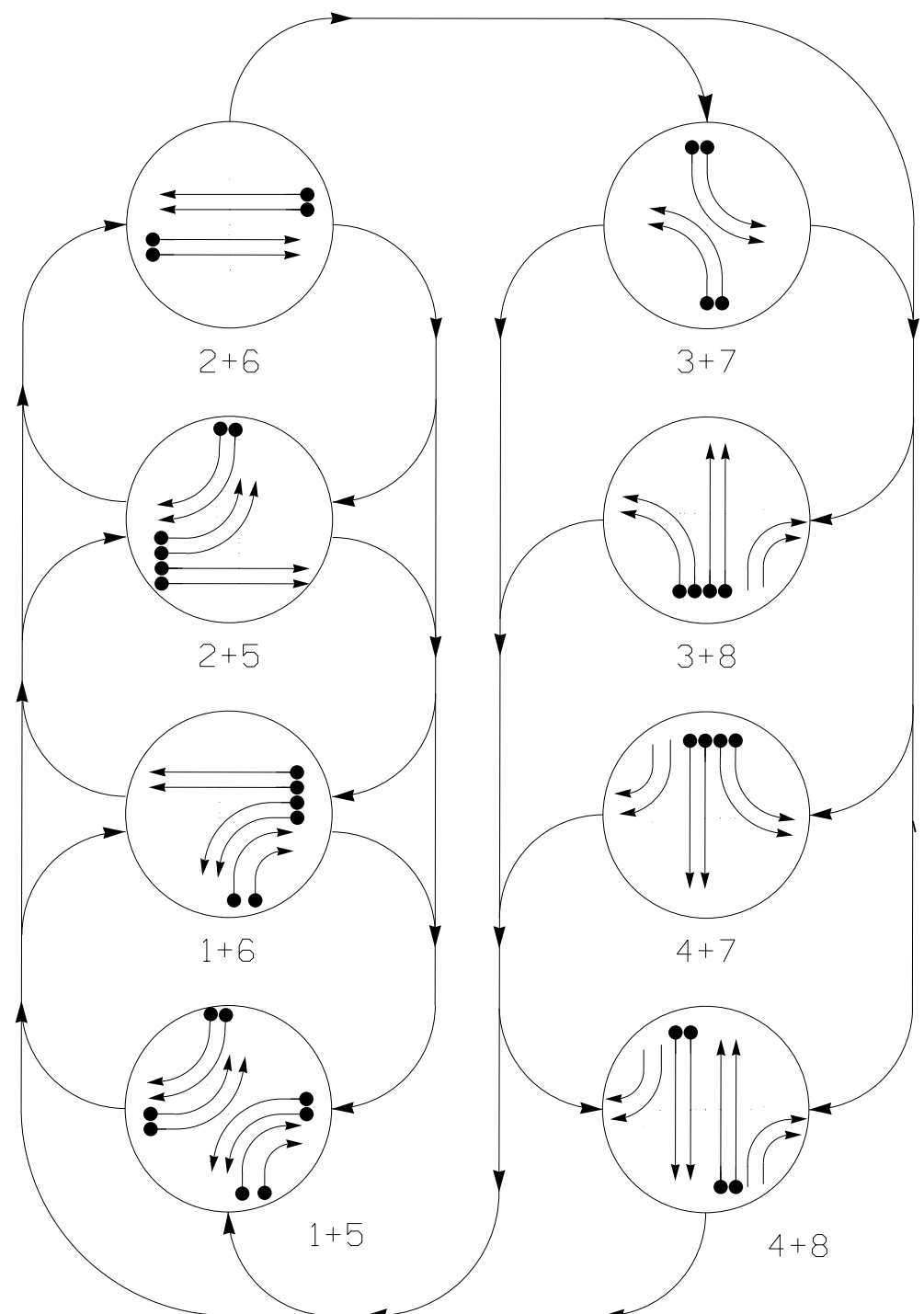
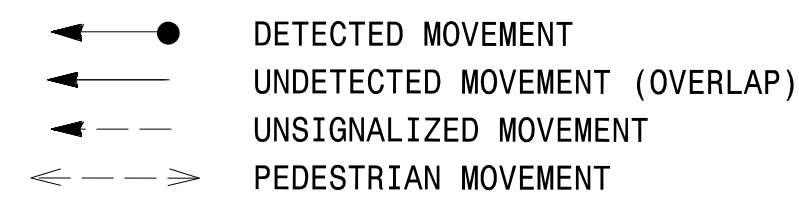


PHASING DIAGRAM

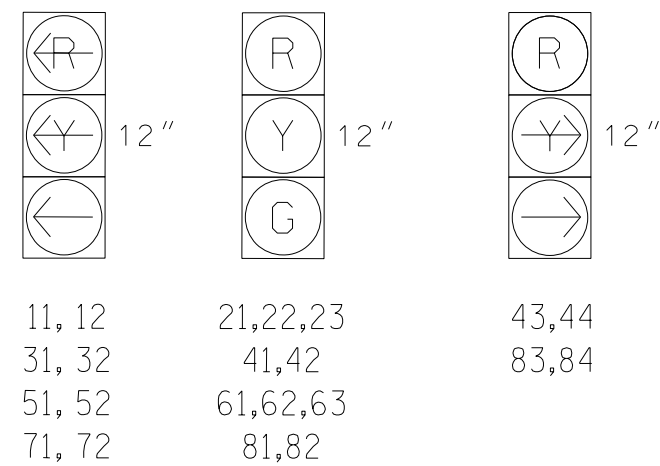


PHASING DIAGRAM DETECTION LEGEND



SIGNAL FACE I.D.

All Heads L.E.D.



| SIGNAL FACE | PHASE | | | | | | | |
|-------------|-------|-----|-----|-----|-----|-----|-----|-----|
| | 1+5 | 1+6 | 2+5 | 2+6 | 3+7 | 3+8 | 4+7 | 4+8 |
| 11, 12 | ← | ← | → | → | → | → | → | → |
| 21, 22, 23 | R | R | G | G | R | R | R | R |
| 31, 32 | → | → | → | → | ← | ← | ← | ← |
| 41, 42 | R | R | R | R | R | R | G | G |
| 43, 44 | → | R | → | R | R | → | → | R |
| 51, 52 | ← | ← | → | → | → | → | → | → |
| 61, 62, 63 | R | G | R | G | R | R | R | R |
| 71, 72 | → | → | → | → | → | → | → | → |
| 81, 82 | R | R | R | R | R | G | R | G |
| 83, 84 | → | → | R | R | → | → | → | R |

MAXTIME DETECTOR INSTALLATION CHART

| LOOP | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | PROGRAMMING | | | | | | | | |
|------|-----------|----------------------------|-------|-------------|------------|------------|-------------|--------|---------------|------|----------|---|
| | | | | NEW LOOP | CALL PHASE | DELAY TIME | EXTEND TIME | EXTEND | ADDED INITIAL | CALL | NEW CARD | |
| 1A | * | 0 | * | - | 1 | 3 | - | X | - | X | - | * |
| 1B | * | 0 | * | - | 1 | - | - | X | - | X | - | * |
| 1C | * | 0 | * | - | 1 | 15 | - | X | - | X | - | * |
| 1D | * | 0 | * | - | 1 | 15 | - | X | - | X | - | * |
| 3A | * | 0 | * | - | 3 | 3 | - | X | - | X | - | * |
| 3B | * | 0 | * | - | 3 | - | - | X | - | X | - | * |
| 4B | * | 0 | * | - | 4 | - | - | X | - | X | - | * |
| 4C | * | 0 | * | - | 4 | - | - | X | - | X | - | * |
| 5A | * | 0 | * | - | 5 | 3 | - | X | - | X | - | * |
| 5B | * | 0 | * | - | 5 | - | - | X | - | X | - | * |
| 5C | * | 0 | * | - | 5 | 15 | - | X | - | X | - | * |
| 5D | * | 0 | * | - | 5 | 15 | - | X | - | X | - | * |
| 7A | * | 0 | * | - | 7 | 3 | - | X | - | X | - | * |
| 7B | * | 0 | * | - | 7 | - | - | X | - | X | - | * |
| 8B | * | 0 | * | - | 8 | - | - | X | - | X | - | * |
| 8C | * | 0 | * | - | 8 | - | - | X | - | X | - | * |

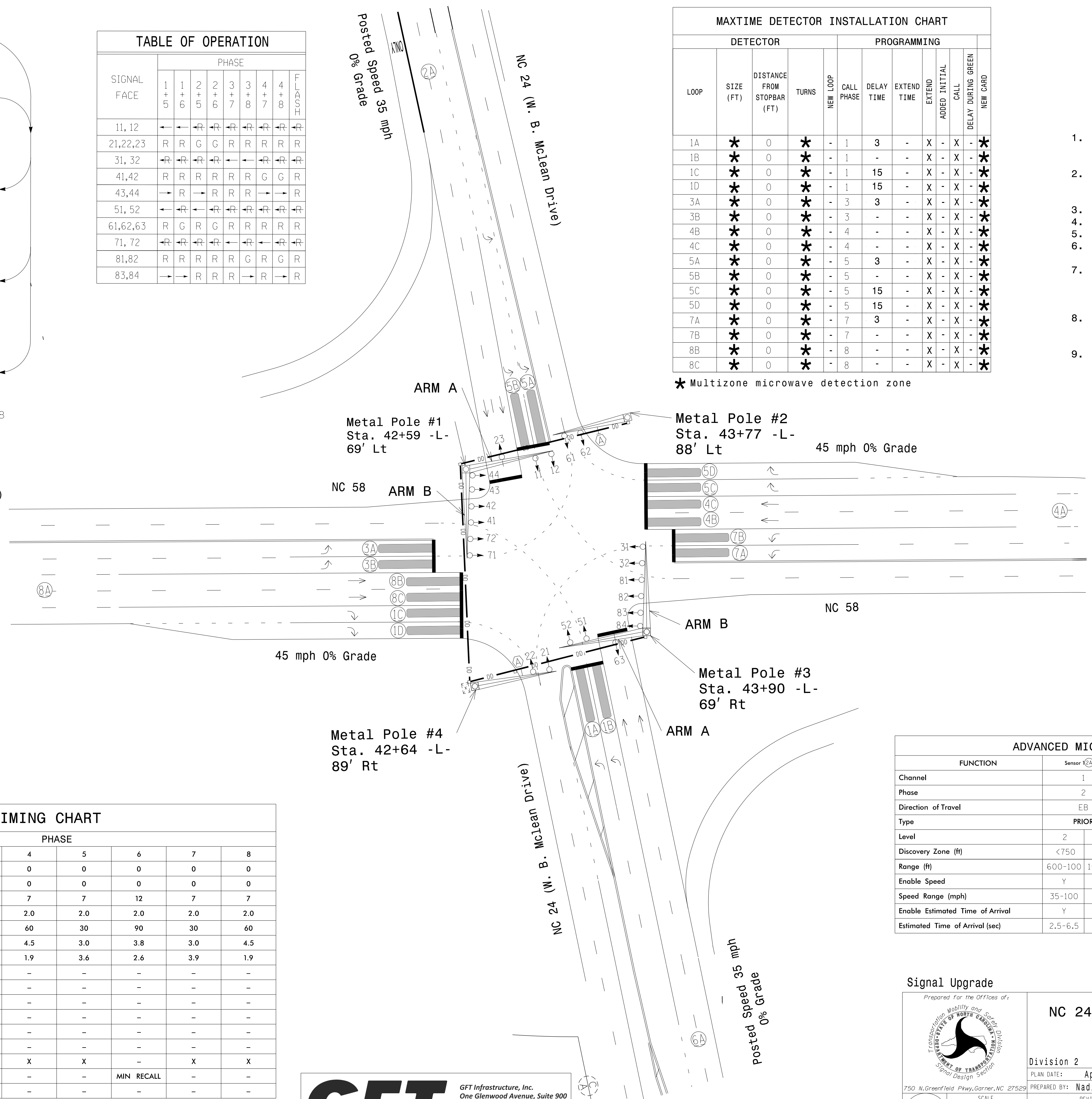
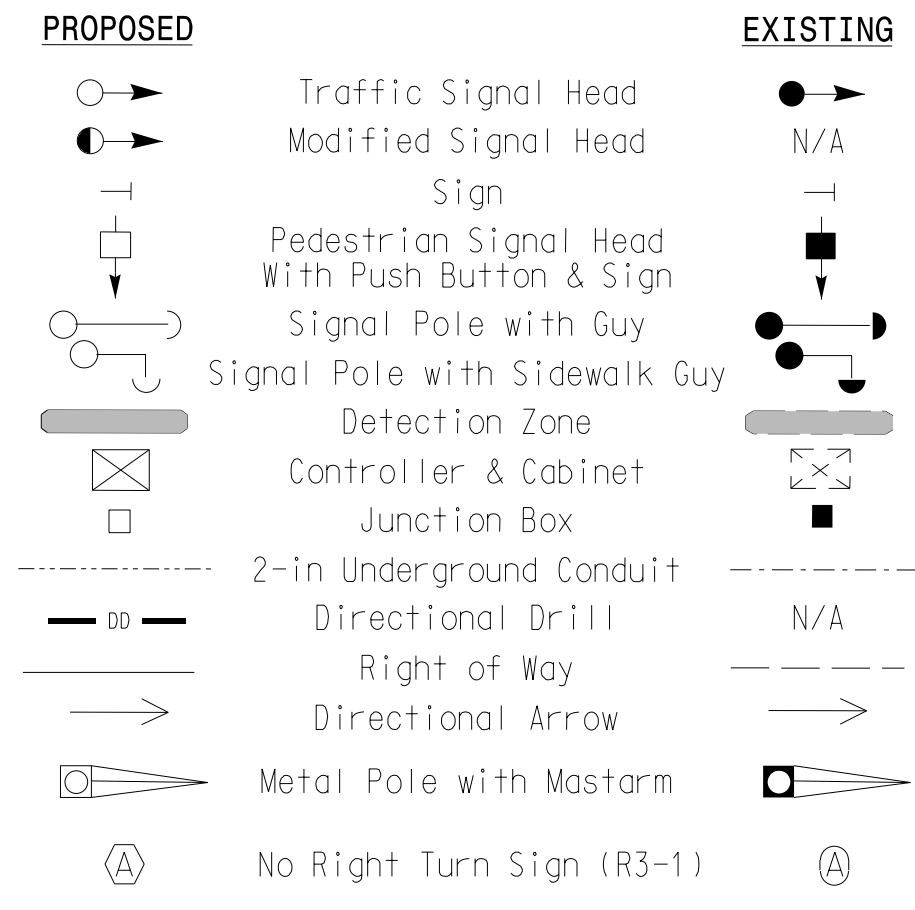
* Multizone microwave detection zone

8 Phase Fully Actuated Signal System D02-02_Cape Carteret

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. Phase 1 and/or phase 5 may be lagged.
4. Phase 3 and/or phase 7 may be lagged.
5. Set all detector units to presence mode.
6. The cabinet should be designed to include an Auxiliary Output file for future use.
7. This intersection uses multizone-microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
9. Refer to Pavement Marking Plans for pavement marking details.

LEGEND



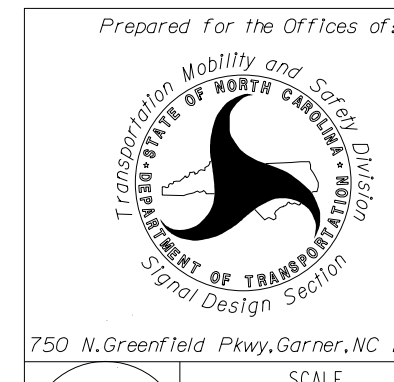
MAXTIME TIMING CHART

| FEATURE | PHASE | | | | | | | |
|-------------------------|-------|------------|-----|-----|-----|------------|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Walk * | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped Clear | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Min Green * | 7 | 12 | 7 | 7 | 7 | 12 | 7 | 7 |
| Passage * | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Max 1 * | 30 | 90 | 30 | 60 | 30 | 90 | 30 | 60 |
| Yellow Change | 3.0 | 3.8 | 3.0 | 4.5 | 3.0 | 3.8 | 3.0 | 4.5 |
| Red Clear | 3.8 | 2.6 | 3.8 | 1.9 | 3.6 | 2.6 | 3.9 | 1.9 |
| Added Initial * | - | - | - | - | - | - | - | - |
| Maximum Initial * | - | - | - | - | - | - | - | - |
| Time Before Reduction * | - | - | - | - | - | - | - | - |
| Time To Reduce * | - | - | - | - | - | - | - | - |
| Minimum Gap | - | - | - | - | - | - | - | - |
| Advanced Walk | - | - | - | - | - | - | - | - |
| Non Lock Detector | X | - | X | X | X | - | X | X |
| Vehicle Recall | - | MIN RECALL | - | - | - | MIN RECALL | - | - |
| Dual Entry | - | - | - | - | - | - | - | - |

* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

| FUNCTION | ADVANCED MICROWAVE EXTENDED RANGE DETECTION | | | | | | | |
|----------------------------------|---|----------|---------------|----------|---------------|----------|---------------|----------|
| | Sensor 1 (2A) | | Sensor 2 (2A) | | Sensor 3 (2A) | | Sensor 4 (2A) | |
| Channel | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Phase | 2 | 6 | 4 | 8 | 4 | 8 | 4 | 8 |
| Direction of Travel | EB | WB | SB | NB | EB | WB | SB | NB |
| Type | PRIORITY | PRIORITY | PRIORITY | PRIORITY | PRIORITY | PRIORITY | PRIORITY | PRIORITY |
| Level | 2 | QUEUE | 2 | QUEUE | 2 | QUEUE | 2 | QUEUE |
| Discovery Zone (ft) | <750 | - | <750 | - | <750 | - | <750 | - |
| Range (ft) | 600-100 | 150-100 | 600-100 | 150-100 | 600-100 | 150-100 | 600-100 | 150-100 |
| Enable Speed | Y | Y | Y | Y | Y | Y | Y | Y |
| Speed Range (mph) | 35-100 | 1-35 | 35-100 | 1-35 | 35-100 | 1-35 | 35-100 | 1-35 |
| Enable Estimated Time of Arrival | Y | N | Y | N | Y | N | Y | N |
| Estimated Time of Arrival (sec) | 2.5-6.5 | - | 2.5-6.5 | - | 2.5-6.5 | - | 2.5-6.5 | - |

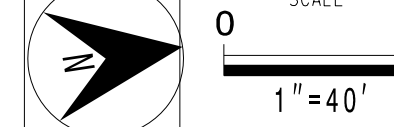
Signal Upgrade



NC 24 (W.B Mclean Drive) at NC 58

Division 2 Carteret County Cape Carteret
 PLAN DATE: April 2026 REVIEWED BY: D. Hartland
 PREPARED BY: Nadia Degbotse REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



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

Signed by: Donald L. Hartland DATE: 4/6/2026
 Signature: [Signature] DATE: 4/6/2026
 Sig. Inventory No. 02-0247