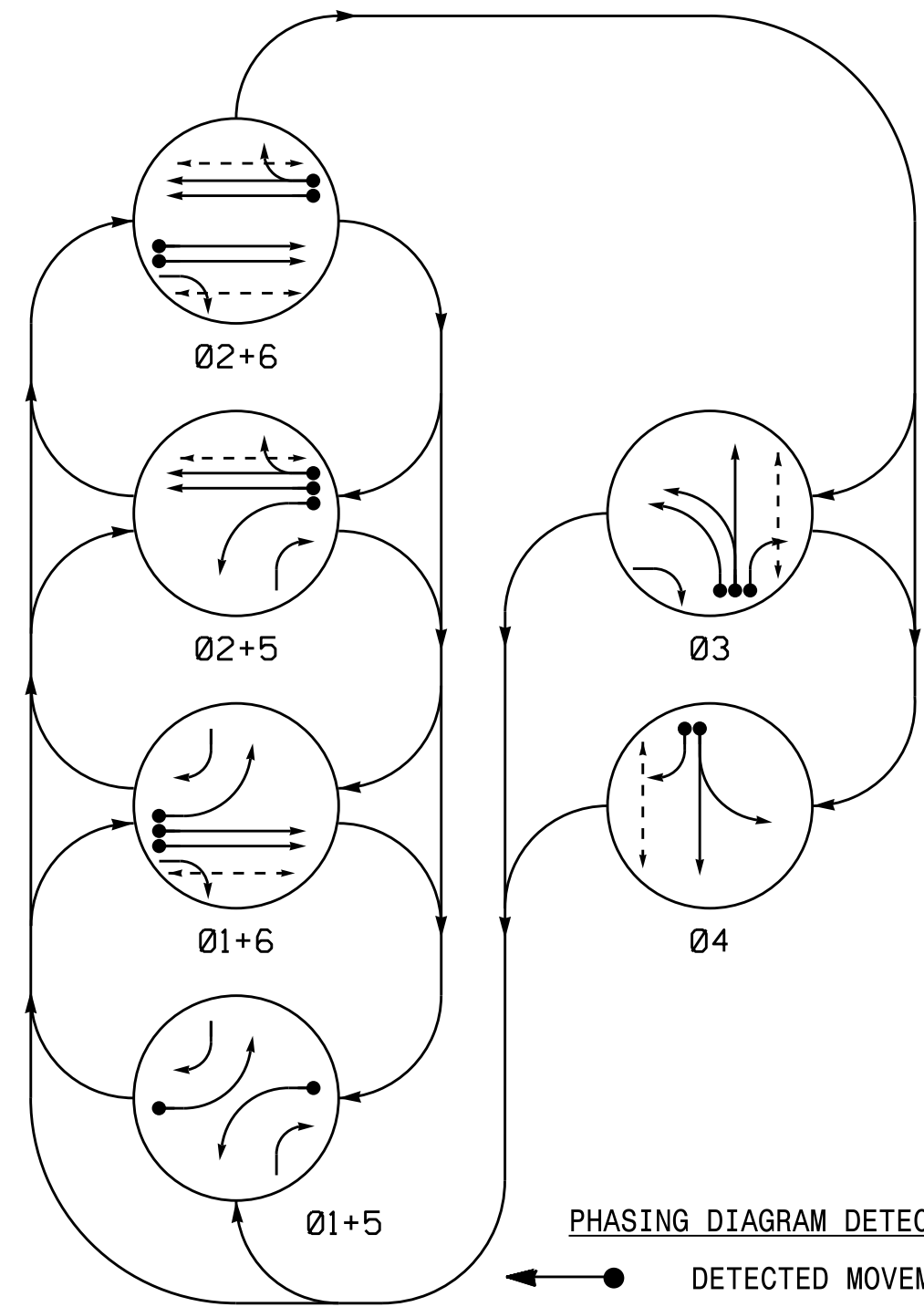


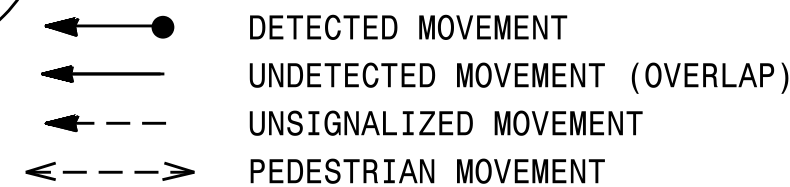
PHASING DIAGRAM



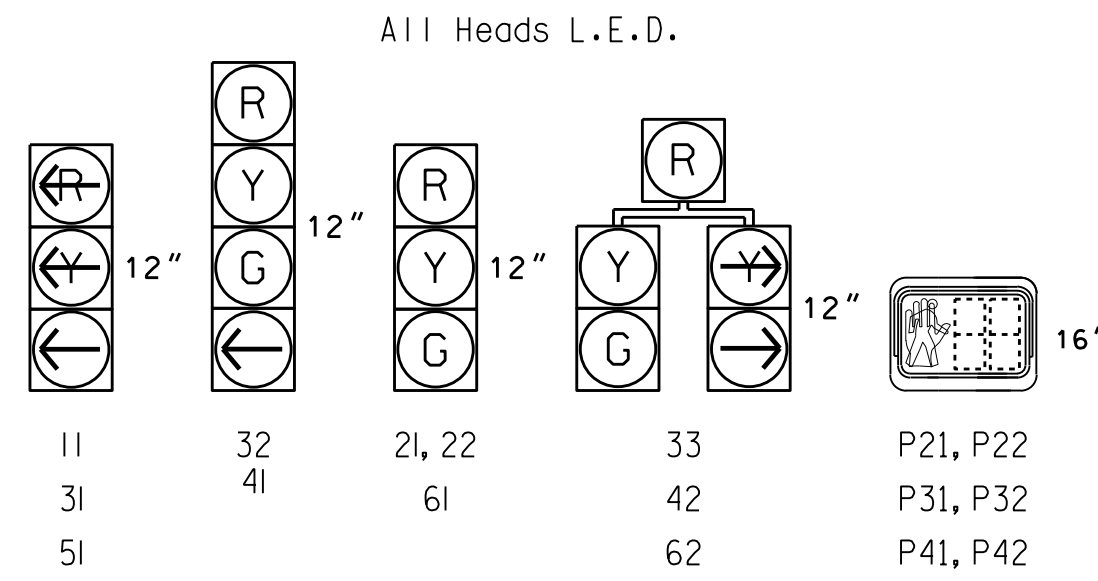
SIGNAL FACE	PHASE						FLASH
	01+5	01+6	02+5	02+6	03	04	
11	-	-	-	-	-	-	-
21, 22	R	R	G	G	R	R	Y
31	-	-	-	-	-	-	-
32	R	R	R	R	G	R	R
33	R	R	R	R	G	R	R
41	R	R	R	R	R	G	R
42	R	R	R	R	R	G	R
51	-	-	-	-	-	-	-
61	R	G	R	G	R	R	Y
62	R	G	R	G	R	R	Y
P21, P22	DW	DW	W	W	DW	DW	DRK
P31, P32	DW	DW	DW	DW	W	DW	DRK
P41, P42	DW	DW	DW	DW	W	DW	DRK
P61, P62	DW	W	DW	W	DW	DW	DRK

W - Walk
DW - Don't Walk
DRK - Dark

PHASING DIAGRAM DETECTION LEGEND



SIGNAL FACE I.D.



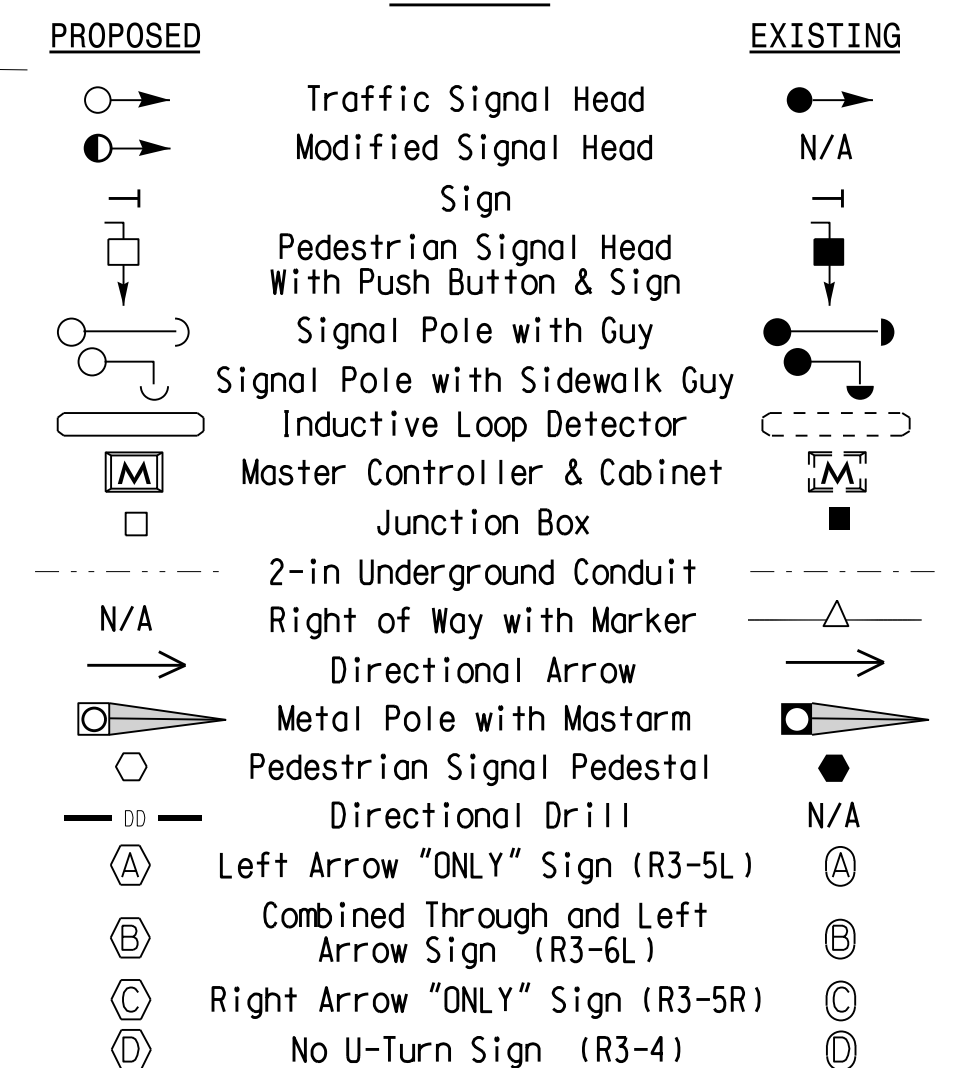
LOOP	SIZE (FT)	INDUCTIVE LOOPS			DETECTOR PROGRAMMING							
		DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	Y	1	Y	Y	-	-	3	-	-
2A	6X6	270	EXIST	-	2	Y	Y	-	-	-	-	-
2B	6X6	270	EXIST	-	2	Y	Y	-	-	-	-	-
3A	6X40	+5	2-4-2	-	3	Y	Y	-	-	3	-	-
3B	6X40	+5	2-4-2	-	3	Y	Y	-	-	-	-	-
3C	6X40	+5	2-4-2	-	3	Y	Y	-	-	15	-	-
4A	6X40	+5	2-4-2	-	4	Y	Y	-	-	3	-	-
4B	6X40	+5	2-4-2	-	4	Y	Y	-	-	15	-	-
5A	6X40	+5	2-4-2	Y	5	Y	Y	-	-	3	-	-
6A	6X6	240	5	Y	6	Y	Y	-	-	-	-	-
6B	6X6	240	5	Y	6	Y	Y	-	-	-	-	-
SO1	6X6	+200	4	Y	-	-	-	-	-	-	Y	-
SO2	6X6	+200	4	Y	-	-	-	-	-	-	Y	-

6 Phase Fully Actuated US 441 Bus./Main Street (Franklin CBD)

NOTES

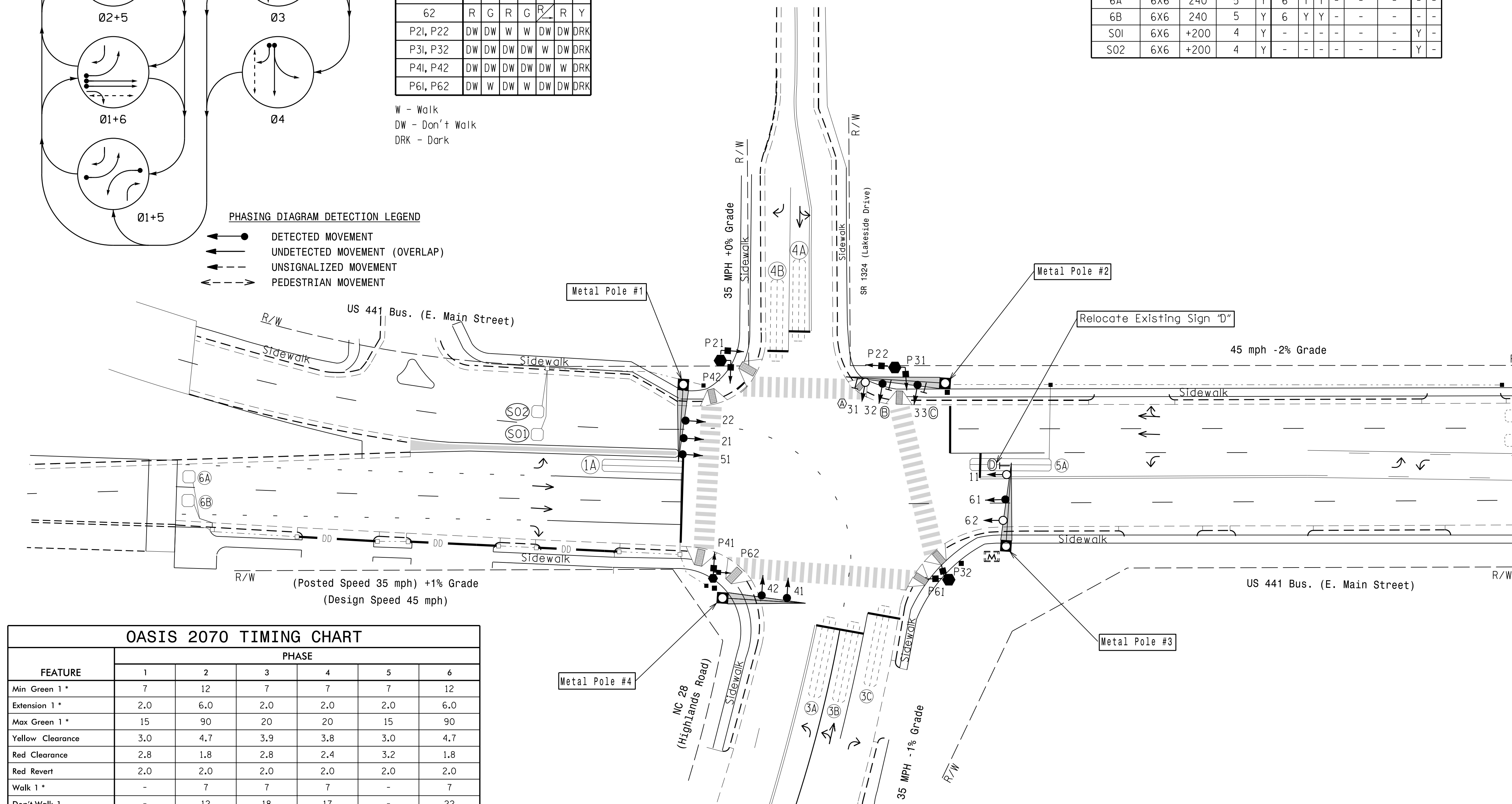
- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Relocate existing "No U-Turn" Sign "D".
- Set all detector units to presence mode.
- 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: Master Asset # 1411, Controller Asset # 0669.

LEGEND



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 *	15	90	20	20	15	90
Yellow Clearance	3.0	4.7	3.9	3.8	3.0	4.7
Red Clearance	2.8	1.8	2.8	2.4	3.2	1.8
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	7	7	7	-	7
Don't Walk 1	-	12	18	17	-	22
Seconds Per Actuation *	-	2.0	-	-	-	1.5
Max Variable Initial *	-	31	-	-	-	28
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 Design

Prepared In the Offices of:

 TRANSPORTATION MOBILITY AND SAFETY SOLUTIONS, INC.
 ENGINEERS OF TRANSPORTATION SIGNAL DESIGN SECTION
 750 N. Greenfield Pkwy, Garner, NC 27529

US 441 Bus. (E. Main Street) at NC 28 (Highlands Road) / SR 1324 (Lakeside Drive)

Division 14 Macon County Franklin

PLAN DATE: February 2016 REVIEWED BY: T. Williams
 PREPARED BY: M. Mahbooba REVIEWED BY:

REVISIONS: INIT. DATE

SCALE: 1"=30'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 024393
 TIMOTHY J. WILLIAMS
 3/1/2016
 DATE
 SIG. INVENTORY NO. 14-0669

01-14-2016 10:33
 R:\MTC\Projects\14-0669\Signal\14-0669_Sig.dwg, 20160301.dgn
 mmb0000