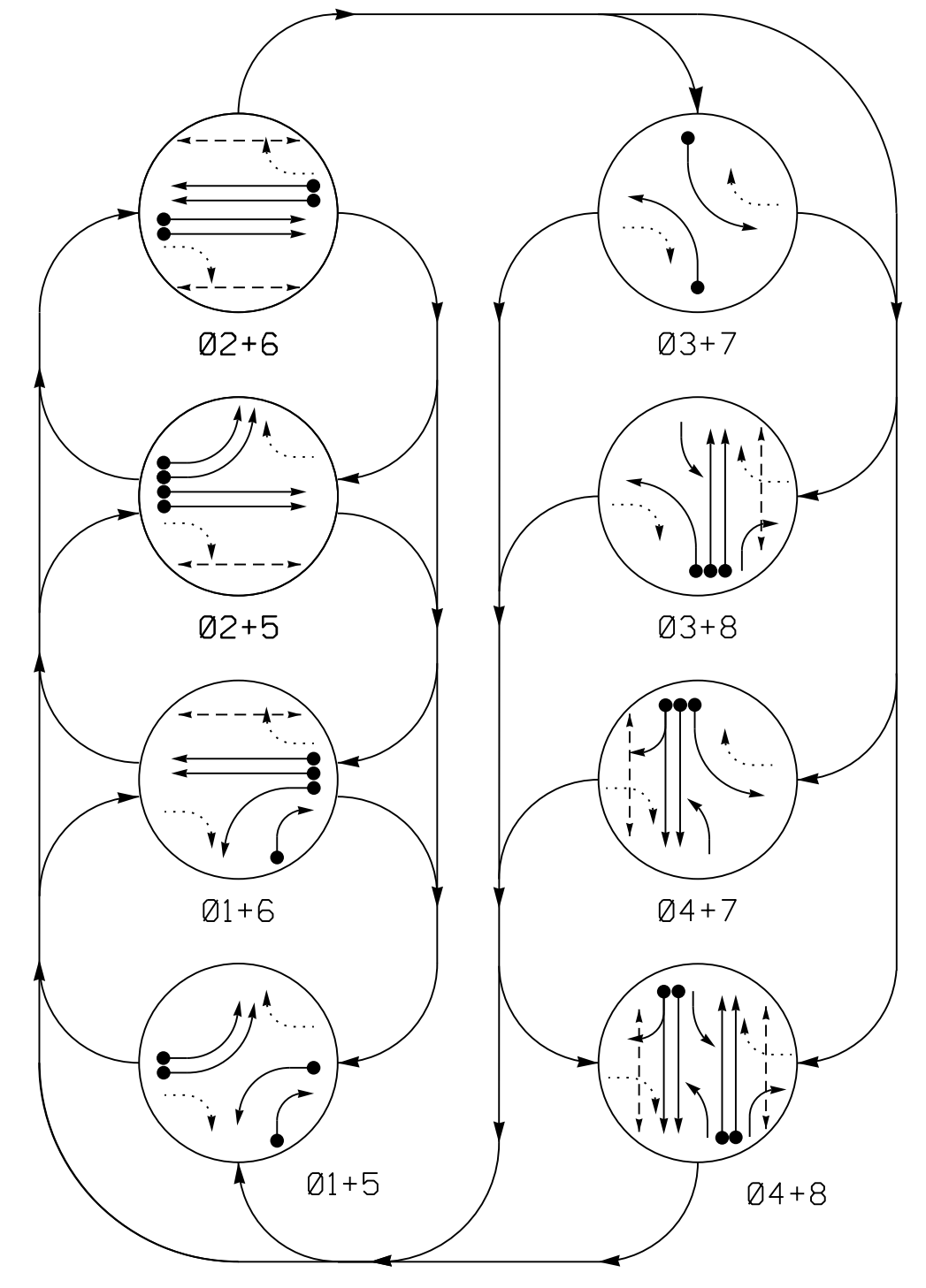


PHASING DIAGRAM



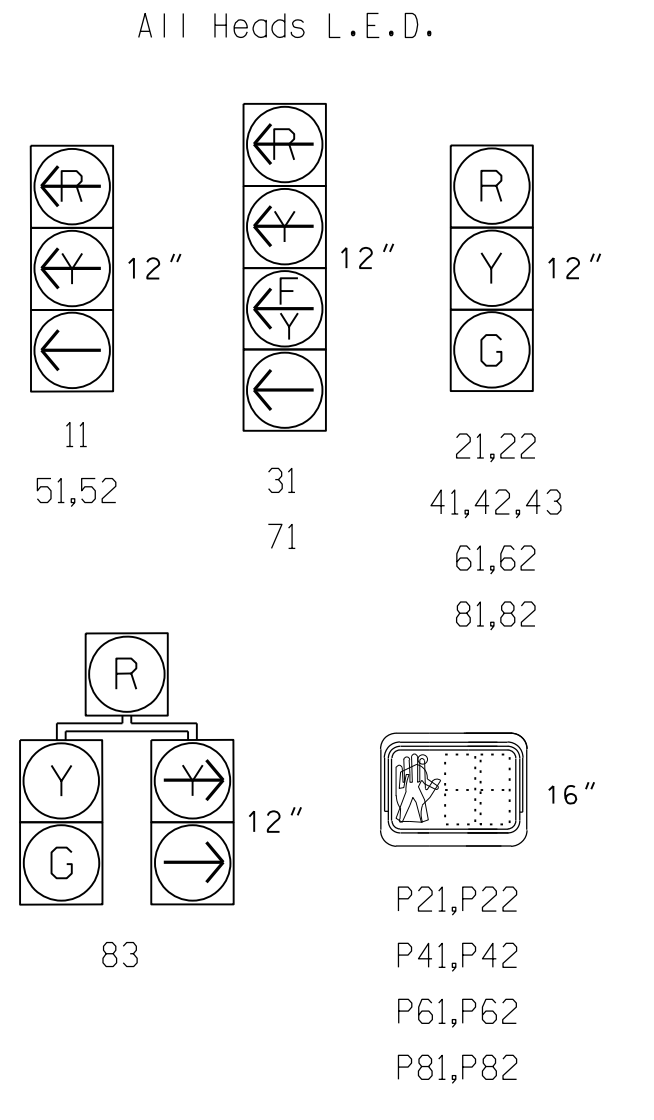
PHASING DIAGRAM DETECTION LEGEND

- 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 |
| 11 | ← | ← | ← | ← | ← | ← | ← | ← |
| 21,22 | R | R | G | G | R | R | R | R |
| 31 | R | R | R | R | ← | ← | ← | ← |
| 41,42,43 | R | R | R | R | R | R | G | R |
| 51,52 | ← | ← | ← | ← | ← | ← | ← | ← |
| 61,62 | R | G | R | G | R | R | R | R |
| 71 | ← | ← | ← | ← | ← | ← | ← | ← |
| 81,82 | R | R | R | R | R | G | R | G |
| 83 | R | R | R | R | R | G | R | G |
| P21,P22 | DW | DW | W | W | DW | DW | DW | DRK |
| P41,P42 | DW | DW | DW | DW | DW | DW | W | DRK |
| P61,P62 | DW | W | DW | W | DW | DW | DW | DRK |
| P81,P82 | DW | DW | DW | DW | W | DW | W | DRK |

SIGNAL FACE I.D.



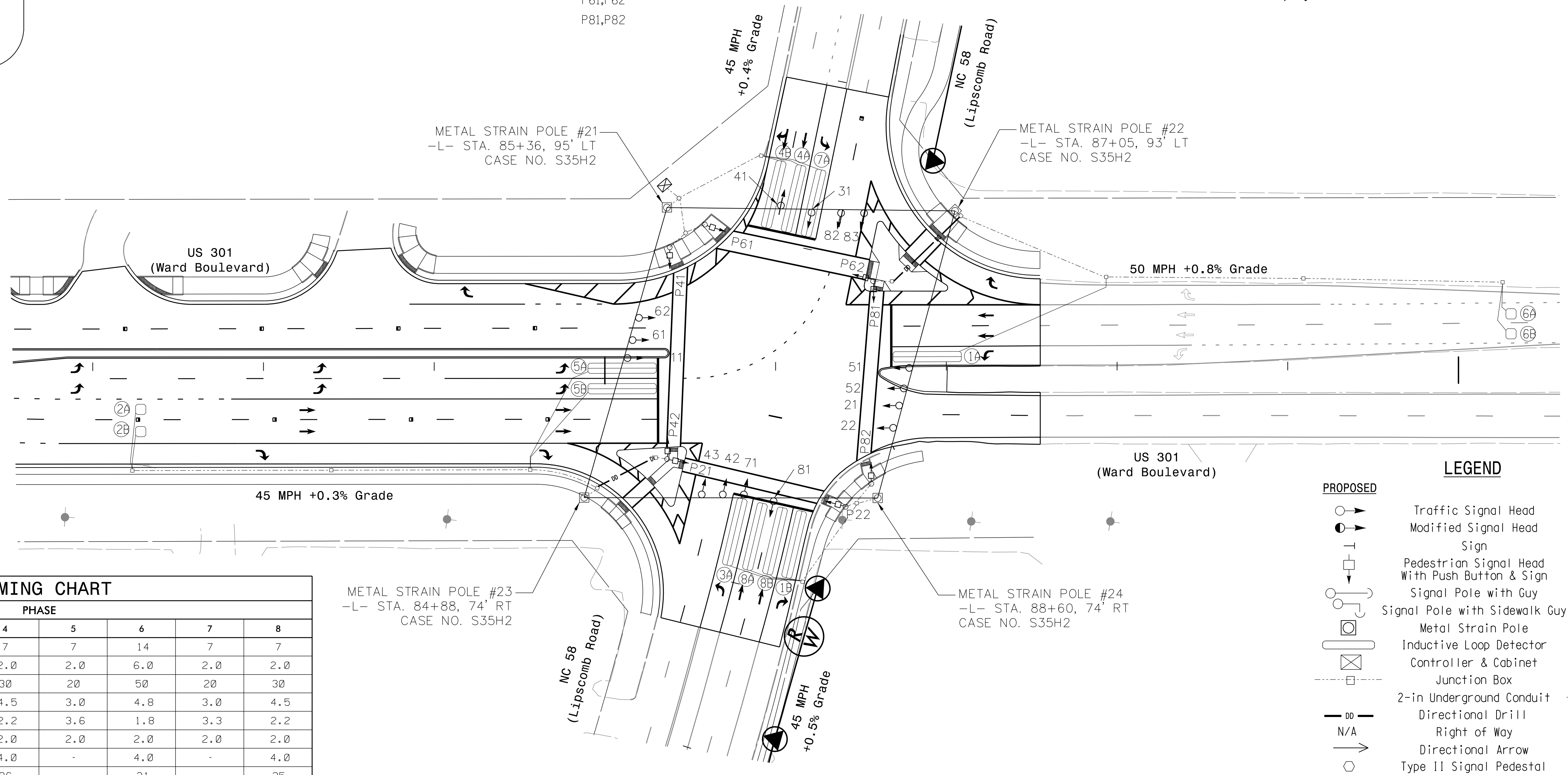
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

| LOOP | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | DETECTOR PROGRAMMING | | | | | | | |
|------|-----------|----------------------------|-------|----------|----------------------|---------|-----------|--------------|------------|-------------|----------|---|
| | | | | | PHASE | CALLING | EXTENSION | STRETCH TIME | DELAY TIME | SYSTEM LOOP | NEW CARD | |
| 1A | 6x40 | 0 | 2-4-2 | Y | 1 | Y | Y | - | - | - | - | Y |
| 1B | 6x40 | 0 | 2-4-2 | Y | 1 | Y | Y | - | - | 15 | - | Y |
| 2A | 6x6 | 300 | 5 | Y | 2 | Y | Y | - | - | - | - | Y |
| 2B | 6x6 | 300 | 5 | Y | 2 | Y | Y | - | - | - | - | Y |
| 3A | 6x40 | 0 | 2-4-2 | Y | 3 | Y | Y | - | - | 15 | - | Y |
| 4A | 6x40 | 0 | 2-4-2 | Y | 4 | Y | Y | - | - | - | - | Y |
| 4B | 6x40 | 0 | 2-4-2 | Y | 4 | Y | Y | - | - | 10 | - | Y |
| 5A | 6x40 | 0 | 2-4-2 | Y | 5 | Y | Y | - | - | - | - | Y |
| 5B | 6x40 | 0 | 2-4-2 | Y | 5 | Y | Y | - | - | - | - | Y |
| 6A | 6x6 | 360 | 5 | Y | 6 | Y | Y | - | - | - | - | Y |
| 6B | 6x6 | 360 | 5 | Y | 6 | Y | Y | - | - | - | - | Y |
| 7A | 6x40 | 0 | 2-4-2 | Y | 7 | Y | Y | - | - | 15 | - | Y |
| 8A | 6x40 | 0 | 2-4-2 | Y | 8 | Y | Y | - | - | 3 | - | Y |
| 8B | 6x40 | 0 | 2-4-2 | Y | 8 | Y | Y | - | - | 10 | - | Y |

7-Phase Fully Actuated US 301 (Ward Boulevard) CLS

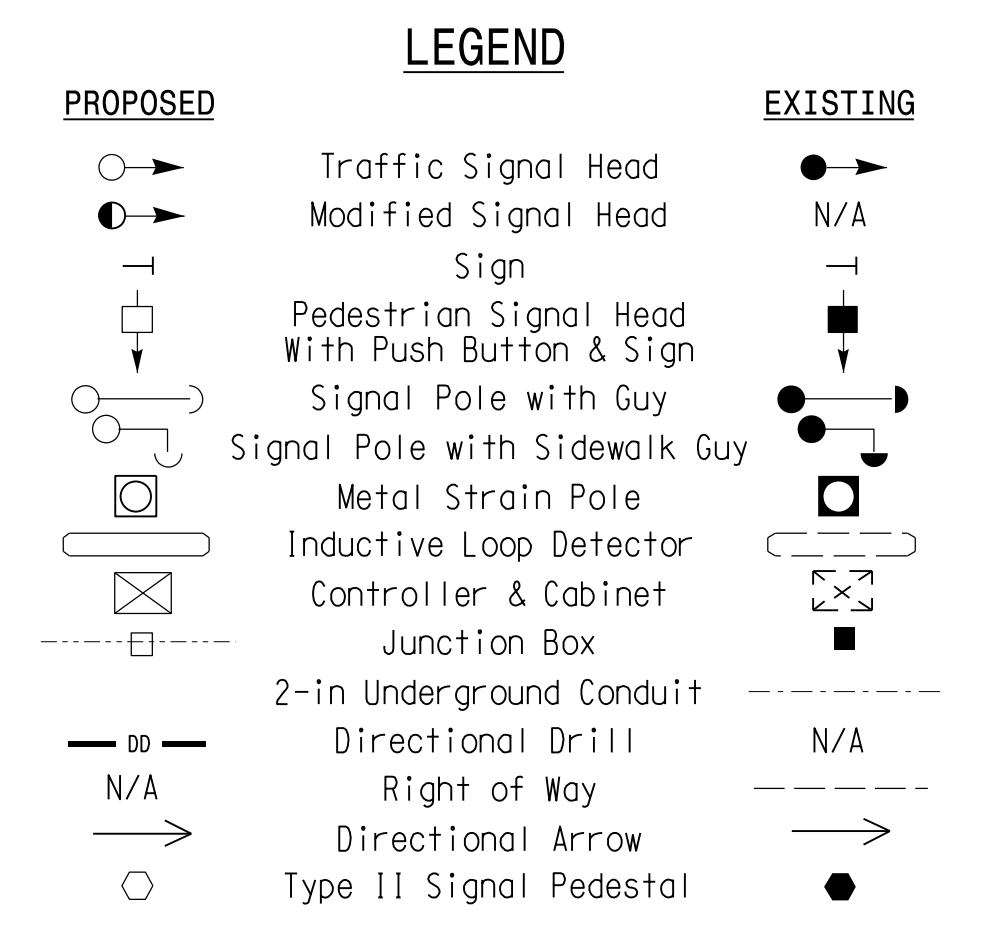
NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 3 and/or Phase 7 may be lagged.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "DON'T WALK" time only.
- 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 #0161.



OASIS 2070 TIMING CHART

| FEATURE | PHASE | | | | | | | |
|-------------------------|-------|------------|-----|-----|-----|------------|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Min Green 1 * | 7 | 12 | 7 | 7 | 7 | 14 | 7 | 7 |
| Extension 1 * | 2.0 | 6.0 | 2.0 | 2.0 | 2.0 | 6.0 | 2.0 | 2.0 |
| Max Green 1 * | 20 | 50 | 20 | 30 | 20 | 50 | 20 | 30 |
| Yellow Clearance | 3.0 | 4.5 | 3.0 | 4.5 | 3.0 | 4.8 | 3.0 | 4.5 |
| Red Clearance | 3.6 | 1.9 | 3.3 | 2.2 | 3.6 | 1.8 | 3.3 | 2.2 |
| Red Revert | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Walk 1 * | - | 4.0 | - | 4.0 | - | 4.0 | - | 4.0 |
| Don't Walk 1 | - | 20 | - | 26 | - | 21 | - | 25 |
| Seconds Per Actuation * | - | 1.8 | - | - | - | 1.8 | - | - |
| Max Variable Initial * | - | 34 | - | - | - | 40 | - | - |
| 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 | 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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Michael Baker INTERNATIONAL

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US 301 (Ward Boulevard) at NC 58 (Lipscomb Road)

Division 4 Wilson County Wilson

PLAN DATE: June 2017 REVIEWED BY: W M Ruhsum

PREPARED BY: K M Cory REVIEWED BY:

SEAL

PROFESSIONAL ENGINEER

SEAL 038970

KELLY M. CORY

DocuSigned by: Kelly M Cory 8/4/2017

750 N. Greenleaf Pkwy, Garner, NC 27529

SCALE 0 40 1"=40'

REVISIONS: INIT. DATE

SIG. INVENTORY NO. 04-0161

04-AUG-2017 11:01 AM C:\Users\mkcory\Documents\Projects\US301\Signal\SIG-07.dgn