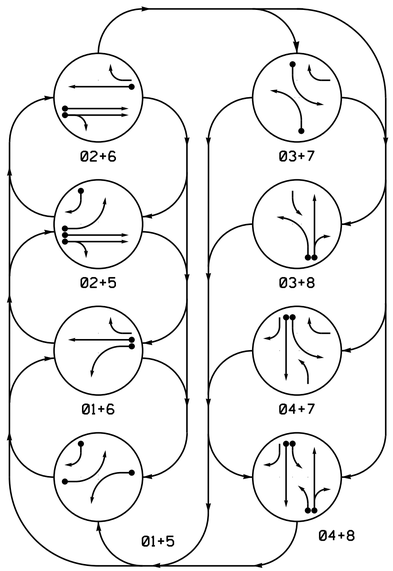
DocuSign Envelope ID: 195CB8CD-D21D-4A4D-8B8C-8064AD354C4A

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| B-5980 | Sig. 4.0 |

## PHASING DIAGRAM




PHASING DIAGRAM DETECTION LEGEND

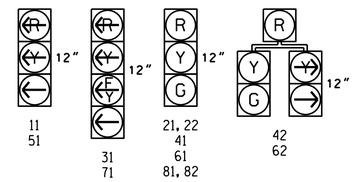
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

## TABLE OF OPERATION

| SIGNAL FACE | PHASE 01+5 | 01+6 | 02+5 | 02+6 | 03+7 | 03+8 | 04+7 | 04+8 | FLASH |
|---|---|---|---|---|---|---|---|---|---|
| 11 | — | — | ~~R~~ | ~~R~~ | ~~R~~ | ~~R~~ | ~~R~~ | ~~R~~ | ~~R~~ |
| 21, 22 | R | R | G | G | R | R | R | R | Y |
| 31 | ~~R~~ | ~~R~~ | ~~R~~ | ~~R~~ | — | — | ~~F Y~~ | ~~F Y~~ | ~~R~~ |
| 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~~ |
| 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 Y~~ | — | ~~F Y~~ | ~~R~~ |
| 81, 82 | R | R | R | R | R | G | R | G | R |

## SIGNAL FACE I.D.

All Heads L.E.D.




## OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

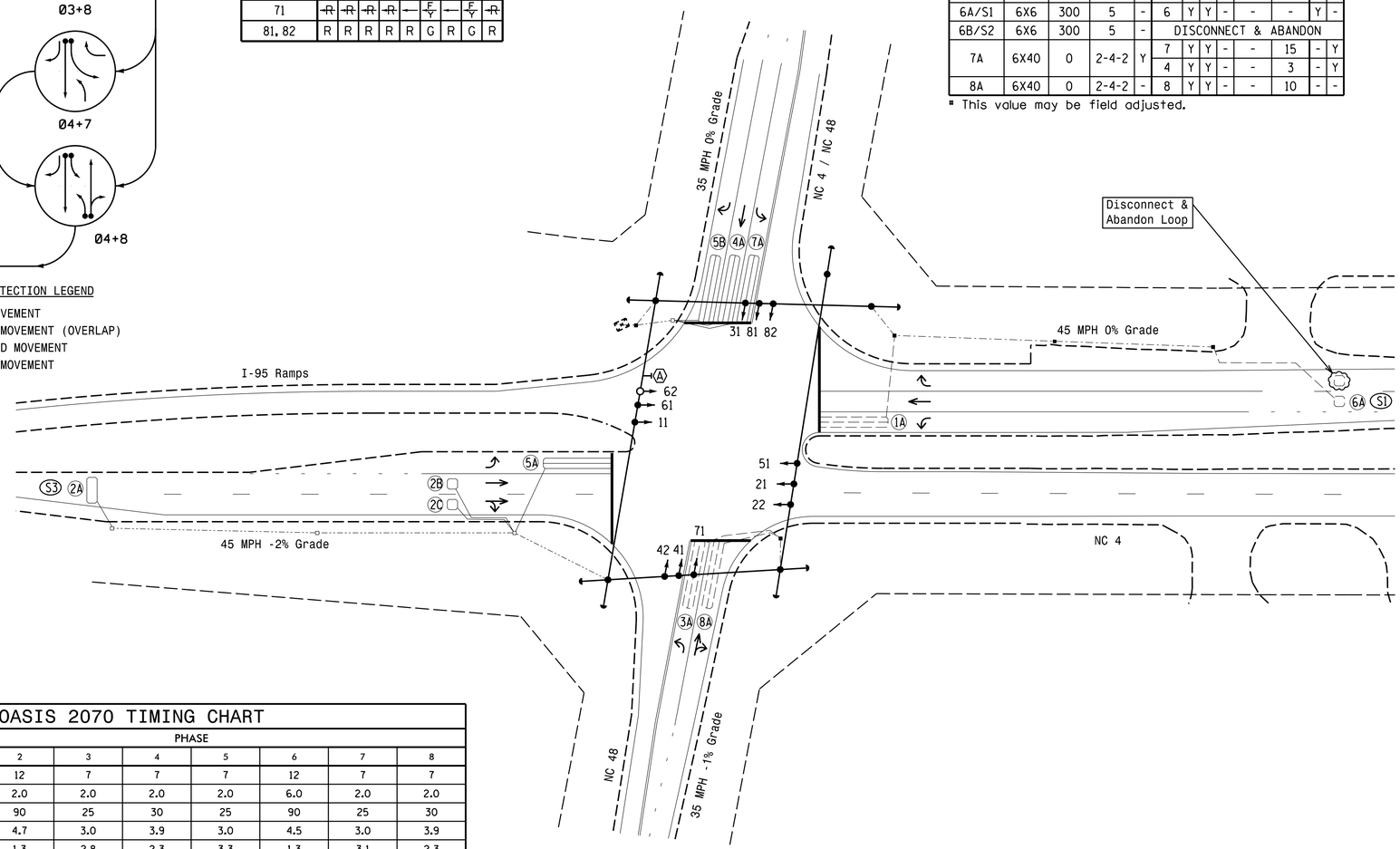
| INDUCTIVE LOOPS | | | | | DETECTOR PROGRAMMING | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LOOP | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | PHASE | CALLING | EXTENSION | FULL TIME DELAY | STRETCH TIME | DELAY TIME | SYSTEM LOOP | NEW CARD |
| 1A | 6X40 | 0 | 2-4-2 | - | 1 | Y | Y | - | - | - | - | - |
| 2A/S3 | 15X6 | 300 | 5 | Y | 2 | Y | Y | - | 2.8* | - | Y | Y |
| 2B | 6X6 | 90 | 4 | Y | 2 | Y | Y | - | - | - | - | Y |
| 2C | 6X6 | 90 | 4 | Y | 2 | Y | Y | - | - | - | - | Y |
| 3A | 6X40 | 0 | 2-4-2 | - | 3 | Y | Y | - | - | 15 | - | - |
| | | | | | 8 | Y | Y | - | - | 3 | - | - |
| 4A | 6X40 | 0 | 2-4-2 | Y | 4 | Y | Y | - | - | - | - | Y |
| 5A | 6X40 | 0 | 2-4-2 | Y | 5 | Y | Y | - | - | - | - | Y |
| 5B | 6X40 | 0 | 2-4-2 | Y | 5 | Y | Y | - | - | 15 | - | Y |
| 6A/S1 | 6X6 | 300 | 5 | - | 6 | Y | Y | - | - | - | Y | - |
| 6B/S2 | 6X6 | 300 | 5 | - | DISCONNECT & ABANDON | | | | | | | |
| 7A | 6X40 | 0 | 2-4-2 | Y | 7 | Y | Y | - | - | 15 | - | Y |
| | | | | | 4 | Y | Y | - | - | 3 | - | Y |
| 8A | 6X40 | 0 | 2-4-2 | - | 8 | Y | Y | - | - | 10 | - | - |

* This value may be field adjusted.

8 Phase
Fully Actuated
(Rocky Mount Signal System)

## NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. Phase 3 and/or phase 7 may be lagged.
5. Reposition signal heads numbered 21, 22, 51, and 61.
6. Set all detector units to presence mode.
7. Disconnect and abandon existing loop 6B/S2.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
9. System data: Zone #15
   Controller Asset # 0111.




## LEGEND

| PROPOSED | | EXISTING |
|---|---|---|
| | Traffic Signal Head | |
| | 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 | |
| A | Right Turn "ONLY" Sign (R3-5R) | A |

## OASIS 2070 TIMING CHART

| FEATURE | PHASE 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Min Green 1 * | 7 | 12 | 7 | 7 | 7 | 12 | 7 | 7 |
| Extension 1 * | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 6.0 | 2.0 | 2.0 |
| Max Green 1 * | 25 | 90 | 25 | 30 | 25 | 90 | 25 | 30 |
| Yellow Clearance | 3.0 | 4.7 | 3.0 | 3.9 | 3.0 | 4.5 | 3.0 | 3.9 |
| Red Clearance | 3.2 | 1.3 | 2.8 | 2.3 | 3.3 | 1.3 | 3.1 | 2.3 |
| Red Revert | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Walk 1 * | - | - | - | - | - | - | - | - |
| Don't Walk 1 | - | - | - | - | - | - | - | - |
| Seconds Per Actuation * | - | - | - | - | - | 2.5 | - | - |
| Max Variable Initial * | - | - | - | - | - | 34 | - | - |
| Time Before Reduction * | - | - | - | - | - | 15 | - | - |
| Time To Reduce * | - | - | - | - | - | 45 | - | - |
| Minimum Gap | - | - | - | - | - | 3.0 | - | - |
| Recall Mode | - | MIN RECALL | - | - | - | MIN RECALL | - | - |
| Vehicle Call Memory | - | YELLOW | - | - | - | YELLOW | - | - |
| Dual Entry | - | - | - | ON | - | - | - | ON |
| Simultaneous Gap | ON | ON | 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.

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Signal Upgrade - Final Design (TMP Phases III & IV)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

I-95 Ramps and NC 4
at
NC 4 / NC 48

Division 4 | Nash County | Rocky Mount

PLAN DATE: July 2019 | REVIEWED BY: A. Ravipati
PREPARED BY: S. W. Cox | REVIEWED BY: C.L. Kalencik

SCALE 0 40 1"=40'

REVISIONS | INIT. | DATE

NORTH CAROLINA PROFESSIONAL SEAL 040715 ENGINEER COURTNEY L. KALENCIK

DocuSigned by: Courtney L. Kalencik 3/17/2020
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SIG. INVENTORY NO. 04-0111

3/16/2020
B-5980_04-0111_CONS1
B-5980#900_CAD_GIS#910_CAD#70_NCDOT_TIP#Traffic#Signals#Design#Signals#B5980_04-0111_2019XXXX.dgn