

PHASING DIAGRAM

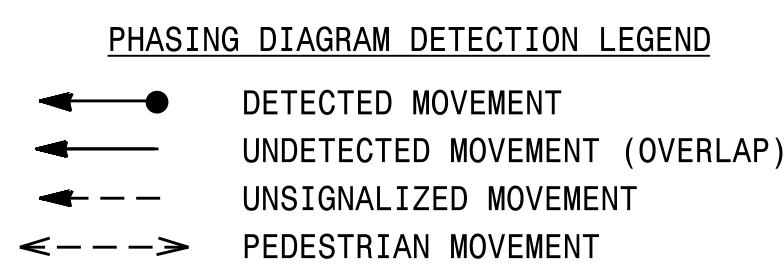
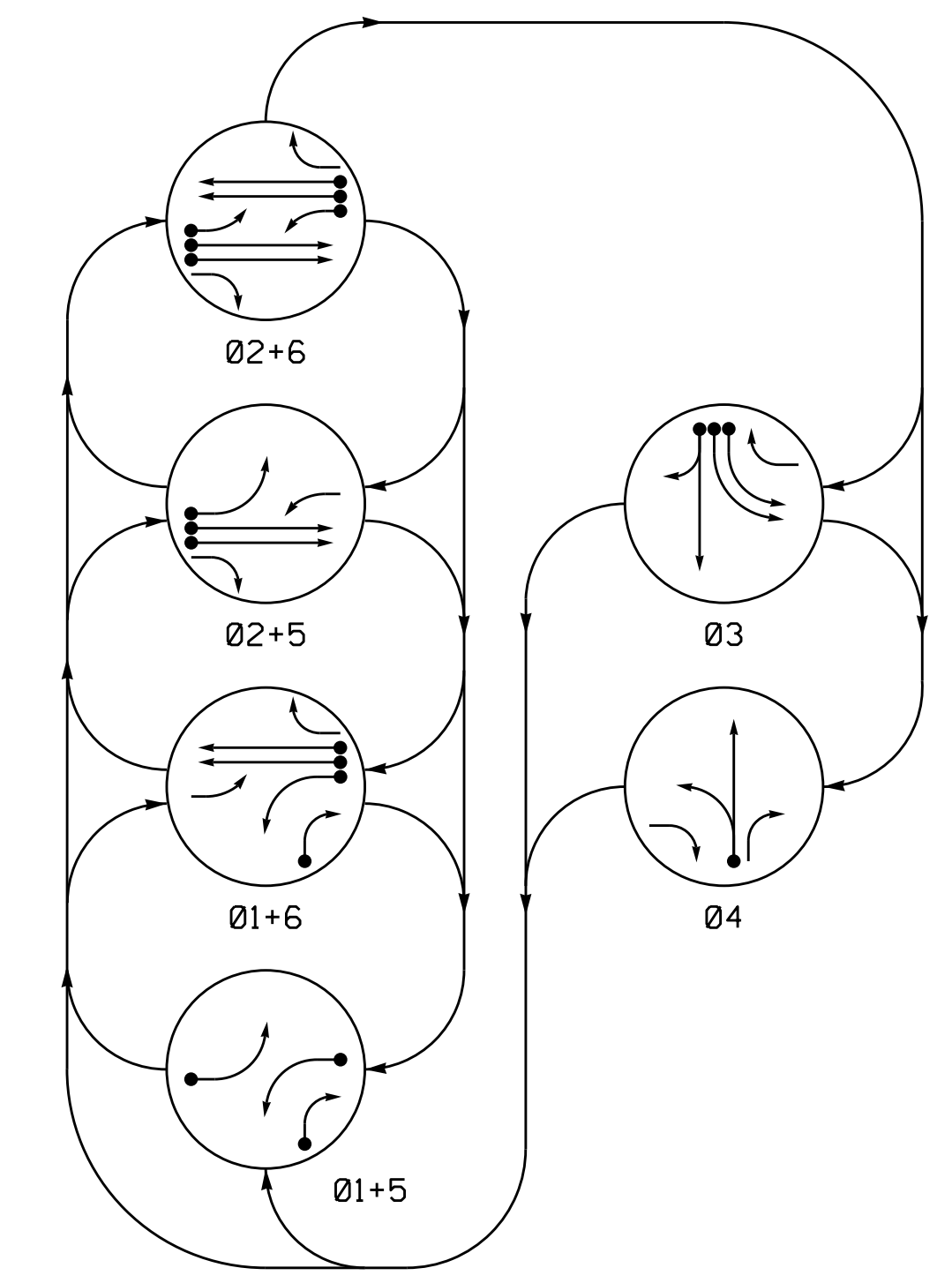
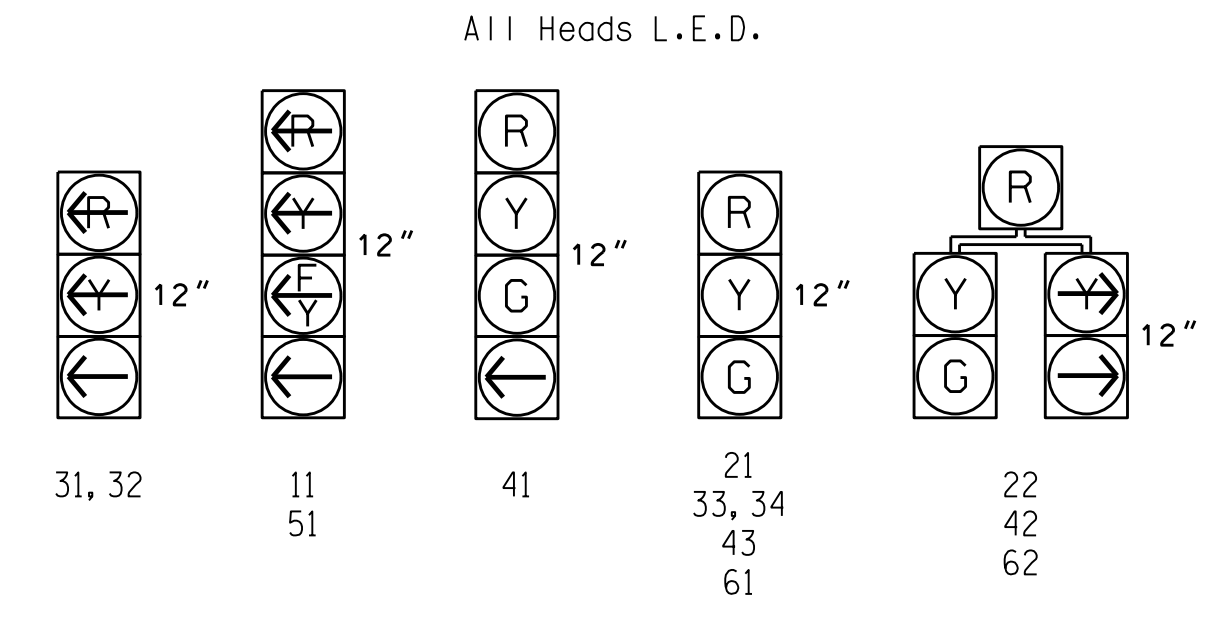


TABLE OF OPERATION

SIGNAL FACE	PHASE						F. TYPE
	01+5	02+5	02+6	03	04	05	
11	←	←	←	←	←	←	Y
21	R	R	G	G	R	R	Y
22	R	R	G	G	R	R	Y
31, 32	←	←	←	←	←	←	Y
33, 34	R	R	R	R	G	R	R
41	R	R	R	R	R	G	R
42	R	R	R	R	R	G	R
43	R	R	R	R	R	G	R
51	←	←	←	←	←	←	Y
61	R	G	R	G	R	R	Y
62	R	G	R	G	R	R	Y

SIGNAL FACE I.D.



LOOP & DETECTOR INSTALLATION CHART

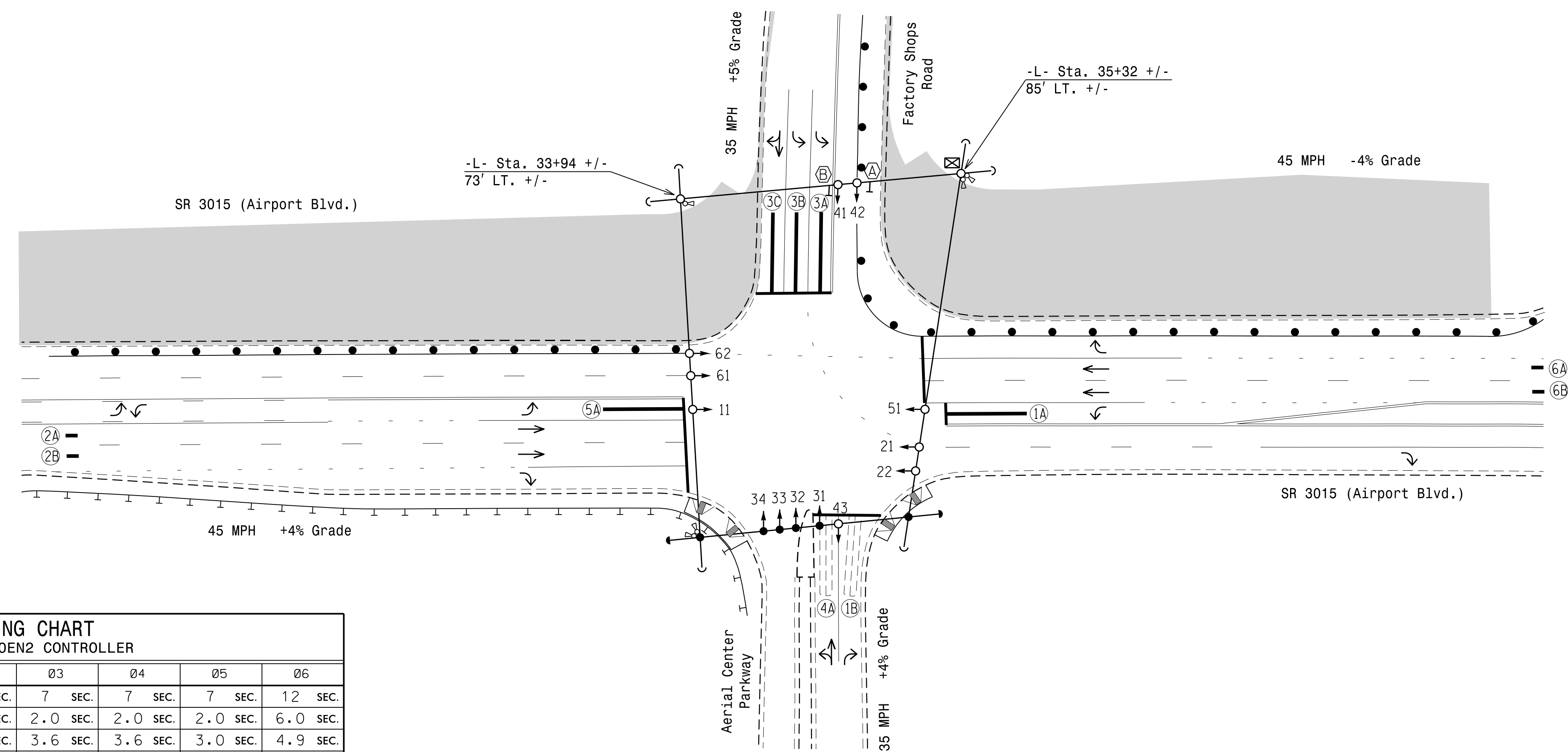
LOOP / ZONE NO.	SIZE (ft)	DIST. FROM STOPBAR (ft)	INDUCTIVE LOOPS			DETECTOR UNITS						
			TURNS	NEW	EXISTING	NEMA PHASE	NEW	EXISTING	TIMING		ADDED INITIAL	DET. TYPE
									FEATURE	TIME (sec)		
1A*	6X40	0	*	X	-	1	*	-	DELAY	15	-	S
1B	6X40	0	2-4-2	-	X	1	X	-	DELAY	15	-	S
2A*	6X6	300	*	X	-	2	*	-	-	-	X	N
2B*	6X6	300	*	X	-	2	*	-	-	-	X	N
3A*	6X40	0	*	X	-	3	*	-	DELAY	3	-	S
3B*	6X40	0	*	X	-	3	*	-	-	-	-	S
3C*	6X40	0	*	X	-	3	*	-	DELAY	10	-	S
4A	6X40	0	2-4-2	-	X	4	X	-	-	-	-	S
5A*	6X40	0	*	X	-	5	*	-	DELAY	15	-	S
6A*	6X6	300	*	X	-	6	*	-	-	-	X	N
6B*	6X6	300	*	X	-	6	*	-	-	-	X	N

* Video detection zone.

6 Phase Fully Actuated (Cary Signal System)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- 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.
- 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.
- Cary signal system data: Fiber Channel #: 26.
- This intersection features a video detection system. Shown locations of detectors are conceptual only. Refer to the manufacturer's guidelines for optimal detector placement.

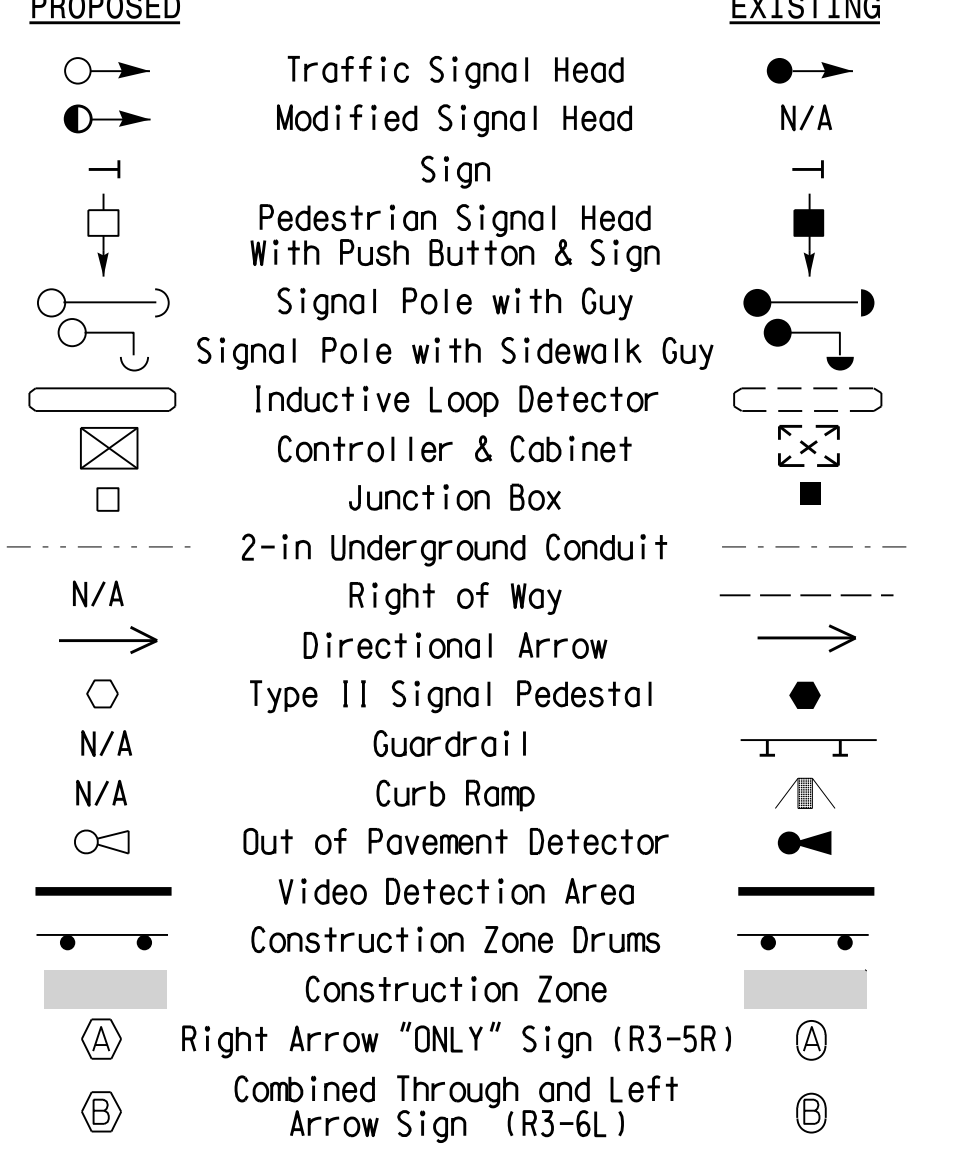


TIMING CHART
ASC/3-2070EN2 CONTROLLER

PHASE	01	02	03	04	05	06
MINIMUM GREEN *	7 SEC.	12 SEC.	7 SEC.	7 SEC.	7 SEC.	12 SEC.
VEHICLE EXT. *	2.0 SEC.	6.0 SEC.	2.0 SEC.	2.0 SEC.	2.0 SEC.	6.0 SEC.
YELLOW CHANGE INT.	3.0 SEC.	4.9 SEC.	3.6 SEC.	3.6 SEC.	3.0 SEC.	4.9 SEC.
RED CLEARANCE	2.9 SEC.	1.7 SEC.	2.6 SEC.	1.8 SEC.	2.9 SEC.	1.7 SEC.
MAX. I *	20 SEC.	120 SEC.	30 SEC.	20 SEC.	15 SEC.	120 SEC.
RECALL POSITION	NONE	MIN. RECALL	NONE	NONE	NONE	MIN. RECALL
LOCK DET.	OFF	ON	OFF	OFF	OFF	ON
WALK *	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.
PED. CLEAR	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.
VOLUME DENSITY	OFF	ON	OFF	OFF	OFF	ON
ACTUATION B4 ADD *	- VEH.	- VEH.	- VEH.	- VEH.	- VEH.	- VEH.
SEC. PER ACTUATION *	- SEC.	1.5 SEC.	- SEC.	- SEC.	- SEC.	1.5 SEC.
MAX. INITIAL *	- SEC.	34 SEC.	- SEC.	- SEC.	- SEC.	34 SEC.
TIME B4 REDUCTION *	- SEC.	15 SEC.	- SEC.	- SEC.	- SEC.	15 SEC.
TIME TO REDUCE *	- SEC.	45 SEC.	- SEC.	- SEC.	- SEC.	45 SEC.
MINIMUM GAP	- SEC.	3.0 SEC.	- SEC.	- SEC.	- SEC.	3.0 SEC.
DUAL ENTRY	OFF	OFF	OFF	OFF	OFF	OFF
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.

LEGEND



Signal Upgrade - Temporary Design 1 (TMP Phase I, Step A)

SR 3015 (Airport Blvd.) at Factory Shops Road/Aerial Center Parkway

Division 5 Wake County Morrisville

PLAN DATE: March 2019 REVIEWED BY: J.A. Lohr

PREPARED BY: J.A. Lohr REVIEWED BY:

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE 0 40 1"=40'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL ROBERT J. JENSEN ENGINEER 026486

7/24/2019

SIG. INVENTORY NO. 05-172611

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