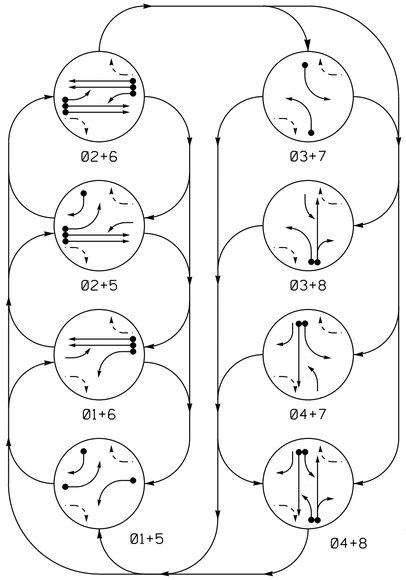
| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| A-0011C | Sig-4.0 |

## PHASING DIAGRAM




PHASING DIAGRAM DETECTION LEGEND

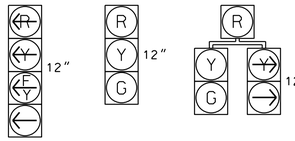
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

## TABLE OF OPERATION

| SIGNAL FACE | PHASE 01+05 | 01+06 | 02+05 | 02+06 | 03+07 | 03+08 | 04+07 | 04+08 | FLASH |
|---|---|---|---|---|---|---|---|---|---|
| 11 | ←● | ← | ←FY | ←FY | ←R | ←R | ←R | ←R | ←Y |
| 21,22 | R | R | G | G | R | R | R | R | Y |
| 31 | ←R | ←R | ←R | ←R | ← | ← | ←FY | ←FY | ←R |
| 41 | R | R | R | R | R | R | G | G | R |
| 42 | R→ | R | R→ | R | R | R | G | G | R |
| 51 | ←● | ← | ←FY | ← | ←R | ←R | ←R | ←R | ←Y |
| 61,62 | R | G | R | G | R | R | R | R | Y |
| 71 | ←R | ←R | ←R | ←R | ← | ←FY | ← | ←FY | ←R |
| 81,82 | R | R | R | R | R | G | R | G | R |

## SIGNAL FACE I.D.

All Heads L.E.D.




11, 31, 51, 71 — 21,22 — 41 — 61,62 — 81,82 — 42

## OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

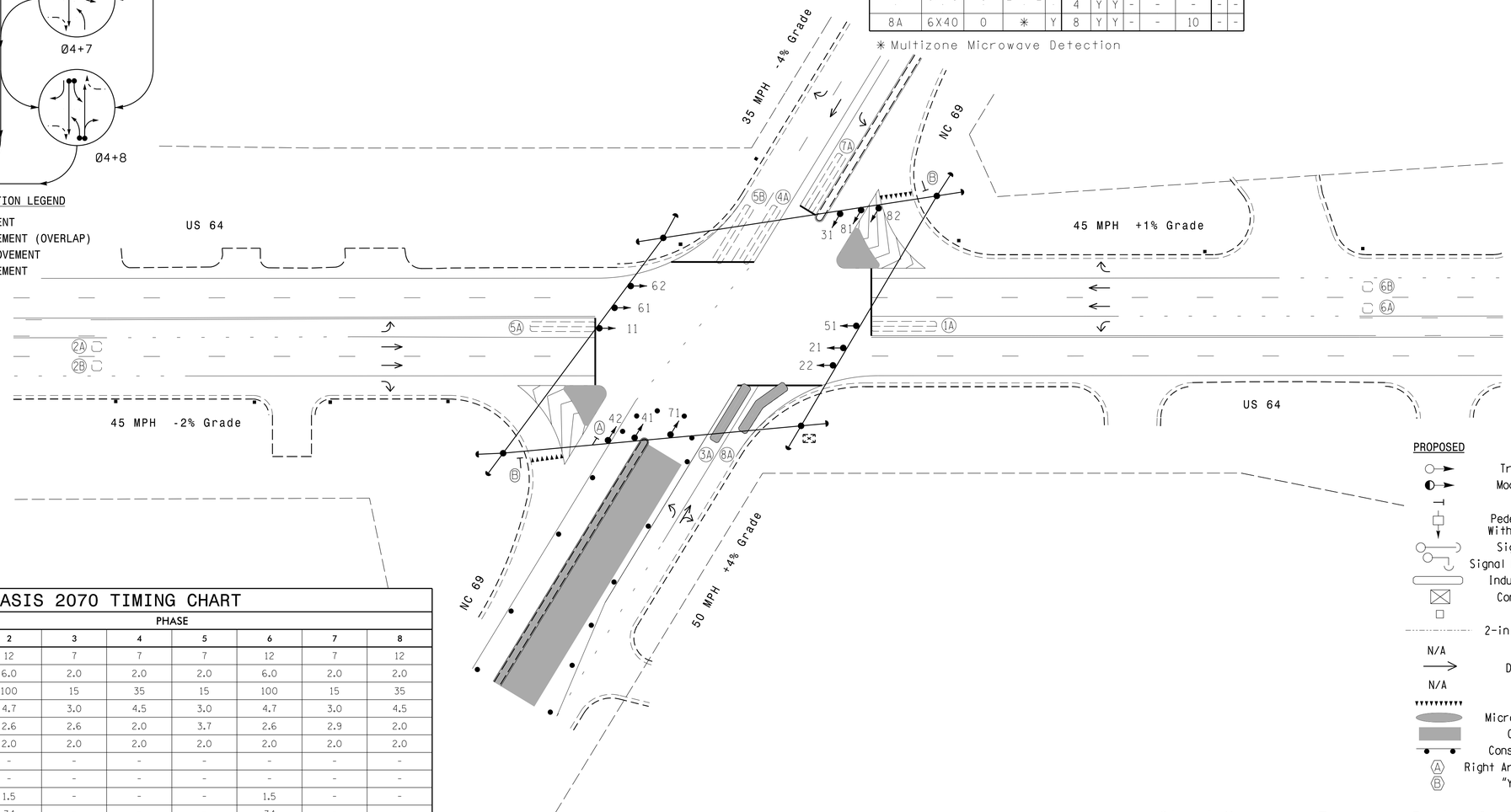
| INDUCTIVE LOOPS | | | | | DETECTOR PROGRAMMING | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LOOP | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | PHASE | CALLING | EXTENSION | FULL TIME DELAY | STRETCH TIME | DELAY TIME | SYSTEM LOOP | NEW CARD |
| 1A | 6X40 | 0 | 2-4-2 | - | 1 | Y | Y | - | - | 15 | - | - |
| | | | | | 6 | Y | Y | Y | - | 3 | - | - |
| 2A | 6X6 | 300 | 5 | - | 2 | Y | Y | - | - | - | - | - |
| 2B | 6X6 | 300 | 5 | - | 2 | Y | Y | - | - | - | - | - |
| 3A | 6X40 | 0 | ✳ | Y | 3 | Y | Y | - | - | 15 | - | - |
| | | | | | 8 | Y | Y | - | - | 3 | - | - |
| 4A | 6X40 | 0 | 2-4-2 | - | 4 | Y | Y | - | - | - | - | - |
| 5A | 6X40 | 0 | 2-4-2 | - | 5 | Y | Y | - | - | 15 | - | - |
| | | | | | 2 | Y | Y | Y | - | 3 | - | - |
| 5B | 6X40 | 0 | 2-4-2 | - | 5 | Y | Y | - | - | 15 | - | - |
| 6A | 6X6 | 300 | 5 | - | 6 | Y | Y | - | - | - | - | - |
| 6B | 6X6 | 300 | 5 | - | 6 | Y | Y | - | - | - | - | - |
| 7A | 6X40 | 0 | 2-4-2 | - | 7 | Y | Y | - | - | 15 | - | - |
| | | | | | 4 | Y | Y | - | - | - | - | - |
| 8A | 6X40 | 0 | ✳ | Y | 8 | Y | Y | - | - | 10 | - | - |

✳ Multizone Microwave Detection

8 Phase
Fully Actuated
Isolated

## 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 existing signal head numbered 31, 81, and 82.
6. Set all detector units to presence mode.
7. See pavement marking plans for stop bar locations.
8. Provide the Engineer with the Manufacturer's approved Microwave Detection locations and mounting heights to obtain detection zones as shown.




## OASIS 2070 TIMING CHART

| FEATURE | PHASE 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Min Green 1 * | 7 | 12 | 7 | 7 | 7 | 12 | 7 | 12 |
| Extension 1 * | 2.0 | 6.0 | 2.0 | 2.0 | 2.0 | 6.0 | 2.0 | 2.0 |
| Max Green 1 * | 15 | 100 | 15 | 35 | 15 | 100 | 15 | 35 |
| Yellow Clearance | 3.0 | 4.7 | 3.0 | 4.5 | 3.0 | 4.7 | 3.0 | 4.5 |
| Red Clearance | 4.0 | 2.6 | 2.6 | 2.0 | 3.7 | 2.6 | 2.9 | 2.0 |
| 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 * | - | 1.5 | - | - | - | 1.5 | - | - |
| Max Variable Initial * | - | 34 | - | - | - | 34 | - | - |
| Time Before Reduction * | - | 15 | - | - | - | 15 | - | - |
| Time To Reduce * | - | 30 | - | - | - | 30 | - | - |
| Minimum Gap | - | 3.2 | - | - | - | 3.2 | - | - |
| 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.

## 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 | → |
| N/A | Curb Ramp | ♿ |
| ▼▼▼▼▼▼▼▼ | Yield Line | N/A |
| ⬭ | Microwave Detection Zone | ⬭ |
| ▭ | Construction Zone | N/A |
| ●● | Construction Zone Drums | ●● |
| Ⓐ | Right Arrow "ONLY" Sign (R3-5R) | Ⓐ |
| Ⓑ | "YIELD" Sign (R1-2) | Ⓑ |

Signal Upgrade - Temporary Design 3 (Phase III)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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US 64
at
NC 69

Division 14 Clay County Hayesville

PLAN DATE: September 2019 REVIEWED BY: NE Burns

PREPARED BY: TS Popelka RKA PROJ NO: 15226 (040)

SCALE 0 40 1"=40'

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

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 046300 ENGINEER NICHOLAS E. BURNS

DocuSigned by: Nicholas E. Burns 9/9/2019
TRAFFIC ENGINEER SIGNATURE DATE

SIG. INVENTORY NO. 14-0195T3