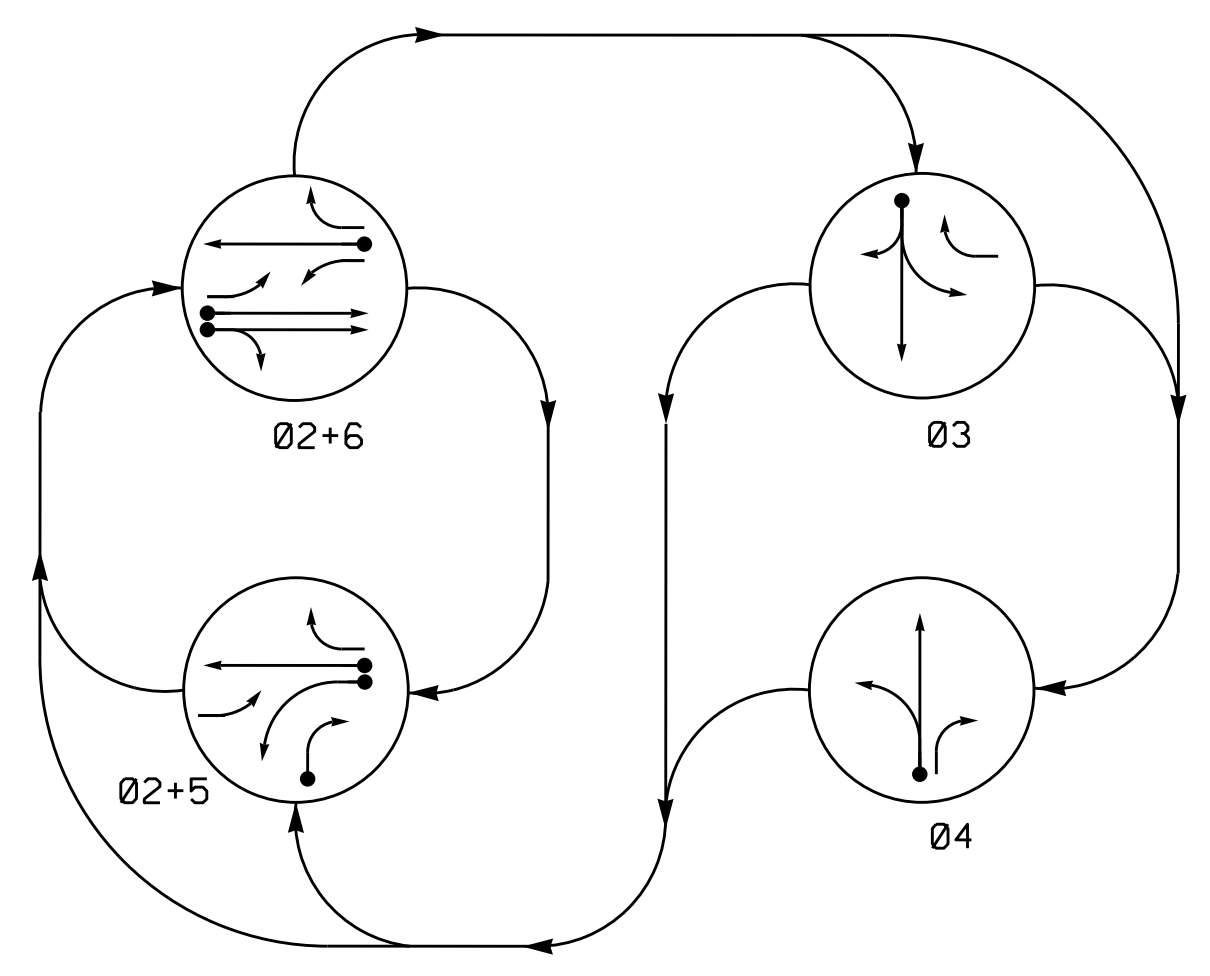


PHASING DIAGRAM



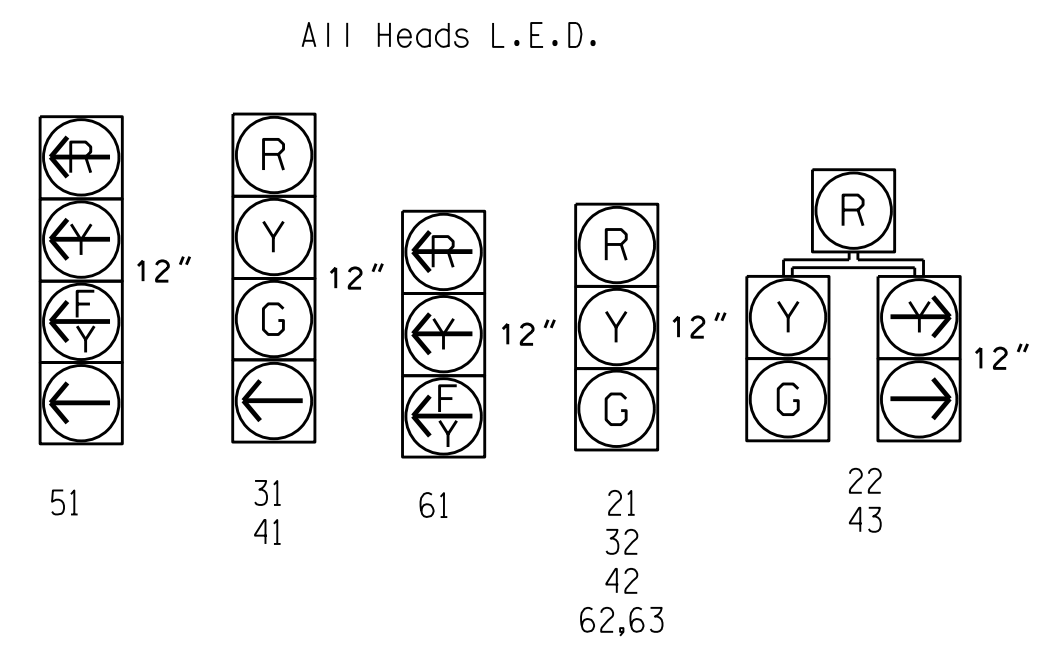
PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE				
	02+5	02+6	03	04	F L R
21	G	G	R	R	Y
22	G	G	R	R	Y
31	R	R	G	R	R
32	R	R	G	R	R
41	R	R	R	G	R
42	R	R	R	G	R
43	R	R	R	G	R
51	F	F	R	R	Y
61	F	F	R	R	Y
62,63	R	G	R	R	Y

SIGNAL FACE I.D.



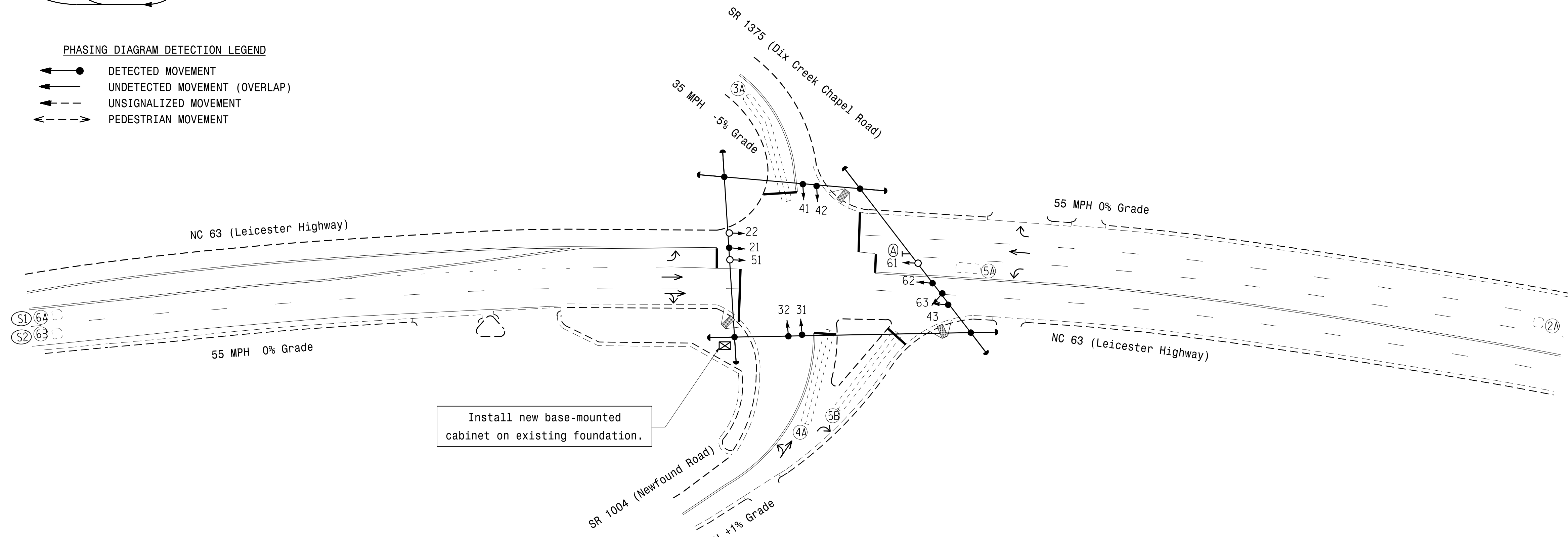
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				SYSTEM LOOP	NEW CARD	
					PHASE	CALLING	EXTENSION	FULL TIME DELAY			
2A	6x6	420	5	-	2	Y	Y	-	-	-	Y
3A	6x70	+5	2-4-2	-	3	Y	Y	-	-	3	Y
4A	6x60	+5	2-4-2	-	4	Y	Y	-	-	-	Y
5A	6x15	50	4	-	5	Y	Y	-	-	15	Y
5B	6x60	+5	2-4-2	-	5	Y	Y	-	-	10	Y
6A/S1	6x6	420	5	-	6	Y	Y	-	-	-	Y
6B/S2	6x6	420	5	-	6	Y	Y	-	-	-	Y

4 Phase Fully Actuated Asheville 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 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Reposition existing signal heads numbered 21,62 & 63.
- In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
- Remove existing "Left Turn Yield on Green" sign -(R10-12) adjacent to head 51.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



OASIS 2070 TIMING CHART

FEATURE	PHASE				
	2	3	4	5	6
Min Green 1 *	12	7	7	10	12
Extension 1 *	6.0	1.0	1.0	1.0	6.0
Max Green 1 *	110	15	15	15	110
Yellow Clearance	5.2	4.2	4.4	3.0	5.2
Red Clearance	1.0	1.5	1.3	1.9	1.0
Red Revert	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	-
Don't Walk 1	-	-	-	-	-
Seconds Per Actuation *	2.0	-	-	-	1.3
Max Variable Initial *	34	-	-	-	34
Time Before Reduction *	15	-	-	-	15
Time To Reduce *	50	-	-	-	30
Minimum Gap	3.4	-	-	-	3.4
Recall Mode	MIN RECALL	-	-	-	MIN RECALL
Vehicle Call Memory	YELLOW	-	-	-	YELLOW
Dual Entry	-	-	-	-	-
Simultaneous Gap	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.

LEGEND

- |       |                                     |       |          |
|-------|-------------------------------------|-------|----------|
| ○→    | Traffic Signal Head                 | ●→    | EXISTING |
| ●→    | Modified Signal Head                | N/A   |          |
| ○     | Sign                                | -     |          |
| ○     | Pedestrian Signal Head              | ○     |          |
| ○     | Signal Pole with Push Button & Sign | ○     |          |
| ○     | Signal Pole with Guy                | ○     |          |
| ○     | Signal Pole with Sidewalk Guy       | ○     |          |
| □     | Inductive Loop Detector             | □     |          |
| □     | Controller & Cabinet                | □     |          |
| □     | Junction Box                        | □     |          |
| - - - | 2-in Underground Conduit            | - - - |          |
| N/A   | Right of Way                        | - - - |          |
| →     | Directional Arrow                   | →     |          |
| (A)   | Left Arrow "ONLY" Sign (R3-5L)      | (A)   |          |

Signal Upgrade

Prepared in the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

NC 63 (Leicester Highway) at SR 1004 (Newfound Road) / SR 1375 (Dix Creek Chapel Road)

Division 13 Buncombe County N. of Asheville

PLAN DATE: June 2016 REVIEWED BY: P. L. Alexander

PREPARED BY: C. Pierce REVIEWED BY:

REVISIONS: \_\_\_\_\_ INIT. DATE

SCALE: 0 40 1"=40'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER 24393

SEAL: J. Williams 9/8/2016

SIG. INVENTORY NO. 13-0556

07-0556-2016 16-07 S:\ITS\SIG\13-0556\13-0556.dgn (Asheville) Signal System\Signal Design\13-0556\13-0556.dgn 20160823.dgn