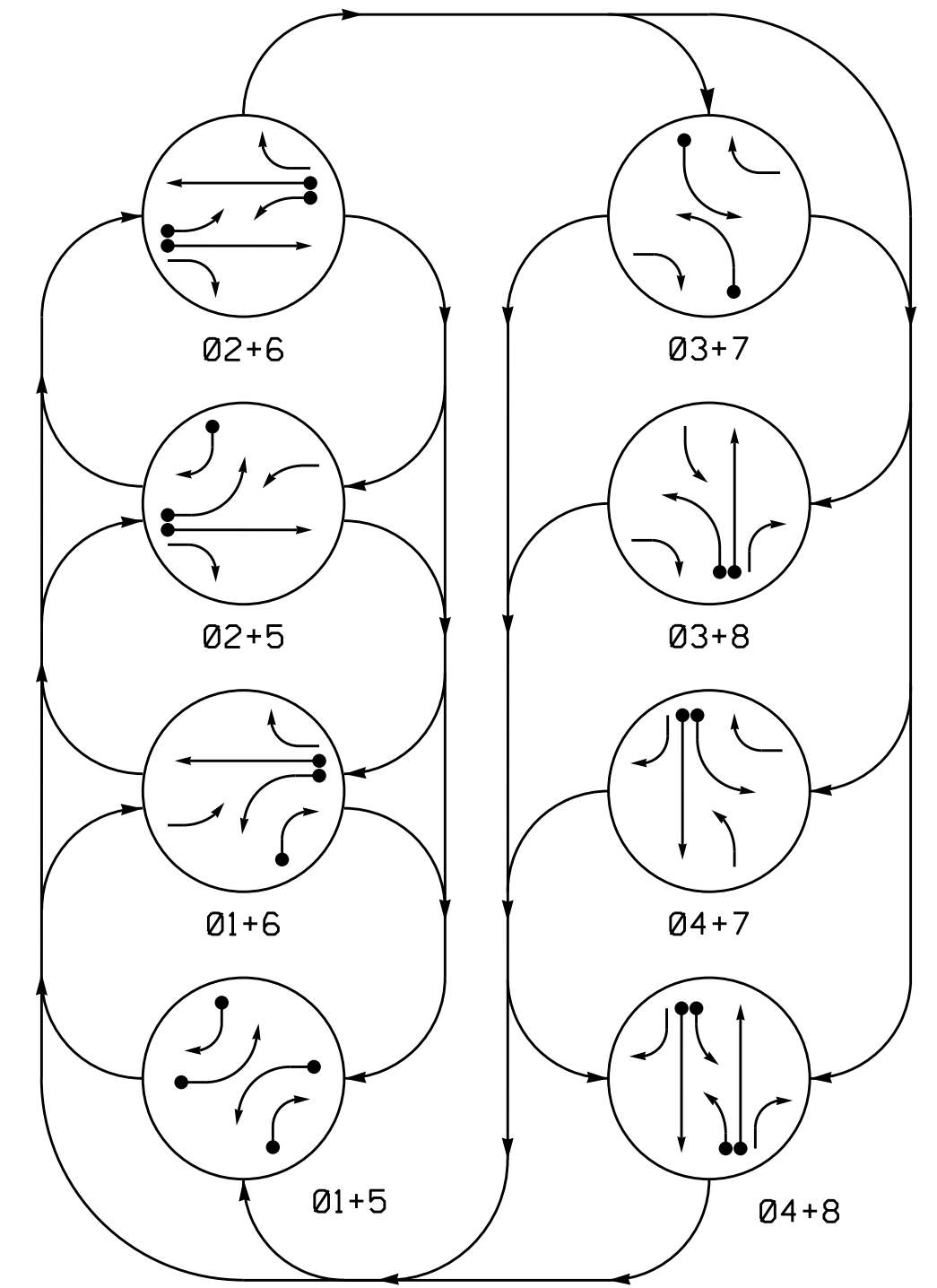


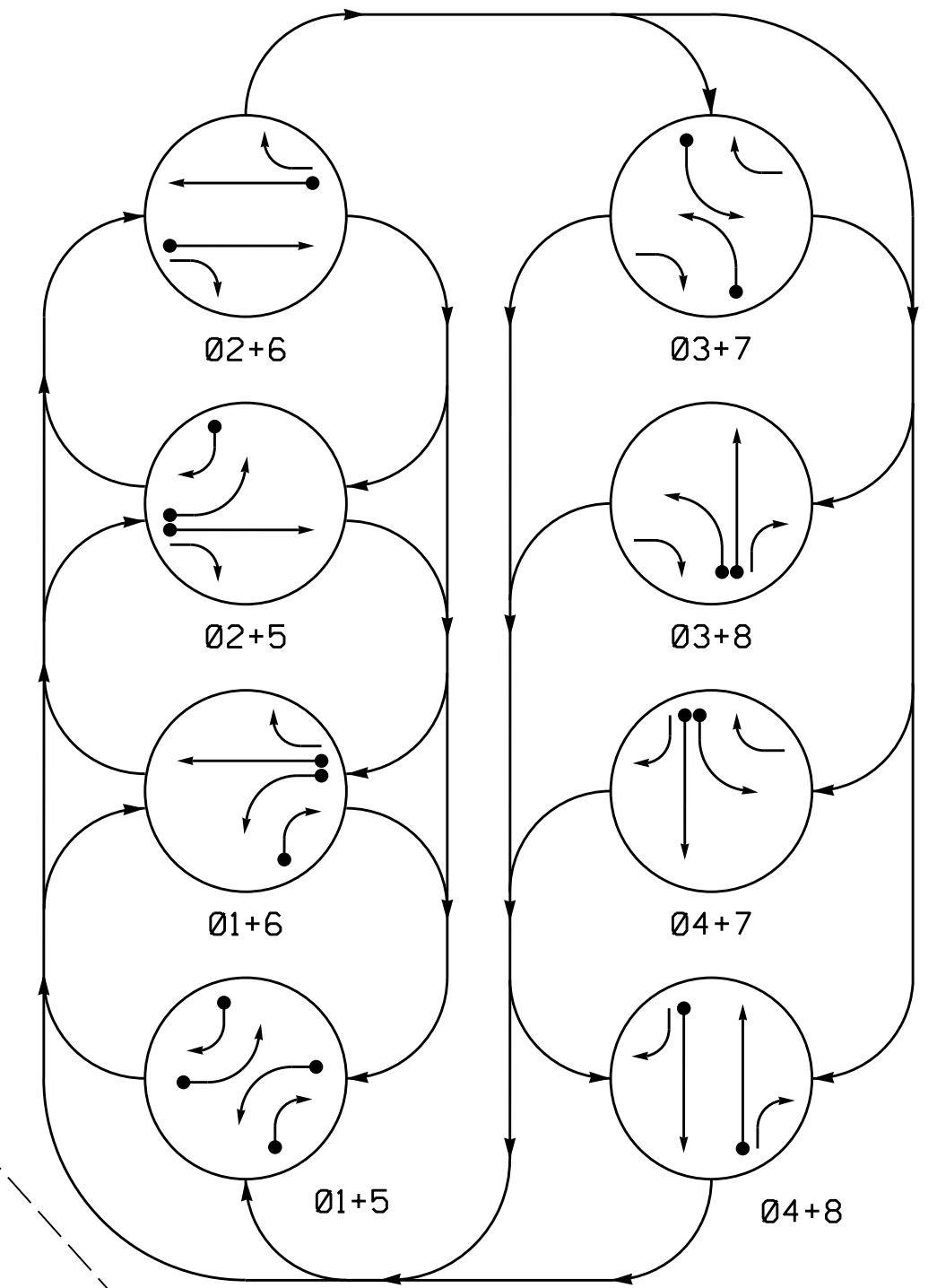
DEFAULT PHASING DIAGRAM



DEFAULT PHASING TABLE OF OPERATION

| SIGNAL FACE | PHASE |      |      |      |      |      |      |      | FLASH |
|-------------|-------|------|------|------|------|------|------|------|-------|
|             | 01+5  | 01+6 | 02+5 | 02+6 | 03+7 | 03+8 | 04+7 | 04+8 |       |
| 11          | -     | -    | F    | F    | R    | R    | R    | R    | Y     |
| 21          | R     | R    | G    | G    | R    | R    | R    | R    | Y     |
| 22          | R     | R    | G    | G    | R    | R    | R    | R    | Y     |
| 31          | R     | R    | R    | R    | -    | F    | F    | R    | Y     |
| 41          | R     | R    | R    | R    | R    | R    | G    | G    | R     |
| 42          | R     | R    | R    | R    | R    | R    | G    | G    | R     |
| 51          | -     | F    | F    | F    | R    | R    | R    | R    | Y     |
| 61          | R     | G    | R    | G    | R    | R    | R    | R    | Y     |
| 62          | R     | G    | R    | G    | R    | R    | R    | R    | Y     |
| 71          | R     | R    | R    | R    | -    | F    | F    | R    | Y     |
| 81          | R     | R    | R    | R    | R    | G    | G    | R    | R     |
| 82          | R     | R    | R    | R    | R    | G    | G    | R    | R     |

ALTERNATE PHASING DIAGRAM



ALTERNATE PHASING TABLE OF OPERATION

| SIGNAL FACE | PHASE |      |      |      |      |      |      |      | FLASH |
|-------------|-------|------|------|------|------|------|------|------|-------|
|             | 01+5  | 01+6 | 02+5 | 02+6 | 03+7 | 03+8 | 04+7 | 04+8 |       |
| 11          | -     | -    | R    | R    | R    | R    | R    | R    | Y     |
| 21          | R     | R    | G    | G    | R    | R    | R    | R    | Y     |
| 22          | R     | R    | G    | G    | R    | R    | R    | R    | Y     |
| 31          | R     | R    | R    | R    | -    | F    | F    | R    | Y     |
| 41          | R     | R    | R    | R    | R    | R    | G    | G    | R     |
| 42          | R     | R    | R    | R    | R    | R    | G    | G    | R     |
| 51          | -     | R    | R    | R    | R    | R    | R    | R    | Y     |
| 61          | R     | G    | R    | G    | R    | R    | R    | R    | Y     |
| 62          | R     | G    | R    | G    | R    | R    | R    | R    | Y     |
| 71          | R     | R    | R    | R    | -    | R    | R    | R    | Y     |
| 81          | R     | R    | R    | R    | R    | G    | G    | R    | R     |
| 82          | R     | R    | R    | R    | R    | G    | G    | R    | R     |

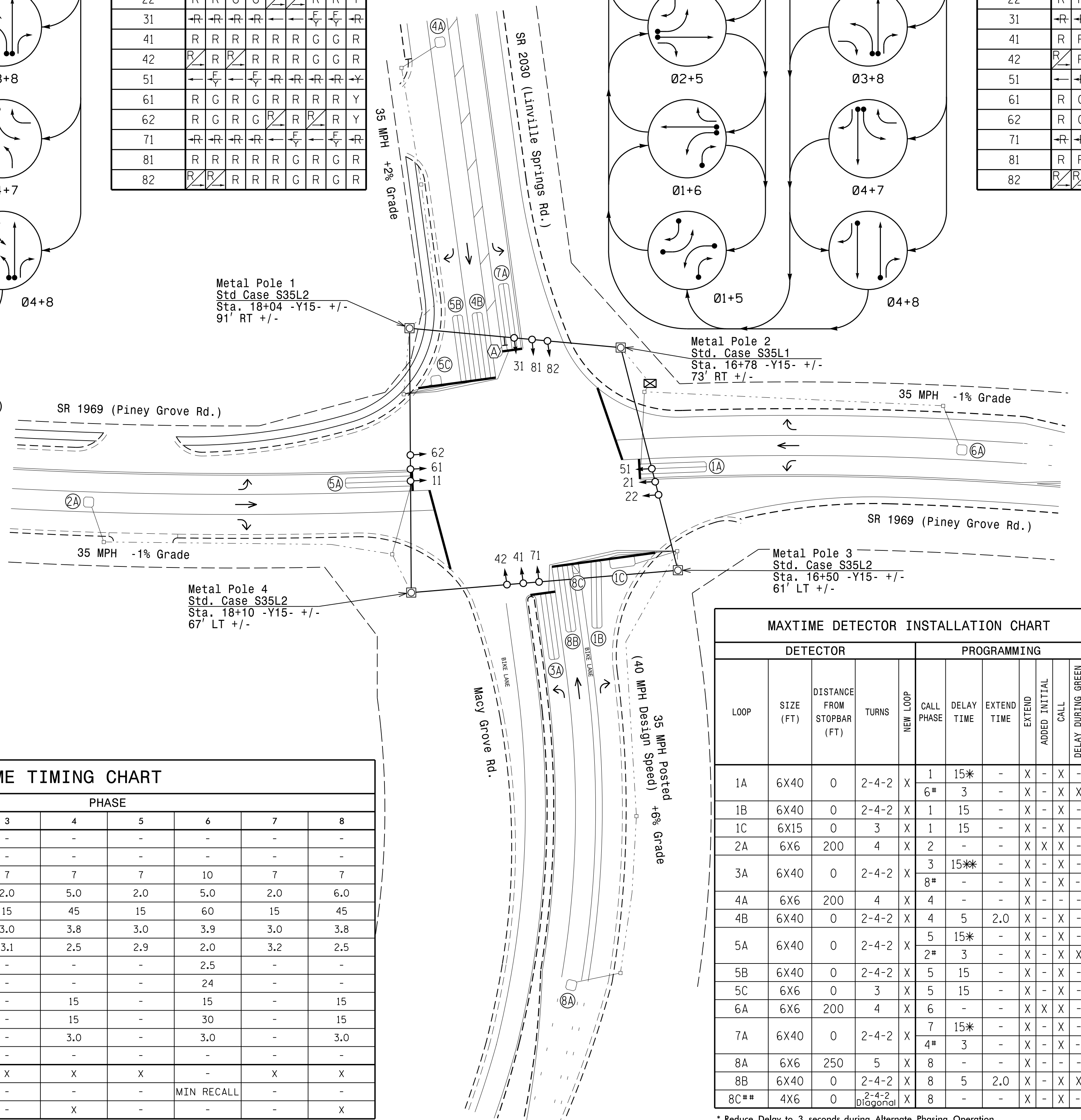
8 Phase Fully Actuated  
(NC 150 at Macy Grove Road and County Line Road CLS)  
Signal System #: D09-28\_Kernersville

NOTES

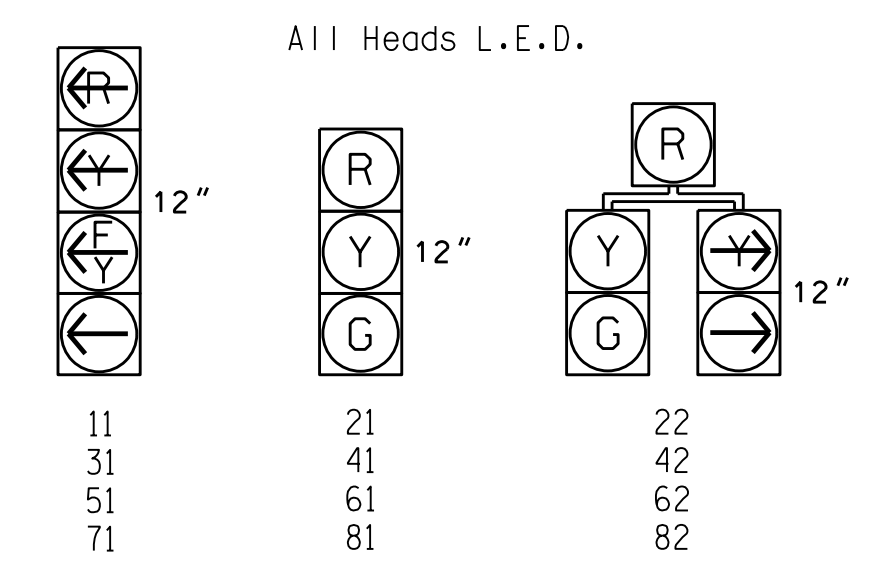
- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Phase 3 and/or phase 7 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.
- The Division Traffic Engineer will determine the hours of use for each phasing plan.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data:  
Controller Asset #: 0365.

PHASING DIAGRAM DETECTION LEGEND

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



SIGNAL FACE I.D.



MAXTIME TIMING CHART

| FEATURE                 | PHASE |            |     |     |            |     |     |     |
|-------------------------|-------|------------|-----|-----|------------|-----|-----|-----|
|                         | 1     | 2          | 3   | 4   | 5          | 6   | 7   | 8   |
| Walk *                  | -     | -          | -   | -   | -          | -   | -   | -   |
| Ped Clear               | -     | -          | -   | -   | -          | -   | -   | -   |
| Min Green *             | 7     | 10         | 7   | 7   | 7          | 10  | 7   | 7   |
| Passage *               | 2.0   | 5.0        | 2.0 | 5.0 | 2.0        | 5.0 | 2.0 | 6.0 |
| Max 1 *                 | 15    | 60         | 15  | 45  | 15         | 60  | 15  | 45  |
| Yellow Change           | 3.0   | 3.9        | 3.0 | 3.8 | 3.0        | 3.9 | 3.0 | 3.8 |
| Red Clear               | 2.9   | 2.0        | 3.1 | 2.5 | 2.9        | 2.0 | 3.2 | 2.5 |
| Added Initial *         | -     | 2.5        | -   | -   | -          | 2.5 | -   | -   |
| Maximum Initial *       | -     | 24         | -   | -   | -          | 24  | -   | -   |
| Time Before Reduction * | -     | 15         | -   | 15  | -          | 15  | -   | 15  |
| Time To Reduce *        | -     | 30         | -   | 15  | -          | 30  | -   | 15  |
| Minimum Gap             | -     | 3.0        | -   | 3.0 | -          | 3.0 | -   | 3.0 |
| Advance Walk            | -     | -          | -   | -   | -          | -   | -   | -   |
| Non Lock Detector       | X     | -          | X   | X   | X          | -   | X   | X   |
| Vehicle Recall          | -     | MIN RECALL | -   | -   | MIN RECALL | -   | -   | -   |
| Dual Entry              | -     | -          | -   | X   | -          | -   | -   | X   |

\* 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.

MAXTIME DETECTOR INSTALLATION CHART

| LOOP | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS          | NEW LOOP | PROGRAMMING |            |             |        |               |      |                    |          |
|------|-----------|----------------------------|----------------|----------|-------------|------------|-------------|--------|---------------|------|--------------------|----------|
|      |           |                            |                |          | CALL PHASE  | DELAY TIME | EXTEND TIME | EXTEND | ADDED INITIAL | CALL | DELAY DURING GREEN | NEW CARD |
| 1A   | 6X40      | 0                          | 2-4-2          | X        | 1           | 15*        | -           | X      | -             | X    | -                  | X        |
| 1B   | 6X40      | 0                          | 2-4-2          | X        | 6*          | 3          | -           | X      | -             | X    | X                  | X        |
| 1C   | 6X15      | 0                          | 3              | X        | 1           | 15         | -           | X      | -             | X    | -                  | X        |
| 2A   | 6X6       | 200                        | 4              | X        | 2           | -          | -           | X      | X             | X    | -                  | X        |
| 3A   | 6X40      | 0                          | 2-4-2          | X        | 3           | 15**       | -           | X      | -             | X    | -                  | X        |
| 4A   | 6X6       | 200                        | 4              | X        | 4           | -          | -           | X      | -             | -    | -                  | X        |
| 4B   | 6X40      | 0                          | 2-4-2          | X        | 4           | 5          | 2.0         | X      | -             | X    | -                  | X        |
| 5A   | 6X40      | 0                          | 2-4-2          | X        | 5           | 15*        | -           | X      | -             | X    | -                  | X        |
| 5B   | 6X40      | 0                          | 2-4-2          | X        | 5           | 15         | -           | X      | -             | X    | -                  | X        |
| 5C   | 6X6       | 0                          | 3              | X        | 5           | 15         | -           | X      | -             | X    | -                  | X        |
| 6A   | 6X6       | 200                        | 4              | X        | 6           | -          | -           | X      | X             | X    | -                  | X        |
| 7A   | 6X40      | 0                          | 2-4-2          | X        | 7           | 15*        | -           | X      | -             | X    | -                  | X        |
| 8A   | 6X6       | 250                        | 5              | X        | 8           | 3          | -           | X      | -             | X    | -                  | X        |
| 8B   | 6X40      | 0                          | 2-4-2          | X        | 8           | 5          | 2.0         | X      | -             | X    | X                  | X        |
| 8C** | 4X6       | 0                          | 2-4-2 Diagonal | X        | 8           | -          | -           | X      | -             | X    | -                  | X        |

\* Reduce Delay to 3 seconds during Alternate Phasing Operation.  
\*\* Disable Delay during Alternate Phasing Operation.  
# Disable phase call for loop during Alternate Phasing Operation.  
## Set sensitivity at appropriate level to detect bicycles.

LEGEND

- PROPOSED: Traffic Signal Head, Modified Signal Head, 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, Right of Way, Directional Arrow, Metal Strain Pole, "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)
- EXISTING: N/A, Sign, Pedestrian Signal Head With Push Button & Sign, Inductive Loop Detector, Controller & Cabinet, Junction Box, 2-in Underground Conduit, Right of Way, Directional Arrow, Metal Strain Pole, "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)

New Installation

Prepared in the Offices of:  
TRANSPORTATION MOBILITY AND SAFETY GROUP  
STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
SIGNAL DESIGN SECTION

SR 1969 (Piney Grove Road) at SR 2030 (Linville Springs Road) and Macy Grove Road  
Division 9 Forsyth County Kernersville  
PLAN DATE: June 2023 REVIEWED BY:  
PREPARED BY: J.A. Lohr REVIEWED BY:

REVISIONS: INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL  
NORTH CAROLINA PROFESSIONAL ENGINEER  
ROBERT J. LITTE  
08/10/2023  
SIG. INVENTORY NO. 09-0365