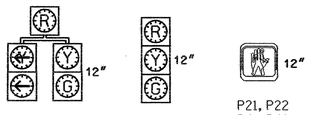
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

## TABLE OF OPERATION

| SIGNAL FACE | PHASE Ø1+5 | Ø1+6 | Ø2+5 | Ø2+6 | Ø4+8 | FLASH |
|---|---|---|---|---|---|---|
| 21 | ←R | R | ←G | G | R | Y |
| 22 | R | R | G | G | R | Y |
| 41, 42 | R | R | R | R | G | R |
| 61 | ←R | ←G | R | G | R | Y |
| 62 | R | G | R | G | R | Y |
| 81, 82 | R | R | R | R | G | R |
| P21, P22 | DW | DW | W | W | DW | DRK |
| P41, P42 | DW | DW | DW | DW | W | DRK |
| P61, P62 | DW | W | DW | W | DW | DRK |

## SIGNAL FACE I.D.

Denotes L.E.D.



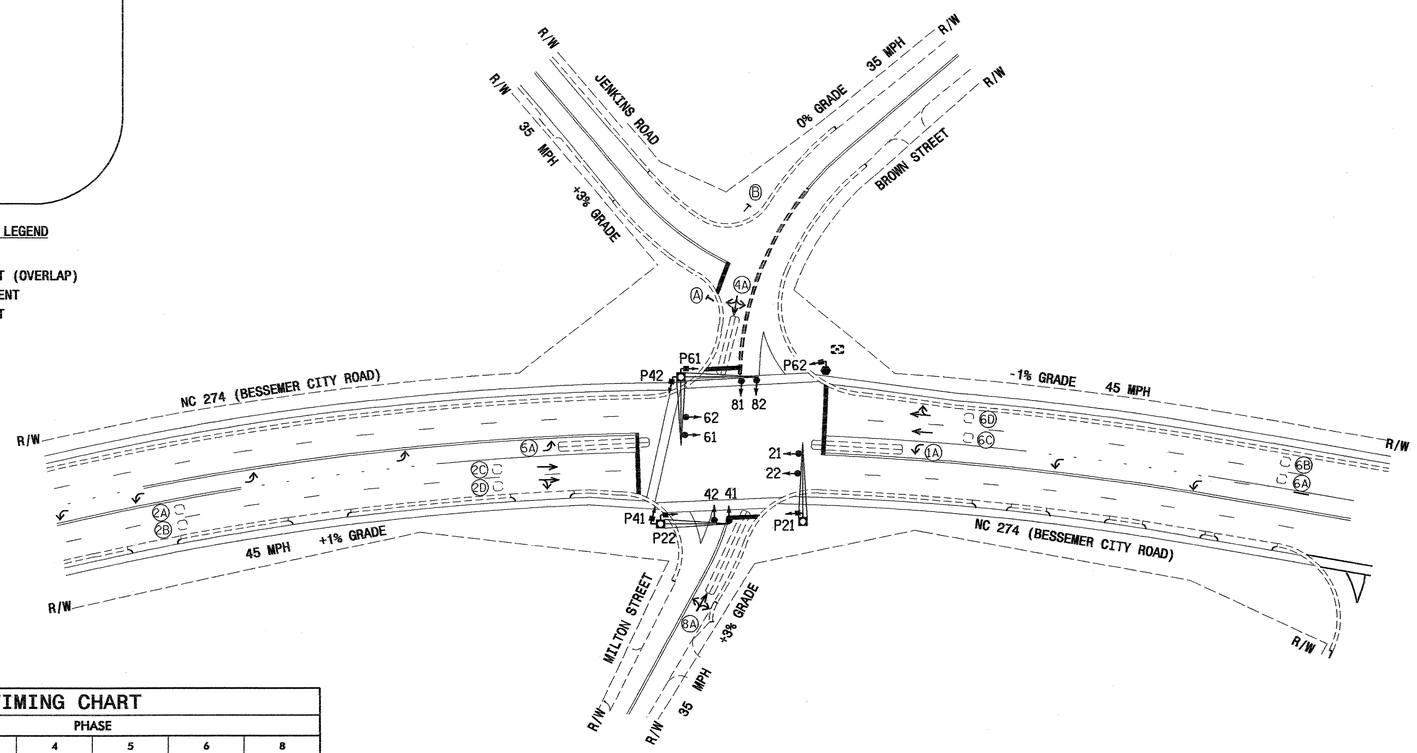

21
61

22
41, 42
62
81, 82

P21, P22
P41, P42
P61, P62

## 2070L LOOP & DETECTOR INSTALLATION

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




## 2070L TIMING CHART

| FEATURE | PHASE 1 | 2 | 4 | 5 | 6 | 8 |
|---|---|---|---|---|---|---|
| Min Green 1 * | 7 | 12 | 7 | 7 | 12 | 7 |
| Extension 1 * | 1.0 | 2.0 | 2.0 | 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 | 2.0 | 1.5 | 2.0 | 2.4 | 1.5 | 2.0 |
| Walk 1 * | - | 4 | 4 | - | 4 | - |
| Don't Walk 1 | - | 14 | 15 | - | 16 | - |
| 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.

## 5 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 1 during phase 2 on.
4. Omit phase 5 during phase 6 on.
5. Program controller to clear from phase 2+6 to phase 1 and/or 5 by progressing through phase 4+8 (see Electrical Details).
6. Set all detector units to presence mode.
7. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
8. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
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. City system data:
    Controller Asset #: 0264.
12. **All work on this signal will be done and paid for under TIP Project U-2408. This plan is only to show that this intersection is part of the Gastonia City Signal System and some minor changes to the timing chart.**

## LEGEND

| PROPOSED | | EXISTING |
|---|---|---|
| | Traffic Signal Head | |
| | Modified Signal Head | N/A |
| | Sign | |
| | Pedestrian Signal Head With Push Button & Sign | |
| | Signal Pole with Guy | |
| | Signal Pole with Sidewalk Guy | |
| | Inductive Loop Detector | |
| | Controller & Cabinet | |
| | Junction Box | |
| | 2-in Underground Conduit | |
| N/A | Right of Way | |
| | Directional Arrow | |
| | Pavement Marking Arrow | |
| | Metal Pole with Mastarm | |
| Ⓐ | "STOP" Sign (R1-1) | Ⓐ |
| Ⓑ | DO NOT BLOCK (Intersection Sign (R10-7) Ⓑ | |

Signal Upgrade

Prepared in the Offices of:
Traffic Engineering and Safety Systems Branch
Signals and Geometrics Section
DEPARTMENT OF TRANSPORTATION · NORTH CAROLINA
122 N. McDowell St., Raleigh, NC 27603

# NC 274 (Bessemer City Road) at Brown St./Milton St.

Division 12 Gaston County Gastonia

PLAN DATE: February 2005 REVIEWED BY: D.Y. Ishak

PREPARED BY: L. Blount REVIEWED BY:

SCALE 0 50 1" = 50'

| REVISIONS | INIT. | DATE |
|---|---|---|
| | | |

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 23027 ENGINEER RICHARD E. MULLINAX
14 MARCH 05
SIGNATURE DATE

SIG. INVENTORY NO. 12-0264

12-MAY-2005 09:19
w:\#projects-unit\#workgroups\#tip projects\#U-4736\#signal plans\#12-0264\#120264_sig_dsn_20050314.dgn
multiTrns