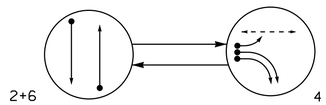
| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| I-5880 | Sig 7.0 |

# 2 Phase
# Fully Actuated
# (Winston-Salem Signal System)

## PHASING DIAGRAM



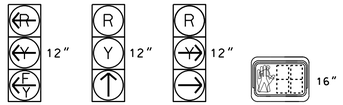

PHASING DIAGRAM DETECTION LEGEND

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

| TABLE OF OPERATION | | | |
|---|---|---|---|
| SIGNAL FACE | PHASE 2+6 | PHASE 4 | PHASE FLASH |
| 21, 22 | ↑ | R | R |
| 41 | ~~R~~ ~~Y~~ ~~↑~~ | ~~Y~~ | ~~R~~ |
| 42, 43 | R | → | R |
| 61, 62 | ↑ | R | R |
| P41, P42 | DW | W | DRK |

## SIGNAL FACE I.D.

All Heads L.E.D.




41 | 21, 22 62, 63 | 42, 43 | P41, P42




## NOTES

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. Remove existing signal head 61.
4. Reposition existing signal heads 21 and 22.
6. Disconnect and abandon existing loops 2B and 6A.
6. Signal heads 21, 22, 41, 42, and 43 have backplates.
7. Set all detector units to presence mode.
8. In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
9. Program controller to operate using FYA compact mode.
10. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
11. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
12. Remove existing lane control signs as shown.
13. This intersection uses non-intrusive detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
14. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

## 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 | → |
| ●● | Construction Zone Drums | ●● |
| ▭ | Construction Zone | ▭ |
| ▬ | Construction Barricade | ▬ |
| ▬ | Non-Intrusive Detection Zone | ▬ |
| Ⓒ | No Left Turn Sign (R3-2) | Ⓒ |
| Ⓓ | Right Arrow "ONLY" Sign (R3-5R) | Ⓓ |
| Ⓖ | Street Name Sign By Others (D3-1) | Ⓖ |
| Ⓗ | No Right Turn Sign (R3-1) | Ⓗ |

## OASIS 2070 TIMING CHART

| FEATURE | PHASE 2 | PHASE 4 | PHASE 6 |
|---|---|---|---|
| Min Green 1 * | 10 | 7 | 10 |
| Extension 1 * | 2.0 | 2.0 | 1.0 |
| Max Green 1 * | 50 | 30 | 50 |
| Yellow Clearance | 3.9 | 3.0 | 3.9 |
| Red Clearance | 1.4 | 2.3 | 1.4 |
| Red Revert | 2.0 | 2.0 | 2.0 |
| Advance Walk | - | 7 | - |
| Walk 1 * | - | 14 | - |
| Don't Walk 1 | - | 17 | - |
| Seconds Per Actuation * | - | - | - |
| Max Variable Initial * | - | - | - |
| Time Before Reduction * | - | - | - |
| Time To Reduce * | - | - | - |
| Minimum Gap | - | - | - |
| Recall Mode | MIN RECALL | - | MIN RECALL |
| Vehicle Call Memory | - | YELLOW | - |
| Dual Entry | - | - | - |
| Simultaneous Gap | 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.

## OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

| INDUCTIVE LOOPS | | | | | DETECTOR PROGRAMMING | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LOOP / ZONE | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | PHASE | CALLING | EXTENSION | FULL TIME DELAY | STRETCH TIME | DELAY TIME | SYSTEM LOOP | NEW CARD |
| 2A | 6X40 | 0 | 2-4-2 | - | 2 | Y | Y | - | - | - | - | - |
| 4A* | 6x40 | 0 | * | - | 4 | Y | Y | - | - | - | - | * |
| 4B* | 6x40 | 0 | * | - | 4 | Y | Y | - | - | 15 | - | * |
| 4C* | 6x40 | 0 | * | - | 4 | Y | Y | - | - | 15 | - | * |
| 6B | 6X60 | +5 | EXIST | - | 6 | Y | Y | - | - | - | - | - |

* Non-Intrusive detection zone.

Signal Upgrade -
Temporary Design 2 (TMP Phase II)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED


Prepared In the Offices of:
Transportation Mobility and Safety Division
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy.Garner,NC 27529


SR 2741 (Clemmonsville Road)
at
I-40 EB Ramp

Division 9 Forsyth County Winston-Salem

PLAN DATE: January 2025 REVIEWED BY:

PREPARED BY: J.A. Lohr REVIEWED BY:

SCALE 0 20 1"=20'

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

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 026486 ENGINEER ROBERT J. ZIEMBA

DocuSigned by: Robert J. Ziemba 2025/01/02
DATE

SIG. INVENTORY NO. 09-0327T2

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