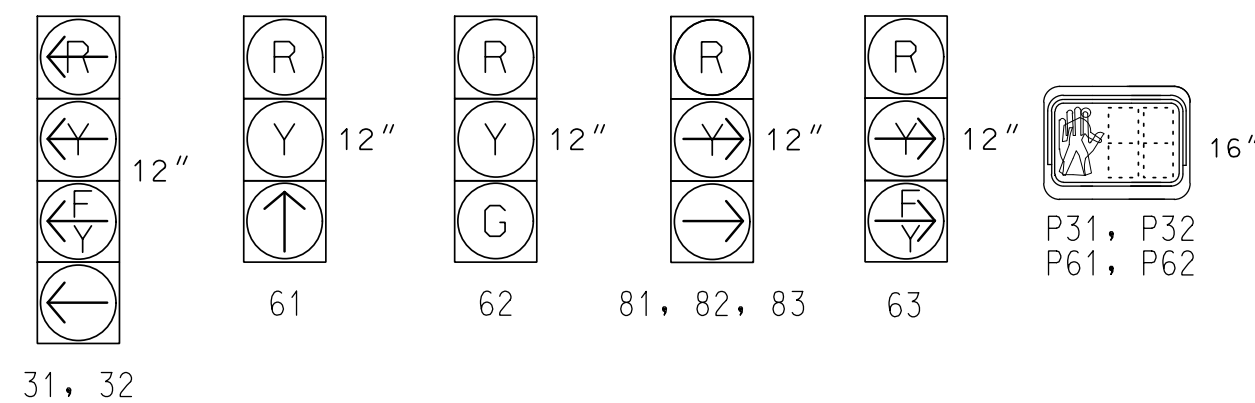


|  |                               |
|--|-------------------------------|
|  | DETECTED MOVEMENT             |
|  | UNDETECTED MOVEMENT (OVERLAP) |
|  | UNSIGNALIZED MOVEMENT         |
|  | PEDESTRIAN MOVEMENT           |

| SIGNAL<br>FACE | PHASE                                                                             |                                                                                   |                                                                                   |
|----------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                | Ø 6                                                                               | Ø 3 + 8                                                                           | F A S H                                                                           |
| 3l, 32         |  |  |  |
| 6l             |  | R                                                                                 | R                                                                                 |
| 62             | G                                                                                 | R                                                                                 | R                                                                                 |
| 63             |  | R                                                                                 | R                                                                                 |
| 8l, 82, 83     | R                                                                                 |  | R                                                                                 |
| P3l, P32       | DW                                                                                | W                                                                                 | DR                                                                                |
| P6l, P62       | W                                                                                 | DW                                                                                | DR                                                                                |

| SIGNAL<br>FACE | PHASE |         |       |
|----------------|-------|---------|-------|
|                | Ø 6   | Ø 3 + 8 | FLASH |
| 3l, 32         | ← R   | ←       | ← R   |
| 6l             | ↑     | R       | R     |
| 62             | G     | R       | R     |
| 63             | ↘     | R       | R     |
| 8l, 82, 83     | R     | →       | R     |
| P3l, P32       | DW    | W       | DRK   |
| P6l, P62       | W     | DW      | DRK   |

All Heads L.E.D.



| DETECTOR |              |                                     |       |          | PROGRAMMING   |               |                |        |                  |      |                       |          |
|----------|--------------|-------------------------------------|-------|----------|---------------|---------------|----------------|--------|------------------|------|-----------------------|----------|
| LOOP     | SIZE<br>(FT) | DISTANCE<br>FROM<br>STOPBAR<br>(FT) | TURNS | NEW LOOP | CALL<br>PHASE | DELAY<br>TIME | EXTEND<br>TIME | EXTEND | ADDED<br>INITIAL | CALL | DELAY<br>DURING GREEN | NEW CARD |
| 3A       | 6X40         | 0                                   | 2-4-2 | X        | 3             | * 15.0        | -              | X      | -                | X    | -                     | X        |
| 6A       | 6X6          | 420                                 | 5     | X        | 6             | -             | -              | X      | X                | X    | -                     | X        |
| 6B       | 6X6          | 420                                 | 5     | X        | 6             | -             | -              | X      | X                | X    | -                     | X        |
| 8A       | 6X40         | 0                                   | 2-4-2 | X        | 8             | 15.0          | -              | X      | -                | X    | -                     | X        |
| 8B       | 6X40         | 0                                   | 2-4-2 | X        | 8             | 15.0          | -              | X      | -                | X    | -                     | X        |

\* Disable Delay During Alternate Phasing Operation.

Fully Actuated w/ Alternate Phasing Operation  
US 321 Closed Loop System

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
4. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
5. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
6. The Division Traffic Engineer will determine the hours of use for each phasing plan.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
8. Pedestal mounted signal heads shall be mounted a minimum of 8' above the high point of the roadway surface elevation.
9. Refer to Roadway and/or Pavement Marking plans for stop bar locations.
10. Suppress FYA for signal heads 31, 32, and 63 for the first 5 seconds of phase 6 ped.

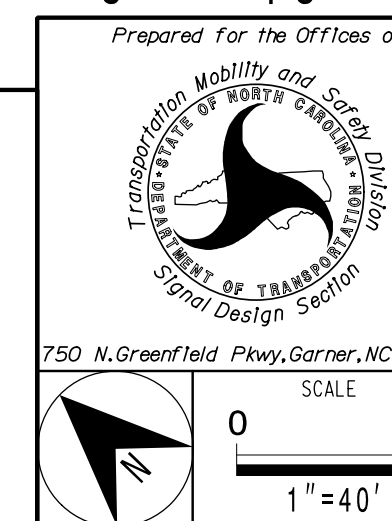
| MAXTIME TIMING CHART    |       |            |     |
|-------------------------|-------|------------|-----|
| FEATURE                 | PHASE |            |     |
|                         | 3     | 6          | 8   |
| Walk *                  | 11    | 13         | —   |
| Ped Clear *             | 15    | 28         | —   |
| Min Green               | 7     | 14         | 7   |
| Passage *               | 2.0   | 6.0        | 2.0 |
| Max 1 *                 | 30    | 90         | 20  |
| Yellow Change           | 3.0   | 4.9        | 3.0 |
| Red Clear               | 2.3   | 1.5        | 2.3 |
| Added Initial *         | —     | 1.5        | —   |
| Maximum Initial *       | —     | 46         | —   |
| Time Before Reduction * | —     | 15         | —   |
| Time To Reduce *        | —     | 30         | —   |
| Minimum Gap             | —     | 3.4        | —   |
| Advance Walk            | 4     | 6          | —   |
| Non Lock Detector       | X     | —          | X   |
| Vehicle Recall          | —     | MIN RECALL | —   |
| Dual Entry              | X     | —          | X   |

\* These values may be field adjusted. Do not adjust Min Green and Extension times for phase 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

| PROPOSED |                                              | EXISTING |
|----------|----------------------------------------------|----------|
|          | Traffic Signal Head                          |          |
|          | Modified Signal Head                         | N/A      |
|          | Sign                                         |          |
|          | Pedestrian Signal Head                       |          |
|          | With Push Button & Sign                      |          |
|          | Metal Pole with Mastarm                      |          |
|          | Inductive Loop Detector                      |          |
|          | Controller & Cabinet                         |          |
|          | Junction Box                                 |          |
|          | 2-in Undergroud Conduit                      | N/A      |
| N/A      | Directional Drill                            | N/A      |
|          | Right of Way                                 |          |
|          | Directional Arrow                            |          |
|          | Type I Pushbutton Post                       |          |
|          | Type II Signal Pedestal                      |          |
|          | Yield Bars                                   |          |
| N/A      | Curb Ramp                                    |          |
|          | No U-Turn Sign (R3-4)                        |          |
|          | No Left Turn Sign (R3-2)                     |          |
|          | "RIGHT LANE MUST TURN RIGHT"<br>Sign (R3-TR) |          |

DOCUMENT NOT CONSIDERED  
FINAL UNLESS ALL  
SIGNATURES COMPLETED

**STV Engineers, Inc.**  
2151 Hawkins St., Suite 1400  
Charlotte, NC 28203  
(704) 372-1885  
NC License Number F-0991



|            |          |                            |
|------------|----------|----------------------------|
| PLAN DATE: | May 2026 | REVIEWED BY: B. Roth-Roffy |
|------------|----------|----------------------------|

|    |                             |                         |
|----|-----------------------------|-------------------------|
| 29 | PREPARED BY: R.L. Aristondo | REVIEWED BY: T.M. Moody |
|----|-----------------------------|-------------------------|

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

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|  |  |  |

[illegible]

DocuSigned by  
Trent Moody  
 4561455040010404  
 SIGNATURE

5/29/2022  
 DATE

SIG. INVENTORY NO. II-0808