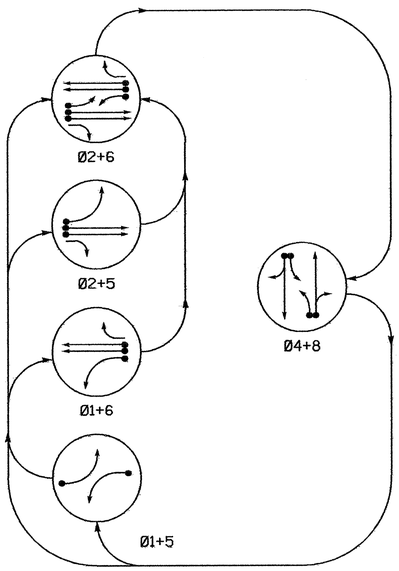
| METRIC | PROJECT REFERENCE NO. | SHEET NO. |
|---|---|---|
| | R-2568 B | Sig.2 |

## PHASING DIAGRAM




**PHASING DIAGRAM DETECTION LEGEND**

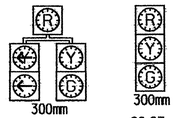
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

## TABLE OF OPERATION

| SIGNAL FACE | PHASE Ø1+5 | Ø1+6 | Ø2+5 | Ø2+6 | Ø4+8 | FLASH |
|---|---|---|---|---|---|---|
| 21 | R | R | G | G | R | Y |
| 22,23 | R | R | G | G | R | Y |
| 41,42 | R | R | R | R | G | R |
| 61 | R | G | R | G | R | Y |
| 62,63 | R | G | R | G | R | Y |
| 81,82 | R | R | R | R | G | R |

## SIGNAL FACE I.D.

Denotes L.E.D.




21
61




22,23
41,42
62,63
81,82

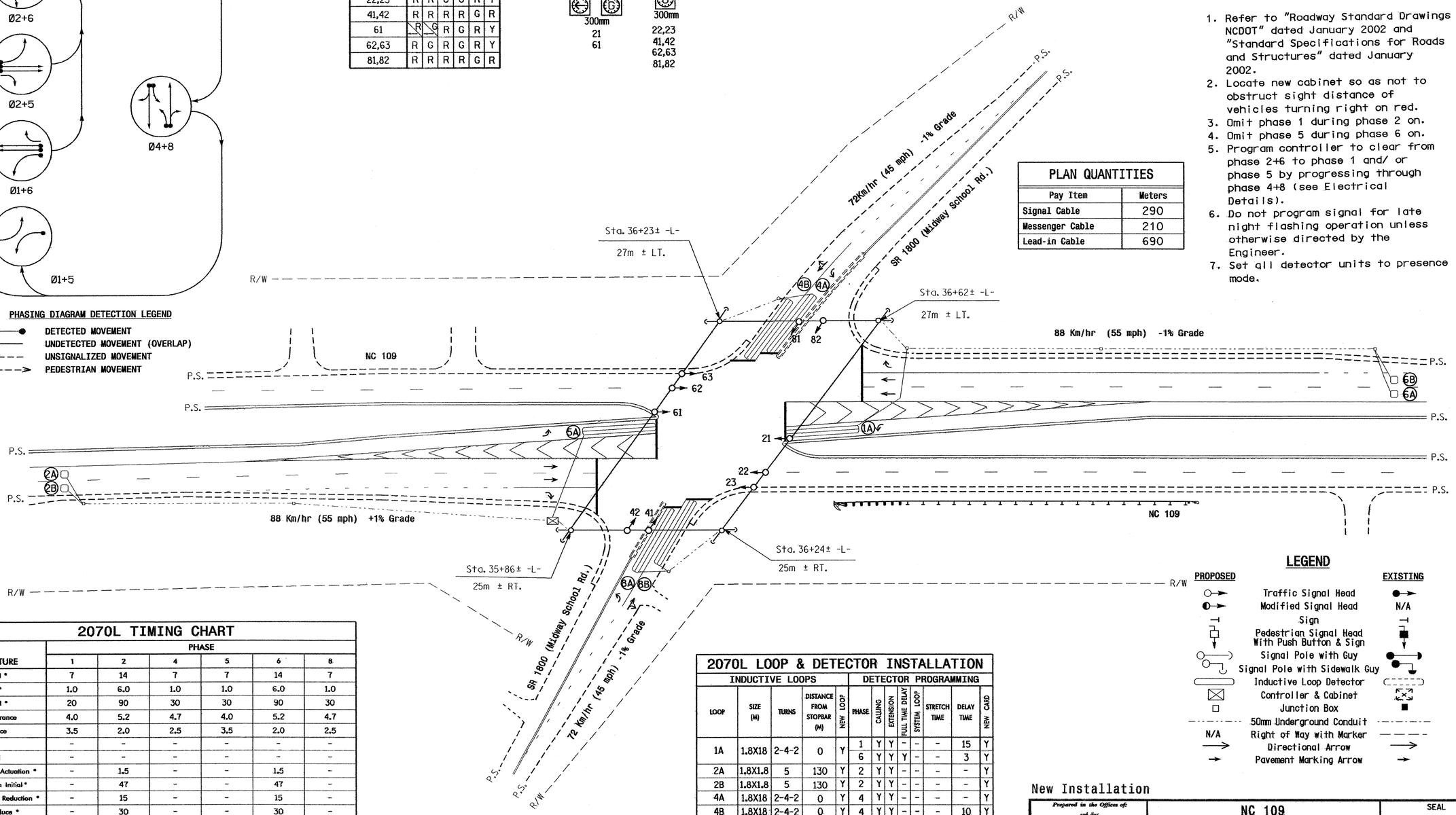
## 5-Phase Fully Actuated Isolated

## NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
2. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
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 phase 5 by progressing through phase 4+8 (see Electrical Details).
6. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
7. Set all detector units to presence mode.

## PLAN QUANTITIES

| Pay Item | Meters |
|---|---|
| Signal Cable | 290 |
| Messenger Cable | 210 |
| Lead-in Cable | 690 |




## 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 | |
| | 50mm Underground Conduit | |
| N/A | Right of Way with Marker | |
| | Directional Arrow | |
| | Pavement Marking Arrow | |

## 2070L TIMING CHART

| FEATURE | PHASE 1 | 2 | 4 | 5 | 6 | 8 |
|---|---|---|---|---|---|---|
| Min Green 1 * | 7 | 14 | 7 | 7 | 14 | 7 |
| Extension 1 * | 1.0 | 6.0 | 1.0 | 1.0 | 6.0 | 1.0 |
| Max Green 1 * | 20 | 90 | 30 | 30 | 90 | 30 |
| Yellow Clearance | 4.0 | 5.2 | 4.7 | 4.0 | 5.2 | 4.7 |
| Red Clearance | 3.5 | 2.0 | 2.5 | 3.5 | 2.0 | 2.5 |
| Walk 1 * | - | - | - | - | - | - |
| Don't Walk 1 | - | - | - | - | - | - |
| Seconds Per Actuation * | - | 1.5 | - | - | 1.5 | - |
| Max Variable Initial * | - | 47 | - | - | 47 | - |
| Time Before Reduction * | - | 15 | - | - | 15 | - |
| Time To Reduce * | - | 30 | - | - | 30 | - |
| Minimum Gap | - | 3.4 | - | - | 3.4 | - |
| 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.

## 2070L LOOP & DETECTOR INSTALLATION

| INDUCTIVE LOOPS | | | | | DETECTOR PROGRAMMING | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LOOP | SIZE (M) | TURNS | DISTANCE FROM STOPBAR (M) | NEW LOOP | PHASE | CALLING | EXTENSION | FULL TIME DELAY | SYSTEM LOOP | STRETCH TIME | DELAY TIME | NEW CARD |
| 1A | 1.8X18 | 2-4-2 | 0 | Y | 1 | Y | Y | - | - | - | 15 | Y |
| | | | | | 6 | Y | Y | Y | - | - | 3 | Y |
| 2A | 1.8X1.8 | 5 | 130 | Y | 2 | Y | Y | - | - | - | - | Y |
| 2B | 1.8X1.8 | 5 | 130 | Y | 2 | Y | Y | - | - | - | - | Y |
| 4A | 1.8X18 | 2-4-2 | 0 | Y | 4 | Y | Y | - | - | - | - | Y |
| 4B | 1.8X18 | 2-4-2 | 0 | Y | 4 | Y | Y | - | - | - | 10 | Y |
| 5A | 1.8X18 | 2-4-2 | 0 | Y | 2 | Y | Y | Y | - | - | 3 | Y |
| | | | | | 5 | Y | Y | - | - | - | 15 | Y |
| 6A | 1.8X1.8 | 6 | 130 | Y | 6 | Y | Y | - | - | - | - | Y |
| 6B | 1.8X1.8 | 6 | 130 | Y | 6 | Y | Y | - | - | - | - | Y |
| 8A | 1.8X18 | 2-4-2 | 0 | Y | 8 | Y | Y | - | - | - | - | Y |
| 8B | 1.8X18 | 2-4-2 | 0 | Y | 8 | Y | Y | - | - | - | 10 | Y |

New Installation

Prepared in the Offices of: Traffic Engineering and Safety Systems Branch, Traffic Engineering Unit, Division of Highways, North Carolina Department of Transportation, Raleigh, and Geometrics Section

122 N. McDowell St., Raleigh, NC 27603

**NC 109 at SR 1800 (Midway School Rd.)**

Division 9 Davidson County Thomasville

| PLAN DATE: | June 2004 | REVIEWED BY: | C.J. Collins |
|---|---|---|---|
| PREPARED BY: | Luhr | REVIEWED BY: | |

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

SCALE 5 0 10 — 1:500

SEAL — NORTH CAROLINA PROFESSIONAL SEAL 24393 ENGINEER TIMOTHY J. WILLIAMS

SIGNATURE 8/2/04 DATE

SIG. INVENTORY NO. 09-1293

02-AUG-2004 16:33
K:\PE\PE1L-I-HWYDRGR-1-MTIPPROJ-1-MR-2568B#Sig\plots#09I293.sig
luhr