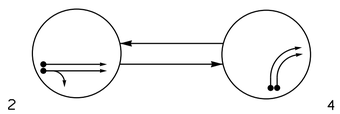
| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-5302 | Sig. 13.0 |

## PHASING DIAGRAM




PHASING DIAGRAM DETECTION LEGEND

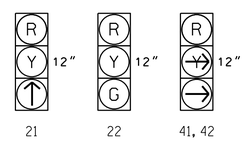
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

## TABLE OF OPERATION

| SIGNAL FACE | PHASE 2 | PHASE 4 | FLASH |
|---|---|---|---|
| 21 | ↑ | R | R |
| 22 | G | R | R |
| 41, 42 | R | → | R |

## SIGNAL FACE I.D.

All Heads L.E.D.




## SE-PAC 2070 LOOP & DETECTOR UNIT INSTALLATION CHART

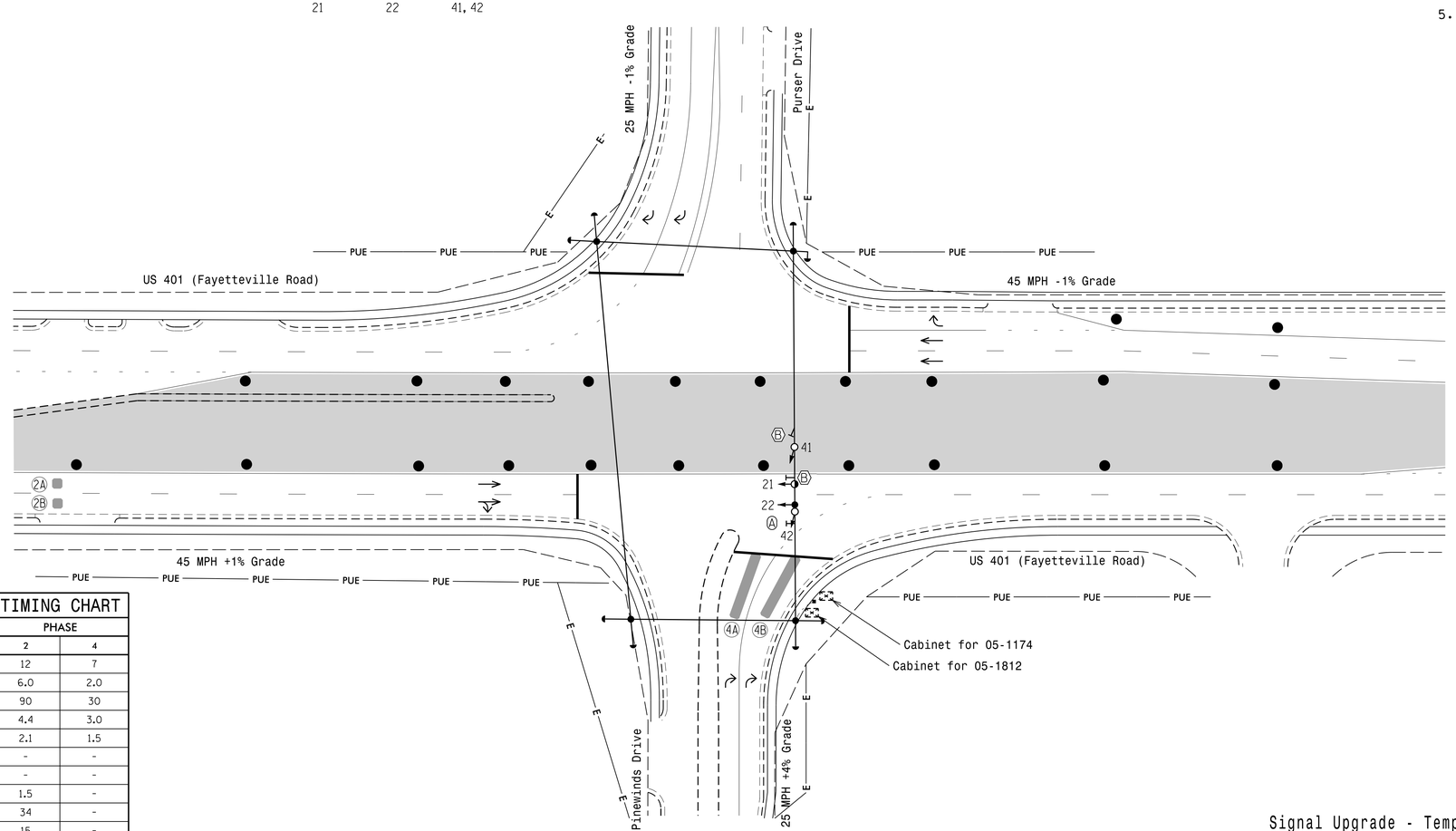
| INDUCTIVE LOOPS | | | | | | DETECTOR PROGRAMMING | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | TIMING | | OPERATION MODE | | | | | | | | | | STATUS | |
| ZONE | SIZE (ft) | TURNS | DIST. FROM STOPBAR (ft) | NEW | EXISTING | ASSIGNED PHASE | DELAY | EXTEND (STRETCH) | 0 VEHICLE | 1 PEDESTRIAN | 2 I CALL | 3 STOP A | 4 STOP B | 5 PROTFER VLSFER | 6 PROTFER PLSFER | 7 THROUGH AND | SWITCH | SYSTEM LOOPS | NEW | EXISTING |
| 2A | 6X6 | ✳ | 300 | X | - | 2 | - SEC. | - SEC. | X | - | - | - | - | - | - | - | - | - | - | ✳ |
| 2B | 6X6 | ✳ | 300 | X | - | 2 | - SEC. | - SEC. | X | - | - | - | - | - | - | - | - | - | - | ✳ |
| 4A | 6X40 | ✳ | 0 | X | - | 4 | 15.0 SEC. | - SEC. | X | - | - | - | - | - | - | - | - | - | ✳ | - |
| 4B | 6X40 | ✳ | 0 | X | - | 4 | 15.0 SEC. | - SEC. | X | - | - | - | - | - | - | - | - | - | ✳ | - |

* Non-intrusive detection zone.

2 Phase
Fully Actuated
(Raleigh Signal System)

## 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. Set all detector units to presence mode.
4. This intersection uses non-intrusive detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
5. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.




## SE-PAC 2070 TIMING CHART

| FEATURE | PHASE 2 | PHASE 4 |
|---|---|---|
| Min Green * | 12 | 7 |
| Passage Gap * | 6.0 | 2.0 |
| Maximum Green * | 90 | 30 |
| Yellow Change | 4.4 | 3.0 |
| Red Clear | 2.1 | 1.5 |
| Walk * | - | - |
| Pedestrian Clear | - | - |
| Added Initial * | 1.5 | - |
| Maximum Initial * | 34 | - |
| Time Before Reduction * | 15 | - |
| Time To Reduce * | 30 | - |
| Minimum Gap | 3.0 | - |
| Recall Mode | MIN RECALL | - |
| Vehicle Call Memory | LOCK | NON-LOCK |
| Dual Entry | - | - |
| Simultaneous Gap | ON | ON |

* These values may be field adjusted. Do not adjust Min Green and Extension times for phase 2 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

## LEGEND

| PROPOSED | | EXISTING |
|---|---|---|
| | Traffic Signal Head | |
| | Modified Signal Head | N/A |
| | Sign | |
| | Pedestrian Signal Head | |
| | 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 | |
| | Non-Intrusive Detection Zone | |
| N/A | Permanent Utility Easement | PUE |
| N/A | Construction Easement | E |
| | Construction Zone | |
| | Construction Zone Drums | |
| A | Street Name Sign (D3-1) | A |
| B | No Left Turn Sign (R3-2) | B |

Signal Upgrade - Temporary Design 3 (TMP Phase IV)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

# US 401 NB (Fayetteville Road) at Pinewinds Drive

Division 5 Wake County Raleigh

PLAN DATE: February 2025 REVIEWED BY:
PREPARED BY: J.A. Lohr REVIEWED BY:

SCALE 0 40 1"=40'

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

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 026486 ENGINEER ROBERT J. ZIEMBA

DocuSigned by: Robert J. Ziemba 03/27/2025
1B0BAB9B27AA49A... DATE

SIG. INVENTORY NO. 05-1174T3

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JALohr