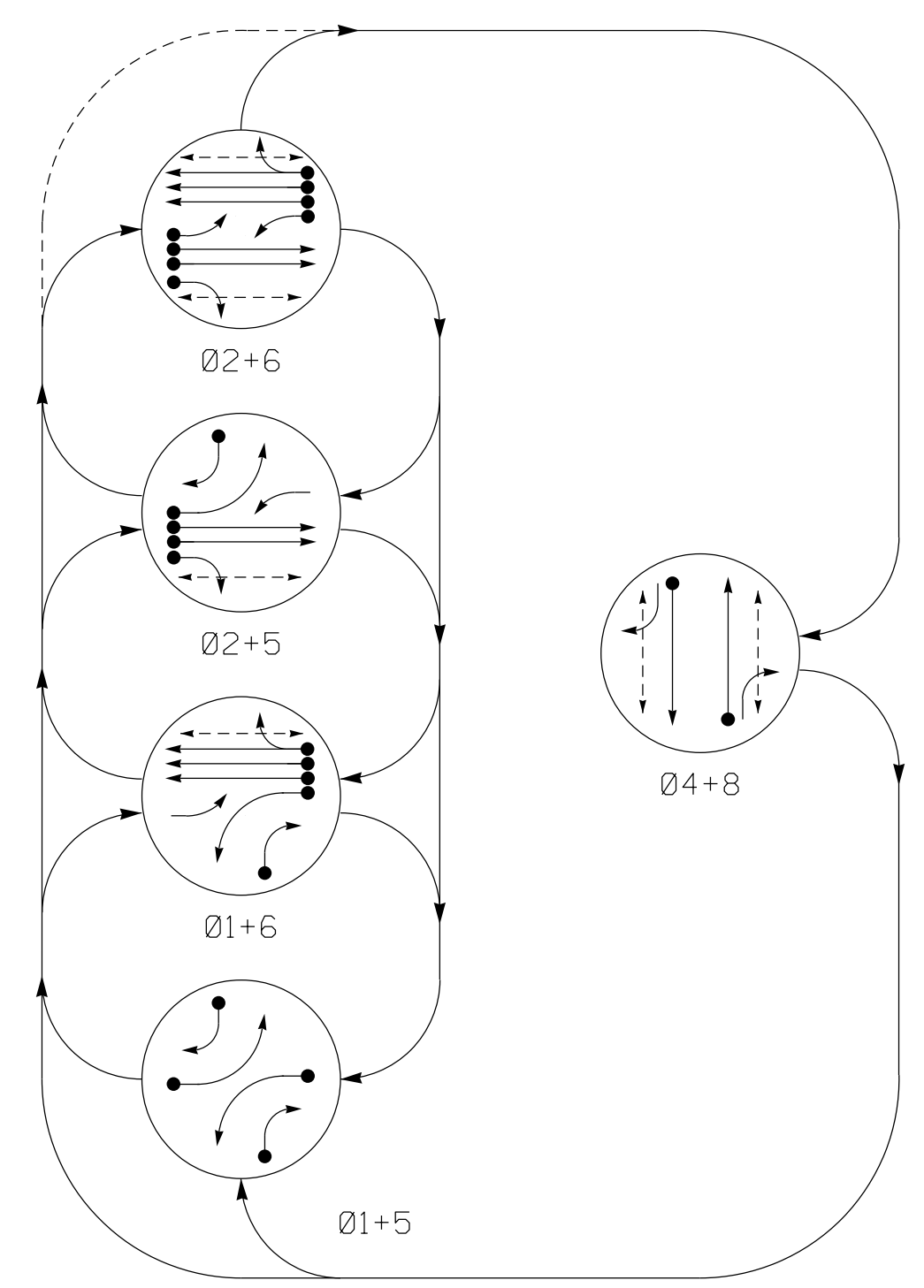


PHASING DIAGRAM



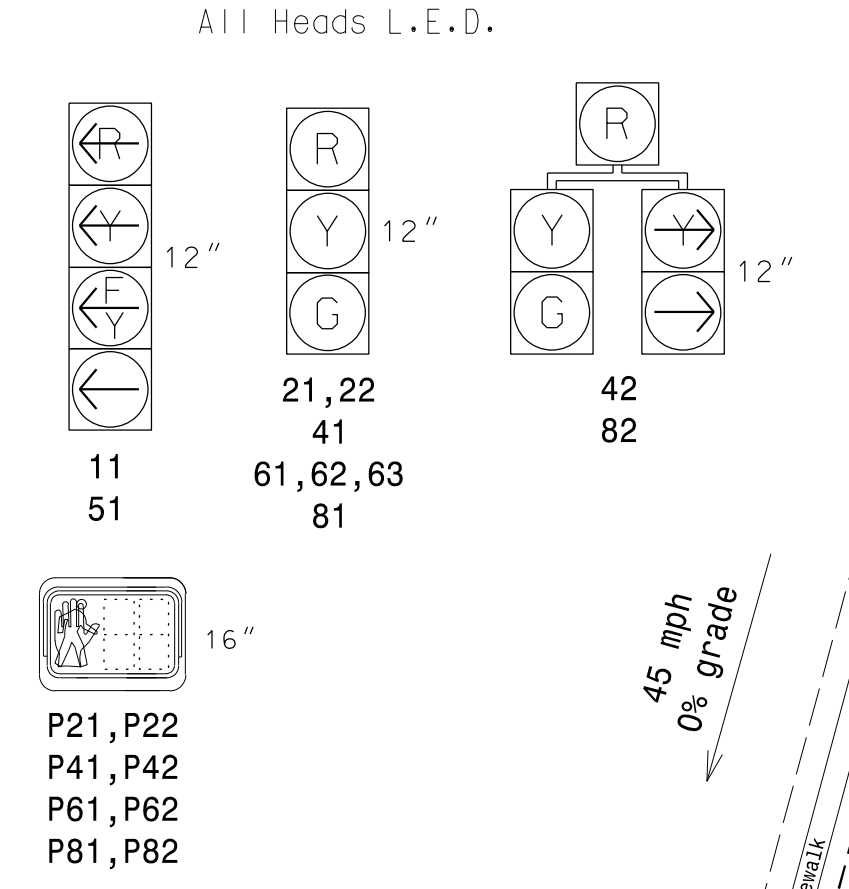
PHASING DIAGRAM DETECTION LEGEND

- ← ● DETECTED MOVEMENT
- ← ○ UNDETECTED MOVEMENT (OVERLAP)
- ← ○ UNSIGNALIZED MOVEMENT
- ← ○ PEDESTRIAN MOVEMENT

TABLE OF OPERATION

| SIGNAL FACE | PHASE | | | | | | | |
|-------------|-------|------|------|------|------|-----|----|----|
| | 01+5 | 01+6 | 02+5 | 02+6 | 04+8 | FL | EU | PA |
| 11 | ← | ← | ← | ← | ← | ← | ← | ← |
| 21, 22 | R | R | G | G | R | Y | | |
| 41 | R | R | R | R | G | R | | |
| 42 | R | R | R | R | G | R | | |
| 51 | ← | ← | ← | ← | ← | ← | ← | ← |
| 61, 62, 63 | R | G | R | G | R | Y | | |
| 81 | R | R | R | R | G | R | | |
| 82 | R | R | R | R | G | R | | |
| P21,P22 | DW | DW | W | W | DW | DRK | | |
| P41,P42 | DW | DW | DW | DW | W | DRK | | |
| P61,P62 | DW | W | DW | W | DW | DRK | | |
| P81,P82 | DW | DW | DW | DW | W | DRK | | |

SIGNAL FACE I.D.



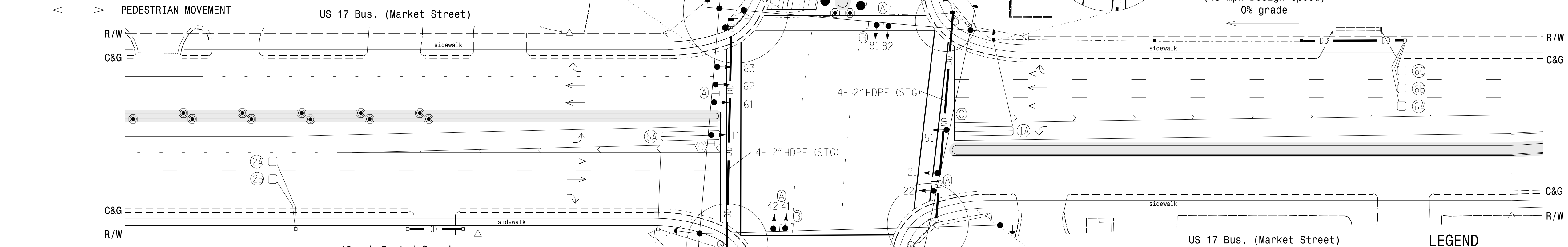
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

| LOOP | SIZE (FT) | DISTANCE FROM STOPBAR (FT) | TURNS | NEW LOOP | DETECTOR PROGRAMMING | | | STRETCH TIME | DELAY TIME | SYSTEM LOOP | NEW CARD |
|------|-----------|----------------------------|-------|----------|----------------------|---------|-----------|--------------|------------|-------------|----------|
| | | | | | PHASE | CALLING | EXTENSION | | | | |
| 1A | 6X40 | 0 | 2-4-2 | Y | 1 | Y | Y | - | 15 | - | - |
| 1B | 6X40 | 0 | 2-4-2 | Y | 6 | Y | Y | - | 3 | - | - |
| 2A | 6X6 | 300 | 6 | Y | 2 | Y | Y | - | - | - | - |
| 2B | 6X6 | 300 | 6 | Y | 2 | Y | Y | - | - | - | - |
| 4A | 6X40 | 0 | 2-4-2 | - | 4 | Y | Y | - | - | - | - |
| 5A | 6X40 | 0 | 2-4-2 | Y | 5 | Y | Y | - | 15 | - | - |
| 5B | 6X40 | 0 | 2-4-2 | - | 2 | Y | Y | - | 15 | - | - |
| 6A | 6X6 | 300 | 4 | Y | 6 | Y | Y | - | - | - | - |
| 6B | 6X6 | 300 | 4 | Y | 6 | Y | Y | - | - | - | - |
| 6C | 6X6 | 300 | 4 | Y | 6 | Y | Y | - | - | - | - |
| 8A | 6X40 | 0 | 2-4-2 | Y | 8 | Y | Y | - | - | - | - |

5 Phase Fully Actuated (Wilmington Signal System)

NOTES

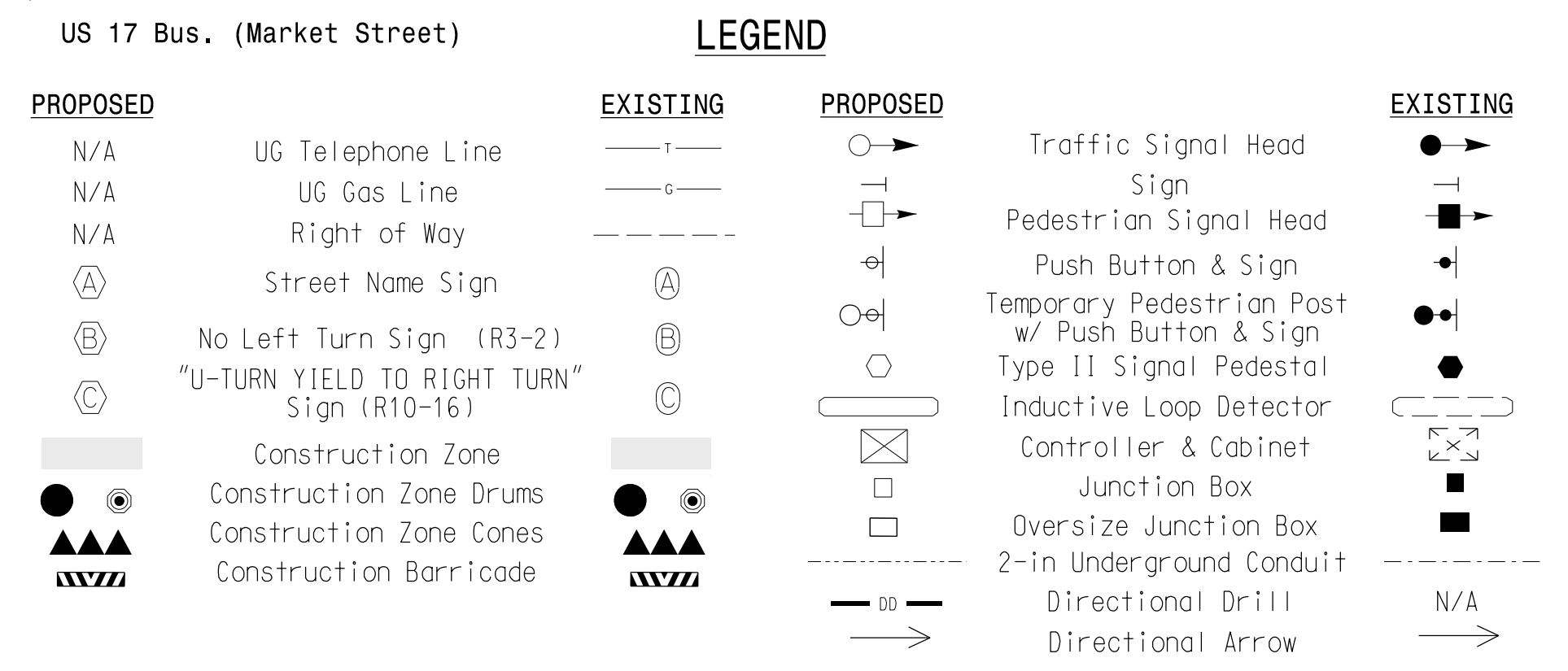
1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. Reposition existing signal heads numbered 11, 21, 22, 41, 42, 51, 81 & 82.
5. Reposition signs as shown on plans.
6. Run all lead-in cable overhead on existing utility poles where possible.
7. Set all detector units to presence mode.
8. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
9. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
10. Pedestrian Pushbutton and sign shall be mounted parallel with associated crosswalk.
11. When pushbuttons are mounted on metal pole or pedestrian pedestal, the pole or pedestal shall be installed as close as possible to the back of curb at accessible ramps to minimize reach range.
12. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
13. Signal system data: Controller Asset #0049.



OASIS 2070 TIMING CHART

| FEATURE | PHASE | | | | | | | |
|-------------------------|-------|-------------|-----|-----|-------------|-----|--|--|
| | 1 | 2 | 4 | 5 | 6 | 8 | | |
| Min Green 1 * | 7 | 12 | 7 | 7 | 12 | 7 | | |
| Extension 1 * | 1.0 | 6.0 | 3.0 | 1.0 | 6.0 | 3.0 | | |
| Max Green 1 * | 30 | 90 | 60 | 30 | 90 | 60 | | |
| Yellow Clearance | 3.0 | 4.6 | 4.5 | 3.0 | 4.6 | 3.9 | | |
| Red Clearance | 3.8 | 2.2 | 2.4 | 3.6 | 2.2 | 3.0 | | |
| Red Revert | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | | |
| Walk 1 * | - | 7 | 7 | - | 7 | 7 | | |
| Don't Walk 1 | - | 25 | 33 | - | 30 | 31 | | |
| Seconds Per Actuation * | - | 1.5 | - | - | 1.3 | - | | |
| Max Variable Initial * | - | 34 | - | - | 34 | - | | |
| Time Before Reduction * | - | 15 | - | - | 15 | - | | |
| Time To Reduce * | - | 30 | - | - | 30 | - | | |
| Minimum Gap | - | 3.2 | - | - | 3.2 | - | | |
| Recall Mode | - | SOFT RECALL | - | - | SOFT RECALL | - | | |
| Vehicle Call Memory | - | YELLOW | - | - | YELLOW | - | | |
| Dual Entry | - | - | ON | - | - | ON | | |
| 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 - Temporary Design 3 (TMP Phase IV)

Prepared for the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

US 17 Business (Market Street) at SR 1175 (Kerr Avenue)

Division 03 New Hanover County Wilmington

PLAN DATE: June 2014 REVIEWED BY: MB Toth

PREPARED BY: AJ Davis REVIEWED BY: LM Moon

SEAL

Melissa B. Toth 12/19/2014

SCALE 1"=40'

13-JUL-2015 10:19 D:\Transportation\Projects\03338B_Kerr_Sig_LITS\451\Signal\03-004913.dgn