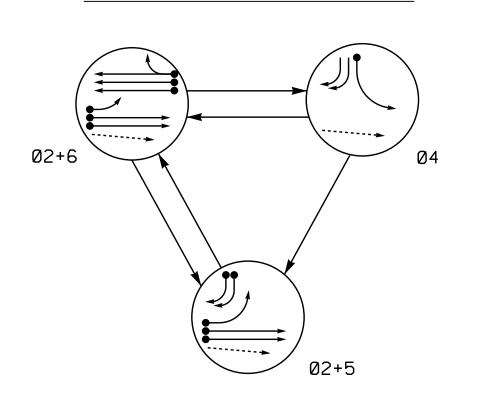
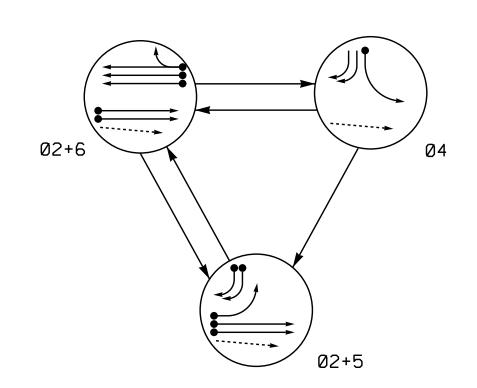
DEFAULT PHASING DIAGRAM

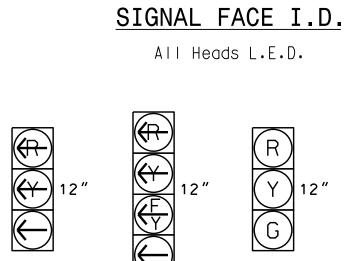
ALTERNATE PHASING DIAGRAM

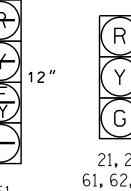


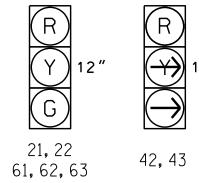


| DEFAULT PHASING TABLE OF OPERATION | | | | | |
|---------------------------------------|---------------|---------|----------------|----------------|--|
| | | PHA | SE | | |
| SIGNAL FACE | Ø2+5 | Ø 2 + 6 | Ø 4 | FLANI | |
| 21, 22 | G | G | R | Υ | |
| 41 | ∢R | ₩ | — | ₩ | |
| 42, 43 | - | R | 1 | R | |
| 51 | - | 나누 | - R | - ¥ | |
| 61, 62, 63 | R | G | R | Υ | |

| | ALTERNATE PHASING TABLE OF OPERATION | | | | | |
|----------------|---|-----------------|----------|----------------|--|--|
| | | PHA | SE | | | |
| SIGNAL FACE | ØN+15 | Ø2+6 | 0 4 | FLAOT | | |
| 21, 22 | G | G | R | Υ | | |
| 41 | # | # | \ | - R | | |
| 42, 43 | | R | | R | | |
| 51 | ← | - R | ₩ | - ¥ | | |
| 61, 62, 63 | R | G | R | Υ | | |







3 Phase Fully Actuated (Cary Signal System)

<u>NOTES</u>

- 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 5 may be lagged.
- 4. Set all detector units to presence mode.
- 5. Pavement markings are existing.
- 6. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- 7. Cary signal system data:

Fiber channel #: 26.

| PHASING DIAGRAM DETECTION LEGEND DETECTED MOVEMENT UNDETECTED MOVEMENT UNSIGNALIZED MOVEMENT PEDESTRIAN MOVEMENT | ### ### ############################## | SR 1789 (Pleasant Grove Church Rd.) | | 3. 4. 5. 6. |
|--|--|-------------------------------------|---|----------------------|
| | 63 62 61 61 | | 45 MPH -2% Grade T T T T T T T T T T T T T T T T T T T | |
| 2AC | - $ -$ | Metal Pole #13 | | |

| TIMING CHART ASC/3-2070EN2 CONTROLLER | | | | | | | | | |
|---------------------------------------|---------|-------------|-----|------|-----|------|-----|-------------|--|
| PHASE | 02 | 2 | 04 | | 05 | | Ø6 | | |
| MINIMUM GREEN * | 12 | SEC. | 7 | SEC. | 7 | SEC. | 12 | SEC | |
| VEHICLE EXT. * | 6.0 | SEC. | 2.0 | SEC. | 2.0 | SEC. | 6.0 | SEC | |
| YELLOW CHANGE INT. | 4.7 | SEC. | 3.0 | SEC. | 3.0 | SEC. | 4.7 | SEC | |
| RED CLEARANCE | 1.8 | SEC. | 3.3 | SEC. | 2.6 | SEC. | 1.8 | SEC | |
| MAX. 1 * | 120 | SEC. | 30 | SEC. | 15 | SEC. | 120 | SEC | |
| RECALL POSITION | MIN. RE | MIN. RECALL | | NONE | | NONE | | MIN. RECALL | |
| LOCK DET. | 01 | ON | | OFF | | OFF | | ON | |
| WALK * | _ | SEC. | _ | SEC. | _ | SEC. | _ | SEC | |
| PED. CLEAR | _ | SEC. | ı | SEC. | I | SEC. | _ | SEC | |
| VOLUME DENSITY | 10 | 1 | OFF | | OFF | | ON | | |
| ACTUATION B4 ADD * | _ | VEH. | _ | VEH. | _ | VEH. | _ | VEH | |
| SEC. PER ACTUATION * | 1.5 | SEC. | _ | SEC. | _ | SEC. | 1.0 | SEC | |
| MAX. INITIAL * | 34 | SEC. | _ | SEC. | _ | SEC. | 34 | SEC | |
| TIME B4 REDUCTION * | 15 | SEC. | _ | SEC. | _ | SEC. | 15 | SEC | |
| TIME TO REDUCE * | 30 | SEC. | _ | SEC. | _ | SEC. | 30 | SEC | |
| MINIMUM GAP | 3.0 | SEC. | 1 | SEC. | 1 | SEC. | 3.0 | SEC | |
| DUAL ENTRY | OF | OFF | | OFF | | OFF | | OFF | |
| SIMULTANEOUS GAP | 01 | 1 | ON | | ON | | 01 | 1 | |

| • | |
|---|---|
| | * 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. |

| LOOP & DETECTOR INSTALLATION CHART ASC/3-2070EN2 CONTROLLER W/ TS-2 CABINET | | | | | | | | | | | | | | |
|---|------|-----------------|-------|-----|------------|----------------|--------------|---|---------|-------------|---------|------|-------|------|
| INDUCTIVE LOOPS | | | | | | DETECTOR UNITS | | | | | | | | |
| LOOP NO | SIZE | DIST. FROM | | > | υ <u>N</u> | NEMA | NEMA A Y | | ≽ | 5NI. | TIM | ING | ADDED | DET. |
| LOOP NO. | (ft) | STOPBAR (ft) | TURNS | NEW | EXISTIN | PHASE | | | FEATURE | TIME | INITIAL | TYPE | | |
| 2A | 6X6 | 300 | 5 | - | Χ | 2 | _ | Χ | - | - | Х | N | | |
| 2B | 6X6 | 300 | 5 | - | Χ | 2 | - | Χ | - | - | Х | N | | |
| 4A | 6X60 | 0 | 2-4-2 | - | Χ | 4 | - | Χ | - | - | - | S | | |
| E / | CVCO | 0 | 2 4 2 | | | 5 | - | Χ | DELAY | 15 * | - | S | | |
| 5A | 6X60 | 0 | 2-4-2 | _ | X | 2# | - | Χ | DELAY | 3 | - | G | | |
| 5B | 6X60 | 0 | 2-4-2 | - | Χ | 5 | - | Χ | DELAY | 15 | - | S | | |
| 5C | 6X60 | 0 | 2-4-2 | - | Χ | 5 | - | Χ | DELAY | 15 | - | S | | |
| 5D | 6X15 | 0 | 3 | - | Χ | 5 | - | Χ | DELAY | 15 | - | S | | |
| 6A | 6X6 | 300 | 5 | Х | - | 6 | - | Χ | - | - | Х | N | | |
| 6B | 6X6 | 300 | 5 | Χ | - | 6 | - | Χ | - | - | Х | N | | |
| 6C | 6X6 | 300 | 5 | Χ | - | 6 | - | Χ | - | _ | Х | N | | |

^{*} Disable delay during Alternate Phasing operation.

| <u>PROPOSED</u> | | EXISTING |
|---------------------|---|-----------------------|
| \bigcirc | Traffic Signal Head | |
| O> | Modified Signal Head | N/A |
| $\overline{}$ | Sign | <u> </u> |
| ↓ | Pedestrian Signal Head With Push Button & Sign | • |
| O) | Signal Pole with Guy | • |
| | Signal Pole with Sidewalk Guy | |
| | Inductive Loop Detector | $\subset = = \supset$ |
| | Controller & Cabinet | K×3 |
| | Junction Box | |
| | 2-in Underground Conduit | |
| N/A | Right of Way | |
| \longrightarrow | Directional Arrow | \longrightarrow |
| N/A | Guardrail | |
| —— DD —— | Directional Drill | N/A |
| 0 | Metal Pole with Mastarm | |
| $\langle A \rangle$ | No U-Turn Sign (R3-4) | \triangle |
| B | "U-TURN YIELD TO RIGHT TURN" Sign (R10-16) | lack |

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

LEGEND

| gnal Upgrade - | Final Design | |
|--|-----------------------|-----------------|
| Prepared in the Offices of: | SR 3015 (Ai | rport Blvd.) |
| WOODLE CANONIA | a | ıt |
| P P P P P P P P P P P P P P P P P P P | SR | 1789 |
| 1 100 | (Pleasant Gro | ve Church Rd.) |
| S. T. A. M. S. JON | Division 5 Wake Co | unty Morrisvill |
| Onol Design Section | PLAN DATE: March 2019 | REVIEWED BY: |

750 N.Greenfleid Pkwy.Garner.NC 27529 PREPARED BY: J.A. Lohr REVIEWED BY:

[#] Disable phase call for loop during Alternate Phasing operation.