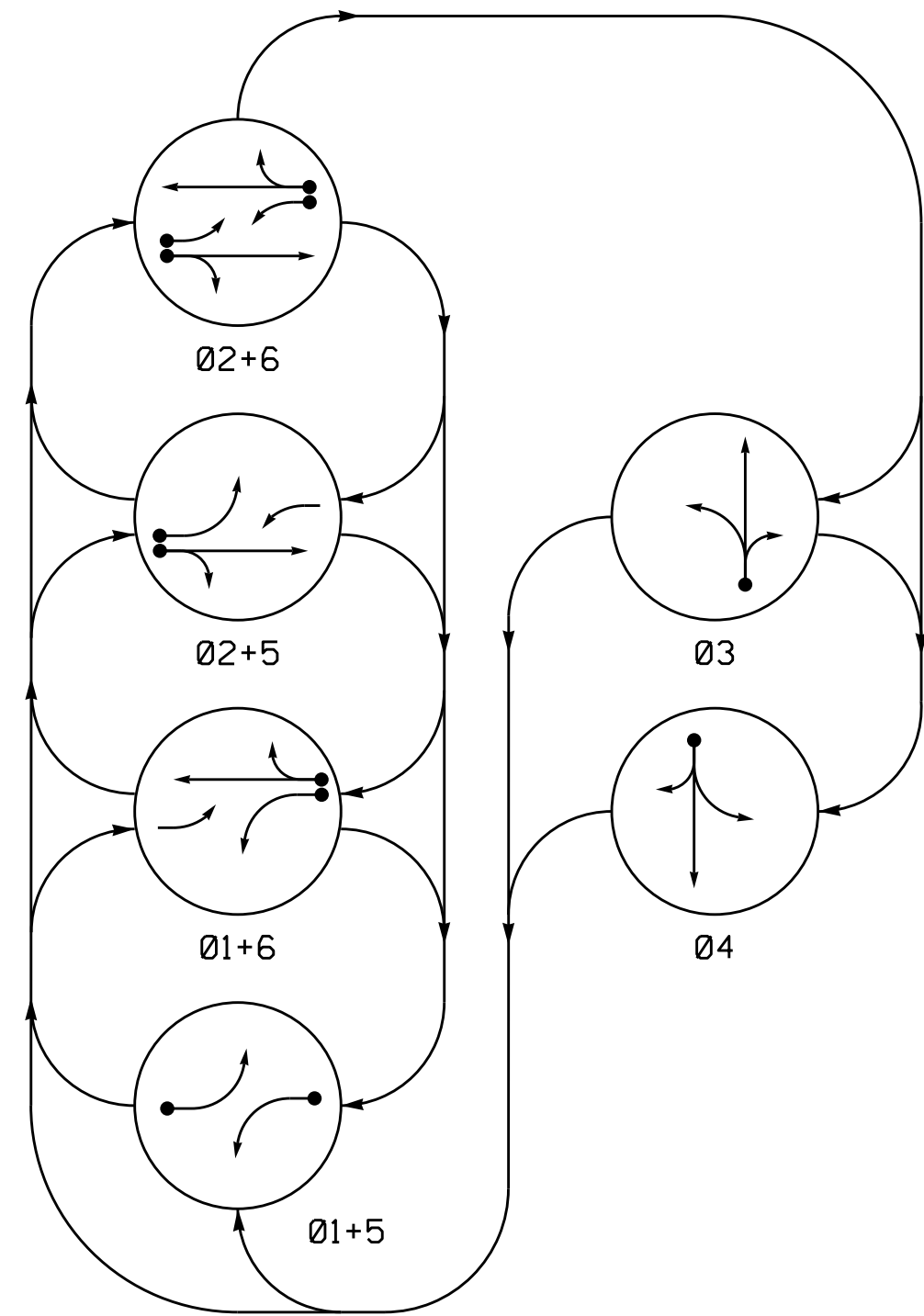


PHASING DIAGRAM



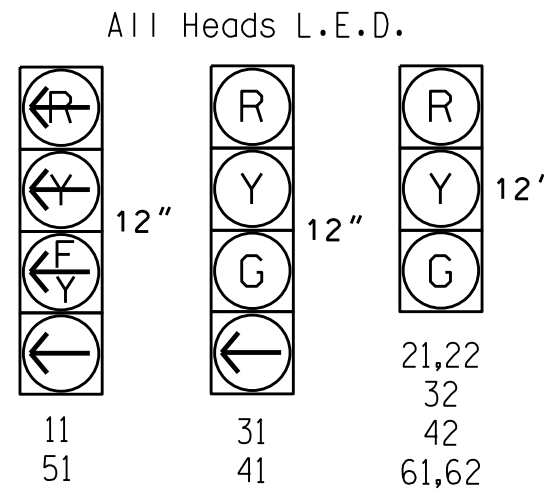
PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

| SIGNAL FACE | PHASE | | | | | |
|-------------|-------|------|------|------|----|----|
| | 01+5 | 01+6 | 02+5 | 02+6 | 03 | 04 |
| 11 | ← | ← | ← | ← | ← | ← |
| 21,22 | R | R | G | G | R | R |
| 31 | R | R | R | R | G | R |
| 32 | R | R | R | R | G | R |
| 41 | R | R | R | R | G | R |
| 42 | R | R | R | R | G | R |
| 51 | ← | ← | ← | ← | ← | ← |
| 61,62 | R | G | R | G | R | Y |

SIGNAL FACE I.D.



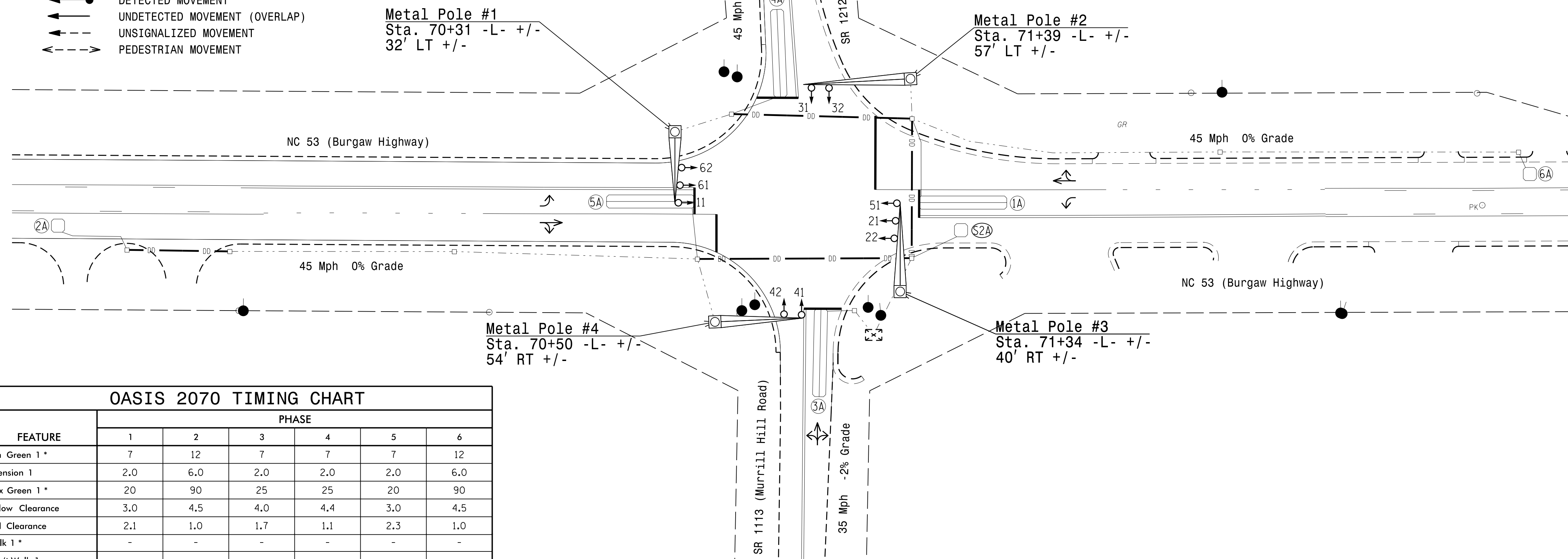
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

| LOOP | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | DETECTOR PROGRAMMING | | | |
|------|-----------|----------------------------|-------|----------|----------------------|---------|-----------|-----------------|
| | | | | | PHASE | CALLING | EXTENSION | FULL TIME DELAY |
| 1A | 6X40 | 0 | 2-4-2 | Y | 1 | Y | Y | - |
| | | | | | 6 | Y | Y | - |
| 2A | 6X6 | 300 | 4 | Y | 2 | Y | Y | |
| 3A | 6X40 | 0 | 2-4-2 | Y | 3 | Y | Y | |
| 4A | 6X40 | 0 | 2-4-2 | Y | 4 | Y | Y | |
| 5A | 6X40 | 0 | 2-4-2 | Y | 5 | Y | Y | |
| 6A | 6X6 | 300 | 4 | Y | 6 | Y | Y | |
| S2A | 6X6 | +108 | 4 | Y | - | - | - | |

6 Phase Fully Actuated Jacksonville Signal System

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 1 and/or phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



LEGEND

- | PROPOSED | EXISTING |
|--|---------------------------------|
| ○ Traffic Signal Head | ● N/A |
| ● Modified Signal Head | ○ N/A |
| ⚡ Pedestrian Signal Head With Push Button & Sign | ⚡ N/A |
| ○ Signal Pole with Guy | ● Signal Pole with Sidewalk Guy |
| ⊠ Inductive Loop Detector | ⊠ Junction Box |
| ⊠ Controller & Cabinet | ⊠ Junction Box |
| ⊠ 2-in Underground Conduit | ⊠ Right of Way |
| → N/A | → Directional Arrow |
| ⚡ Metal Pole with Mastarm | ⚡ Metal Pole with Mastarm |

OASIS 2070 TIMING CHART

| FEATURE | PHASE | | | | | |
|------------------------|-------|------------|-----|-----|-----|------------|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| Min Green 1* | 7 | 12 | 7 | 7 | 7 | 12 |
| Extension 1 | 2.0 | 6.0 | 2.0 | 2.0 | 2.0 | 6.0 |
| Max Green 1* | 20 | 90 | 25 | 25 | 20 | 90 |
| Yellow Clearance | 3.0 | 4.5 | 4.0 | 4.4 | 3.0 | 4.5 |
| Red Clearance | 2.1 | 1.0 | 1.7 | 1.1 | 2.3 | 1.0 |
| Walk 1* | - | - | - | - | - | - |
| Don't Walk 1 | - | - | - | - | - | - |
| Seconds Per Actuation* | - | 2.0 | - | - | - | 2.0 |
| 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 | - | - | - | - | - | - |
| Simultaneous Gap | 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 - Final

750 N. Greenfield Pkwy, Garner, NC 27529

Prepared In the Offices of:

 TRANSPORTATION MOBILITY AND SAFETY SOLUTIONS, INC.
 ENGINEERS OF TRANSPORTATION SIGNAL DESIGN SECTION

NC 53 (Burgaw Highway) at SR 1212 (Pony Farm Road) / SR 1113 (Murrill Hill Road)
 Division 3 Onslow County Jacksonville
 PLAN DATE: July 2016 REVIEWED BY: JPG
 PREPARED BY: Jeff Spence REVIEWED BY:

7500EA70481841D
 Jason P. Galloway 8/29/2016
 SEAL 029904
 ENGINEER
 JASON P. GALLOWAY
 DATE
 SIG. INVENTORY NO. 03-0172

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SCALE 1"=30'

06-SEP-2016 13:52
 S:\PROJECTS\115 - Signal\Signal Design\Section\Eastern Region\01\03-RR-5023B\030112.sig.dsn, 20160829.dgn
 J:\011000\