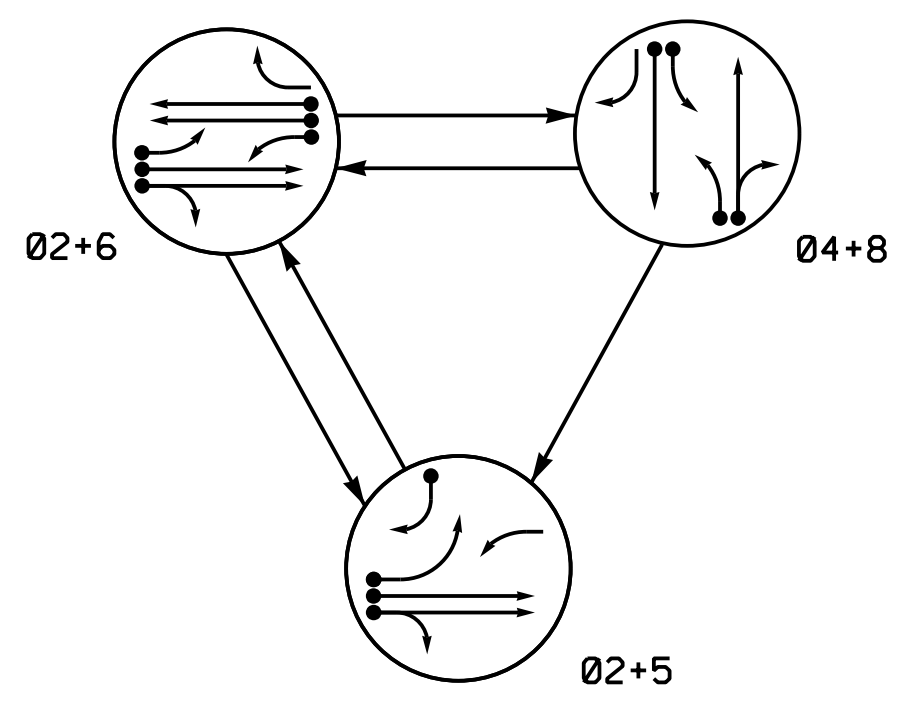
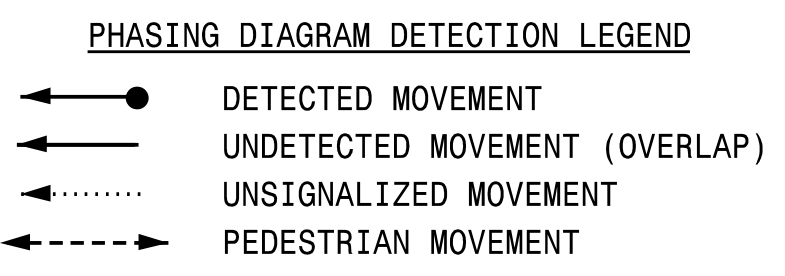
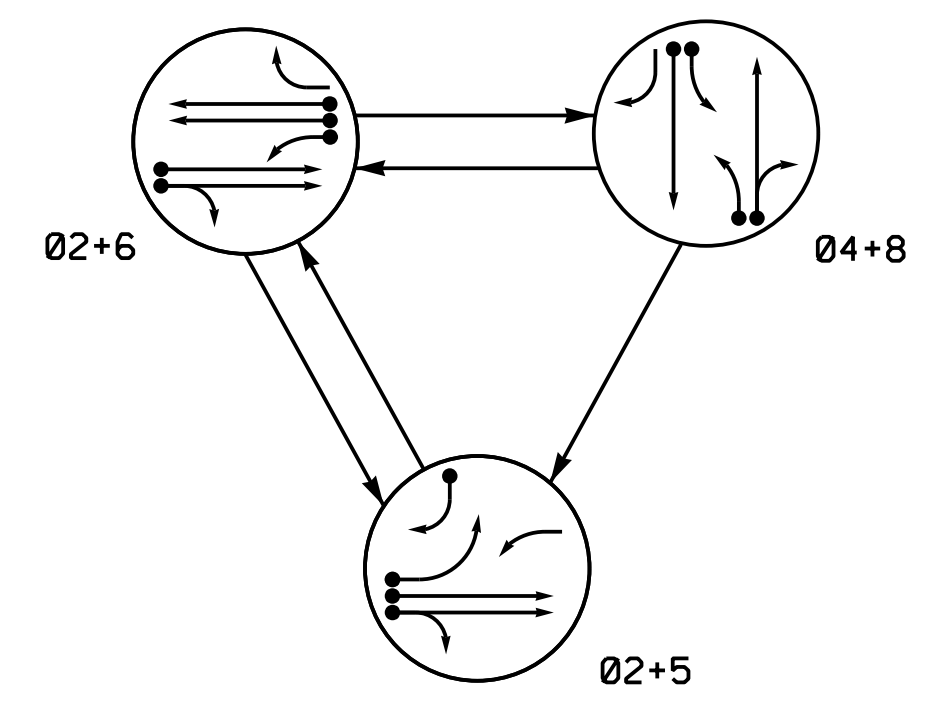


DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



DEFAULT PHASING TABLE OF OPERATION

| SIGNAL FACE | PHASE | | | |
|-------------|-------|------|------|-------|
| | 02+6 | 04+8 | 04+8 | FLASH |
| 21,22 | G | G | R | Y |
| 41 | + | + | F | + |
| 42,43 | R | R | G | R |
| 44 | F | R | F | R |
| 51 | + | + | + | + |
| 61 | F | F | + | + |
| 62,63 | R | G | R | Y |
| 81 | + | + | F | + |
| 82,83 | R | R | G | R |

ALTERNATE PHASING TABLE OF OPERATION

| SIGNAL FACE | PHASE | | | |
|-------------|-------|------|------|-------|
| | 02+6 | 04+8 | 04+8 | FLASH |
| 21,22 | G | G | R | Y |
| 41 | + | + | F | + |
| 42,43 | R | R | G | R |
| 44 | F | R | F | R |
| 51 | + | + | + | + |
| 61 | F | F | + | + |
| 62,63 | R | G | R | Y |
| 81 | + | + | F | + |
| 82,83 | R | R | G | R |

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

| LOOP | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | DETECTOR PROGRAMMING | | | | | SYSTEM LOOP | NEW CARD | |
|--------|-----------|----------------------------|-------|----------|----------------------|---------|-----------|-----------------|--------------|-------------|----------|------------|
| | | | | | PHASE | CALLING | EXTENSION | FULL TIME DELAY | STRETCH TIME | | | DELAY TIME |
| 2A/S25 | 6X6 | 300 | 5 | Y | 2 | Y | Y | - | - | - | Y | Y |
| 2B/S26 | 6X6 | 300 | 5 | Y | 2 | Y | Y | - | - | - | Y | Y |
| 4A | 6X40 | 0 | 2-4-2 | Y | 4 | Y | Y | - | - | - | - | Y |
| 4B | 6X40 | 0 | 2-4-2 | Y | 4 | Y | Y | - | - | - | - | Y |
| 5A | 6X40 | 0 | 2-4-2 | Y | 5 | Y | Y | - | - | **15 | - | Y |
| 5B | 6X40 | 0 | 2-4-2 | Y | 5 | Y | Y | - | - | 15 | - | Y |
| 6A/S27 | 6X6 | 300 | 5 | Y | 6 | Y | Y | - | - | - | Y | Y |
| 6B/S28 | 6X6 | 300 | 5 | Y | 6 | Y | Y | - | - | - | Y | Y |
| 6C | 6X40 | 0 | 2-4-2 | Y | 6 | Y | Y | - | - | 3 | - | Y |
| 8A | 6X40 | 0 | 2-4-2 | Y | 8 | Y | Y | - | - | - | - | Y |
| 8B | 6X40 | 0 | 2-4-2 | Y | 8 | Y | Y | - | - | 10 | - | Y |

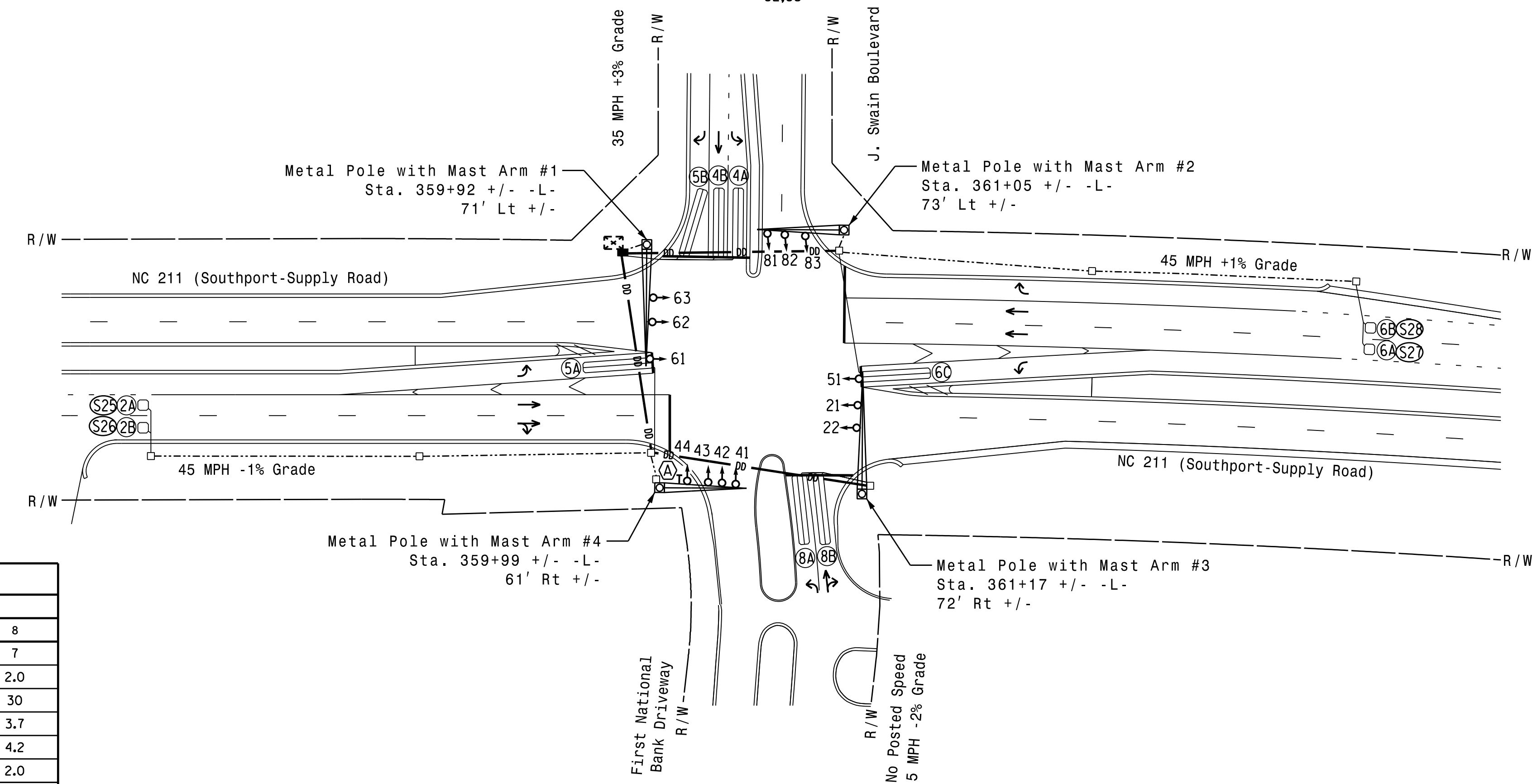
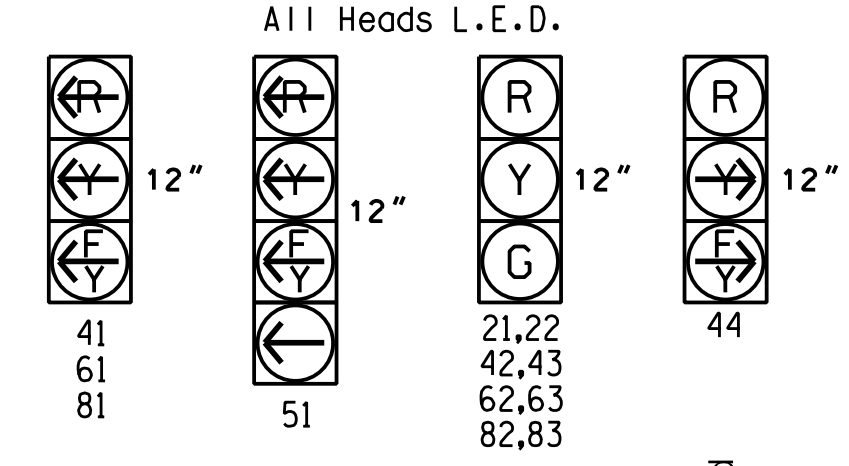
* Disable phase 2 call for 5A during alternate phasing operation.
 ** Reduce delay to 3 seconds during alternate phasing operation.

3 Phase Fully Actuated (NC 133 Closed Loop System)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 5 may be lagged.
- Set all detector units to presence mode.
- The Division Traffic Engineer will determine the hours of use for each phasing plan.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data: Controller Asset #: 1043.

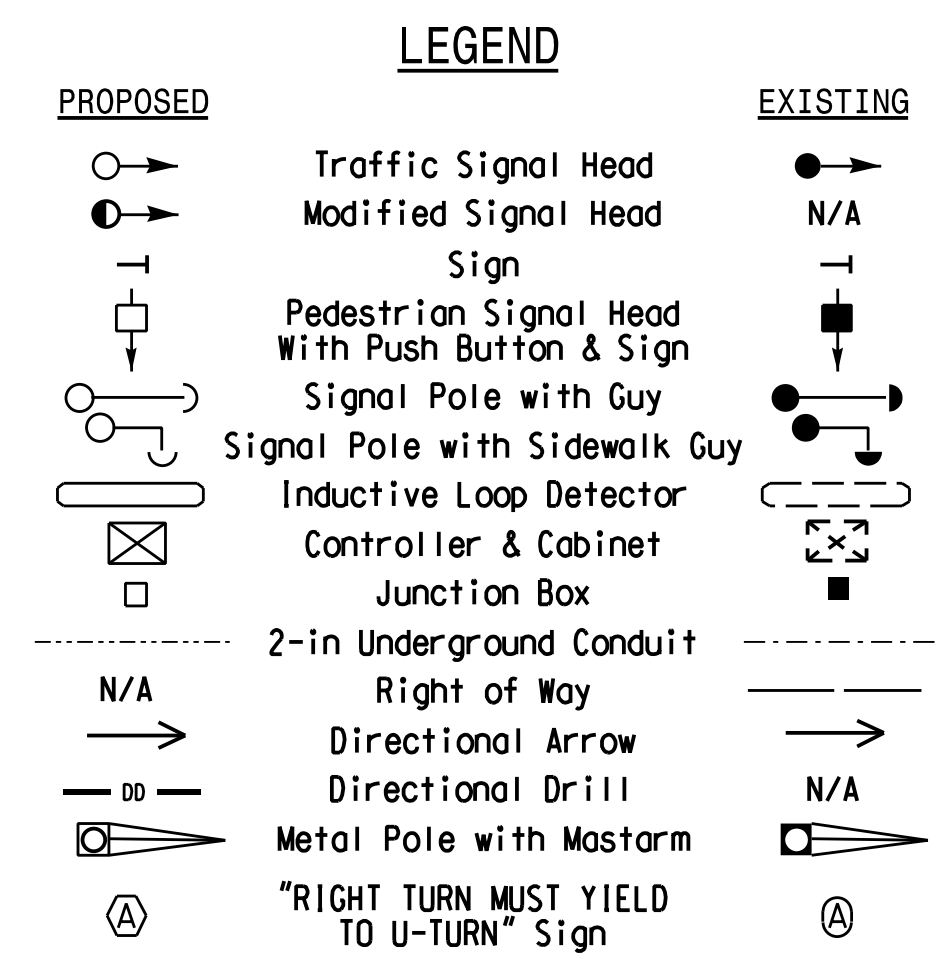
SIGNAL FACE I.D.



OASIS 2070 TIMING CHART

| FEATURE | PHASE | | | | |
|-------------------------|------------|-----|-----|------------|-----|
| | 2 | 4 | 5 | 6 | 8 |
| Min Green 1 * | 12 | 7 | 7 | 12 | 7 |
| Extension 1 * | 6.0 | 2.0 | 2.0 | 6.0 | 2.0 |
| Max Green 1 * | 90 | 30 | 20 | 90 | 30 |
| Yellow Clearance | 4.6 | 3.7 | 3.0 | 4.6 | 3.7 |
| Red Clearance | 1.5 | 4.2 | 2.9 | 1.5 | 4.2 |
| Red Revert | 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 | 3.0 | - | - | 3.0 | - |
| Recall Mode | MIN RECALL | - | - | MIN RECALL | - |
| Vehicle Call Memory | YELLOW | - | - | YELLOW | - |
| Dual Entry | - | ON | - | - | ON |
| Simultaneous Gap | 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.



Signal Upgrade - Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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NC 211 (Southport-Supply Road)
 at
 J. Swain Boulevard

Division 03 Brunswick Co. Southport
 PLAN DATE: June 2017 REVIEWED BY: A.D. Klinksiek
 PREPARED BY: A.H. Thornburg REVIEWED BY: N.R. Simmons

SEAL

 Natasha R. Simmons
 ENGINEER
 031464
 9/10/2021