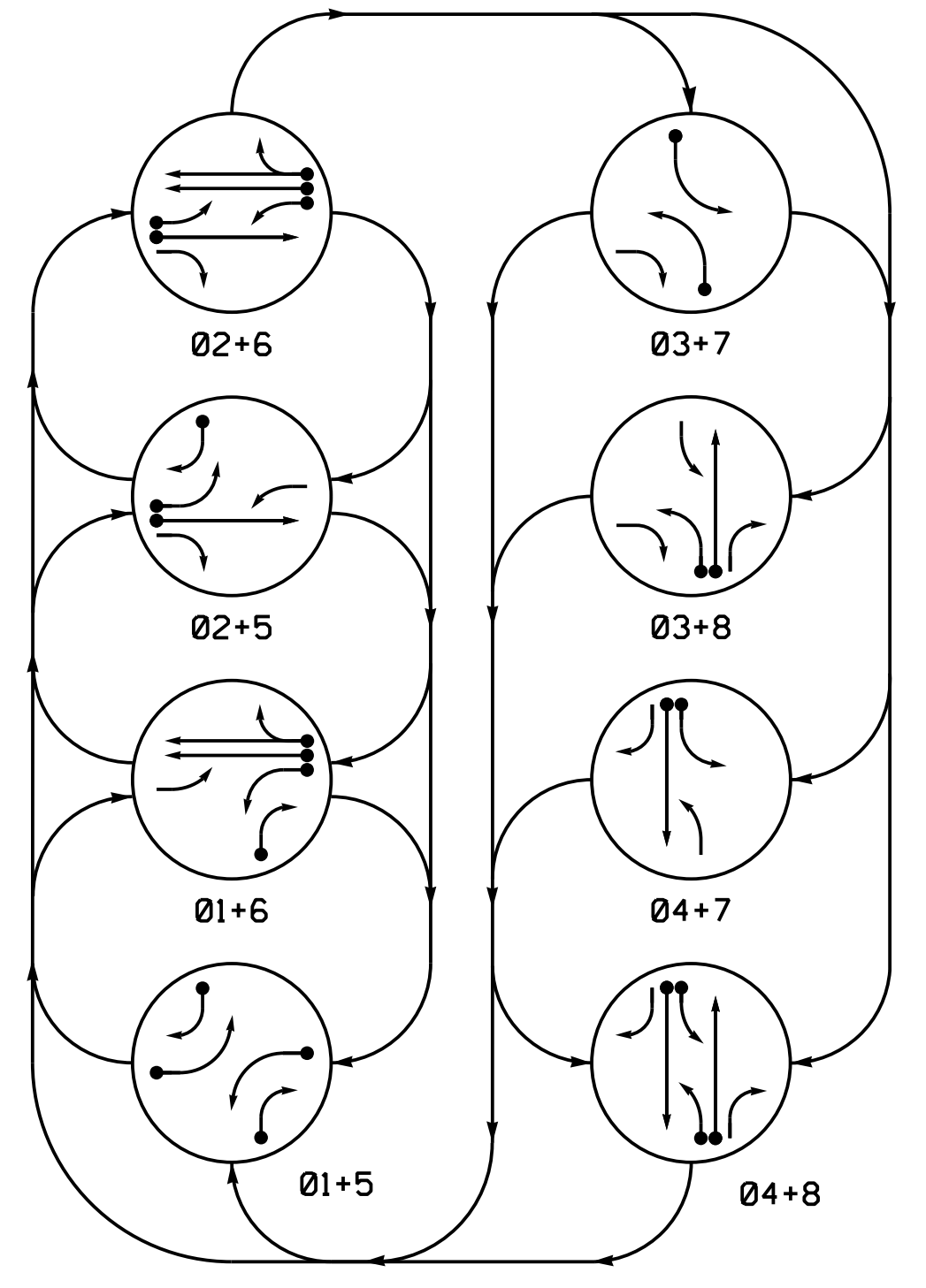
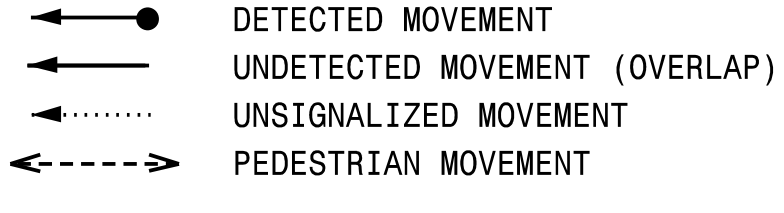


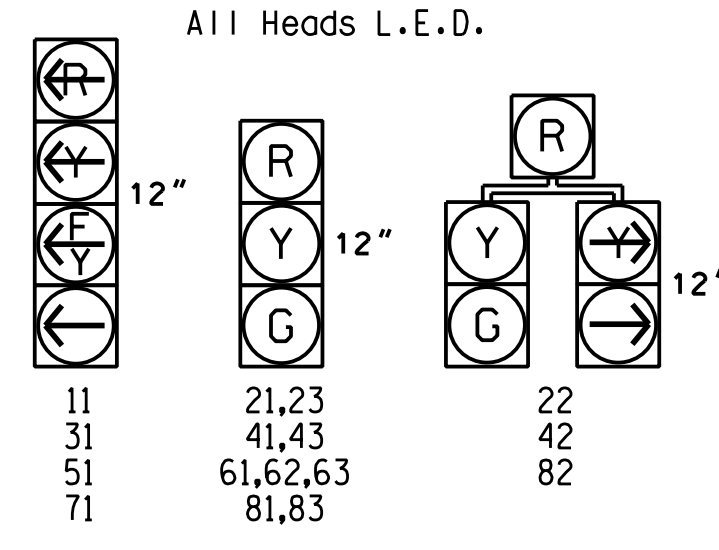
**PHASING DIAGRAM**



**PHASING DIAGRAM DETECTION LEGEND**



**SIGNAL FACE I.D.**



**TABLE OF OPERATION**

SIGNAL FACE	PHASE								FLASH	
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8		
11	-	-	-	-	-	-	-	-	-	-
21,23	R	R	G	G	R	R	R	R	Y	-
22	R	R	G	G	R	R	R	R	Y	-
31	R	R	R	-	-	-	-	-	-	-
41,43	R	R	R	R	R	R	G	G	R	-
42	R	R	R	R	R	R	G	G	R	-
51	-	-	-	-	-	-	-	-	-	-
61,62,63	R	G	R	G	R	R	R	R	Y	-
71	R	R	R	R	-	-	-	-	-	-
81,83	R	R	R	R	G	R	G	R	-	-
82	R	R	R	R	G	R	G	R	-	-

**OASIS 2070E 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			STRETCH TIME
1A	6X40	0	*	*	1	Y	Y	-	15	-	*
1B	6X40	0	*	*	6	Y	Y	-	-	-	*
2A	6X6	70	*	*	2	Y	Y	-	-	-	*
3A	6X40	0	*	*	3	Y	Y	-	15	-	*
4A	6X6	300	*	*	4	-	Y	-	2.4	-	*
4B	6X40	0	*	*	4	Y	Y	-	-	-	*
5A	6X40	0	*	*	5	Y	Y	-	15	-	*
5B	6X40	0	*	*	5	Y	Y	-	15	-	*
6A	6X6	70	*	*	6	Y	Y	-	-	-	*
6B	6X6	70	*	*	6	Y	Y	-	-	-	*
7A	6X40	0	*	*	7	Y	Y	-	15	-	*
8A	6X6	300	*	*	8	-	Y	-	2.4	-	*
8B	6X40	0	*	*	8	Y	Y	-	-	-	*

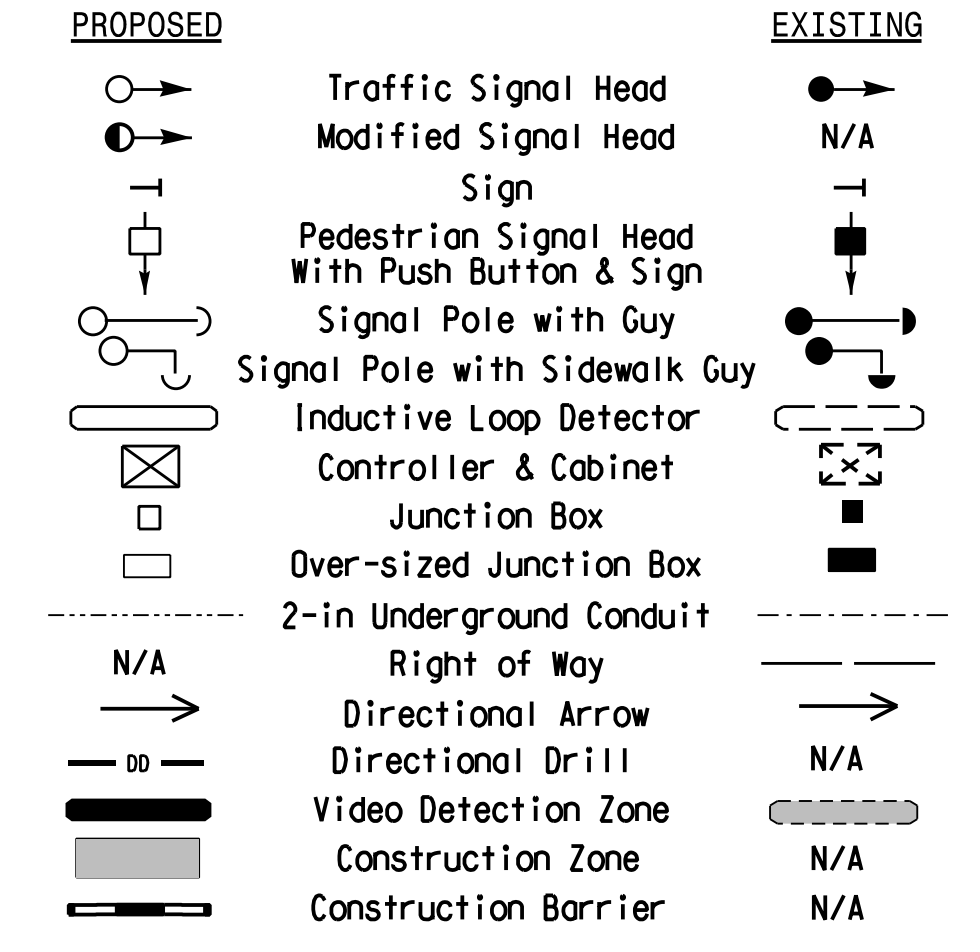
\* Video Detection Zone

**8 Phase Fully Actuated Gilead Road Closed Loop System**

**NOTES**

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 1 and/or 5 may be lagged.
4. Phase 3 and/or 7 may be lagged.
5. Set all detector units to presence mode.
6. Reposition existing signal heads numbered 21,22,23,31,41,42,43,51, 63,71,81,82 and 83.
7. Incorporate Video Detection system for vehicle detection.
8. Provide the Engineer with the Manufacturer's approved Video Detection locations and mounting heights to obtain detection zones as shown.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
10. Closed loop system data: Master Asset #11042 Controller Asset #0617

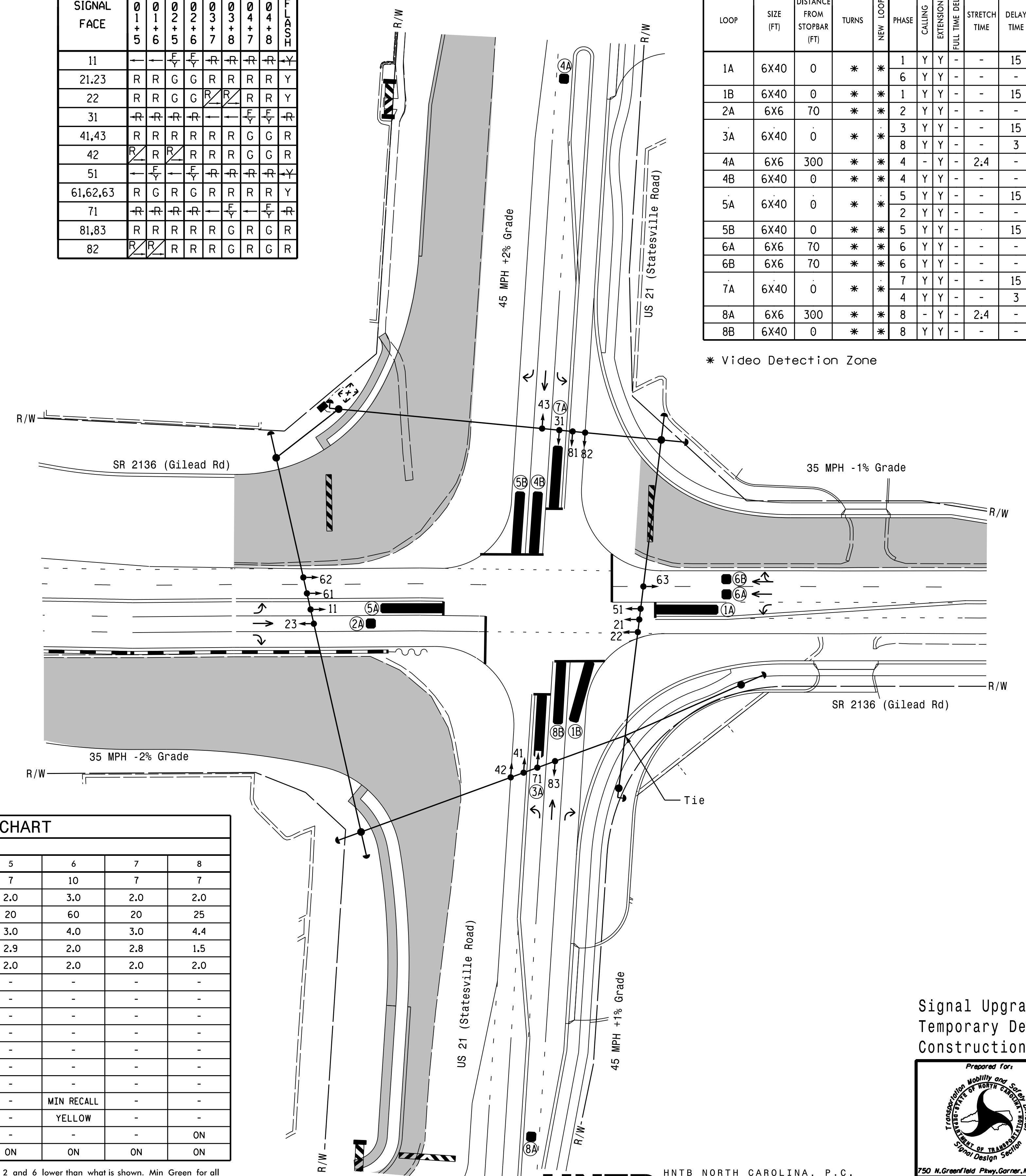
**LEGEND**



**OASIS 2070E TIMING CHART**

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green 1 *	7	10	7	7	7	10	7	7
Extension 1 *	2.0	3.0	2.0	2.0	2.0	3.0	2.0	2.0
Max Green 1 *	30	60	20	25	20	60	20	25
Yellow Clearance	3.0	4.0	3.0	4.4	3.0	4.0	3.0	4.4
Red Clearance	2.9	2.0	2.4	1.5	2.9	2.0	2.8	1.5
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-	-	-
Seconds Per Actuation *	-	-	-	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-	-	-
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  
Temporary Design 2  
Construction Phase II

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

 HNTB NORTH CAROLINA, P.C. 343 E. Six Forks Road, Suite 200 Raleigh, North Carolina 27609 NC License No: C-1554 (919) 546-8997	SR 2136 (Gilead Road) at US 21 (Statesville Road)	SEAL  A.H. THORNBURG ENGINEER No. 031464								
	Division 10 Mecklenburg Co. Huntersville PLAN DATE: December 2017 REVIEWED BY: A.D. Klinksiek PREPARED BY: A.H. Thornburg REVIEWED BY: N.R. Simmons	REVISIONS <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>INIT.</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DATE	INIT.	DATE				
NO.	DATE	INIT.	DATE							

DocuSigned by:  
Natasha R. Simmons  
4/23/2018  
DATE  
SIG. INVENTORY NO. 10-0617 T2