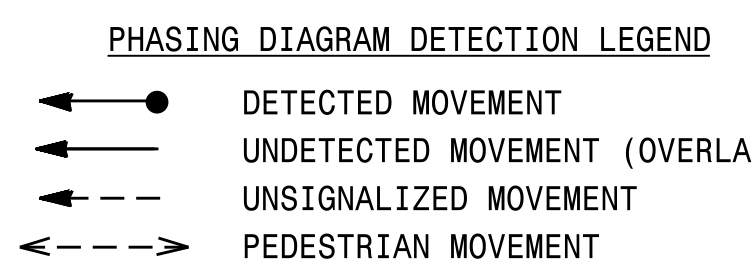
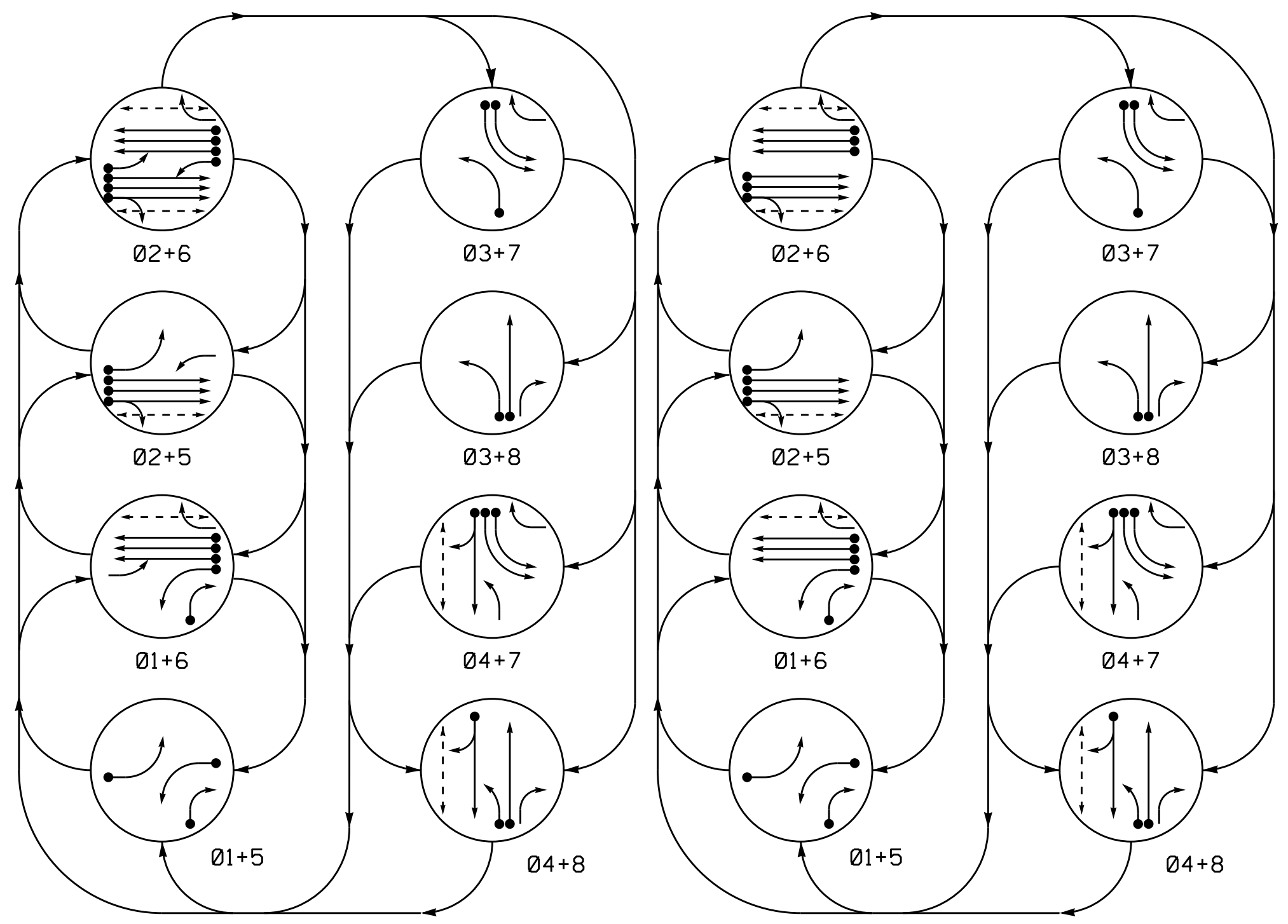


DEFAULT PHASING DIAGRAM

ALTERNATE PHASING DIAGRAM



**DEFAULT TABLE OF OPERATION**

SIGNAL FACE	PHASE							
	01+5	02+6	03+7	04+8	05+9	06+0	07+1	08+2
11	---	---	---	---	---	---	---	---
21, 22, 23	R	R	G	G	R	R	R	Y
31	R	R	R	R	---	---	---	---
41, 42, 43	R	R	R	R	R	G	G	R
51	---	---	---	---	---	---	---	---
61, 62	R	G	R	G	R	R	R	Y
63	R	G	R	G	R	R	R	Y
71, 72	R	R	R	R	---	---	---	---
81, 83	R	R	R	R	G	R	G	R
82	R	R	R	R	G	R	G	R
P21, P22	DW	DW	W	W	DW	DW	DRK	
P41, P42	DW	DW	DW	DW	DW	W	DRK	
P61, P62	DW	W	DW	W	DW	DW	DRK	

**ALTERNATE TABLE OF OPERATION**

SIGNAL FACE	PHASE							
	01+5	02+6	03+7	04+8	05+9	06+0	07+1	08+2
11	---	---	---	---	---	---	---	---
21, 22, 23	R	R	G	G	R	R	R	Y
31	R	R	R	R	---	---	---	---
41, 42, 43	R	R	R	R	R	G	G	R
51	---	---	---	---	---	---	---	---
61, 62	R	G	R	G	R	R	R	Y
63	R	G	R	G	R	R	R	Y
71, 72	R	R	R	R	---	---	---	---
81, 83	R	R	R	R	R	G	R	R
82	R	R	R	R	R	G	R	R
P21, P22	DW	DW	W	W	DW	DW	DRK	
P41, P42	DW	DW	DW	DW	DW	W	DRK	
P61, P62	DW	W	DW	W	DW	DW	DRK	

**LOOP & DETECTOR INSTALLATION CHART**  
ASC/3-2070EN2 CONTROLLER w/ TS-2 CABINET

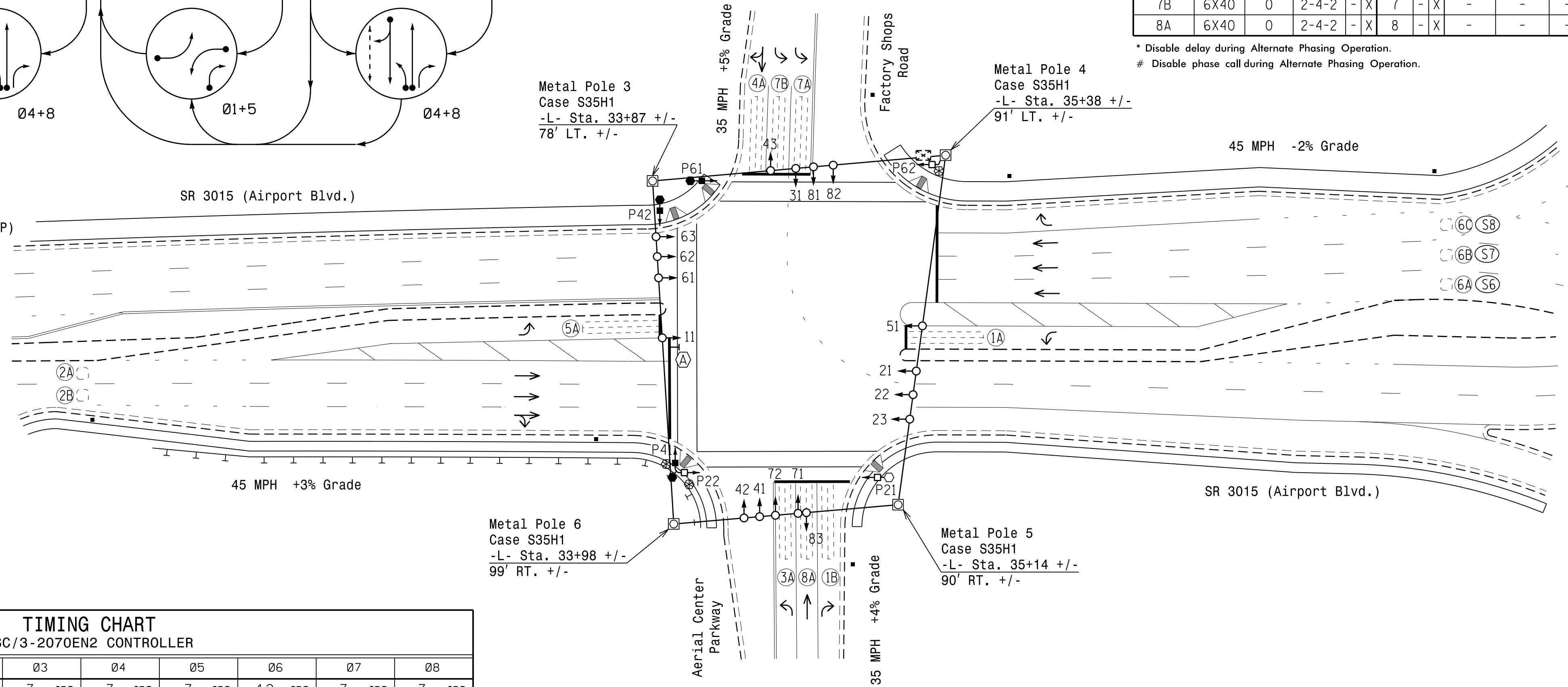
LOOP NO.	SIZE (ft)	DIST. FROM STOPBAR (ft)	TURNS	INDUCTIVE LOOPS		DETECTOR UNITS					
				NEW	EXISTING	TIMING		ADDED INITIAL	DET. TYPE		
						FEATURE	TIME (sec)				
1A	6X40	0	2-4-2	-	X	1	-	X	15*	-	S
1B	6X40	0	2-4-2	-	X	1	-	X	15	-	S
2A	6X6	300	5	-	X	2	-	X	-	X	N
2B	6X6	300	5	-	X	2	-	X	-	X	N
3A	6X40	0	2-4-2	-	X	3	-	X	15	-	S
4A	6X40	0	2-4-2	-	X	4	-	X	10	-	S
5A	6X40	0	2-4-2	-	X	5	-	X	15*	-	S
6A/S6	6X6	260	5	-	X	6	-	X	-	X	N
6B/S7	6X6	260	5	-	X	6	-	X	-	X	N
6C/S8	6X6	260	5	-	X	6	-	X	-	X	N
7A	6X40	0	2-4-2	-	X	7	-	X	3	-	S
7B	6X40	0	2-4-2	-	X	7	-	X	-	-	S
8A	6X40	0	2-4-2	-	X	8	-	X	-	-	S

\* Disable delay during Alternate Phasing Operation.  
# Disable phase call during Alternate Phasing Operation.

8 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.
- Phase 3 and/or phase 7 may be lagged.
- 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.
- The Division (Town) Traffic Engineer will determine the hours of use for each phasing plan.
- 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.

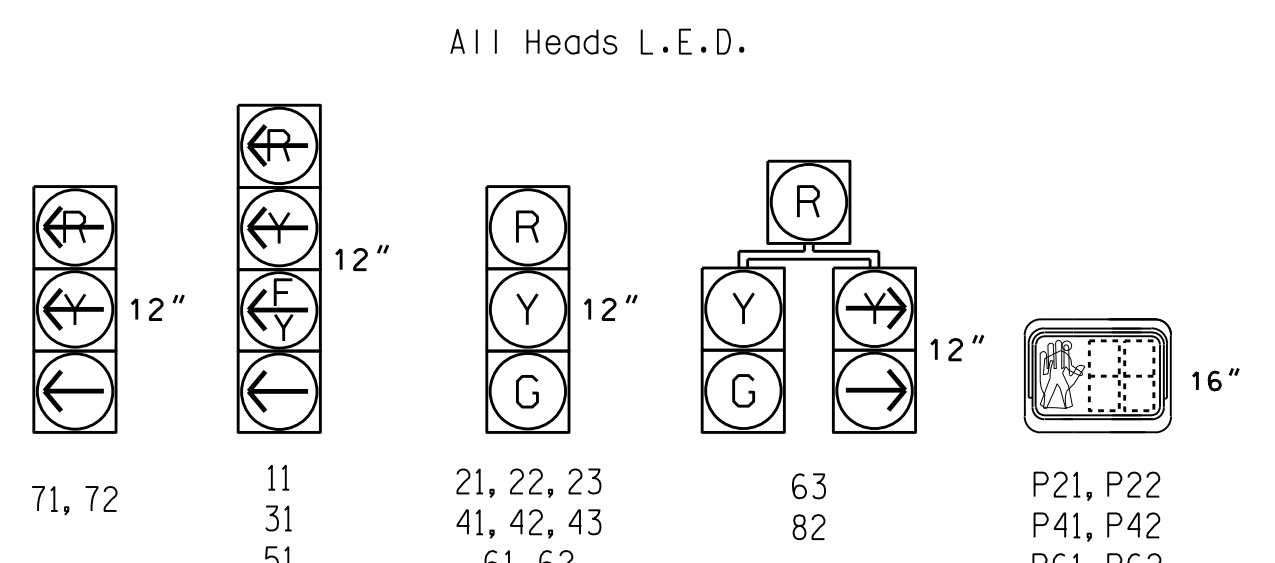


**TIMING CHART**  
ASC/3-2070EN2 CONTROLLER

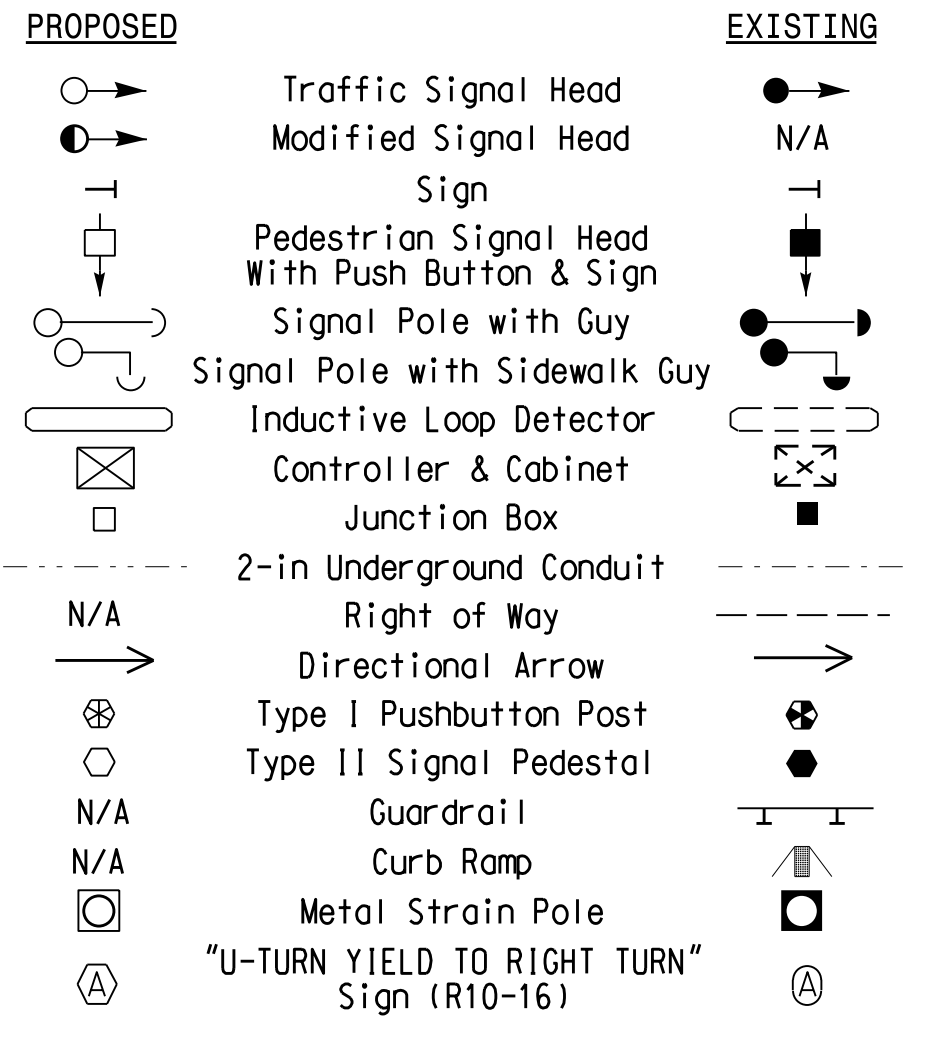
PHASE	01	02	03	04	05	06	07	08
MINIMUM GREEN *	7 SEC.	12 SEC.	7 SEC.	7 SEC.	7 SEC.	12 SEC.	7 SEC.	7 SEC.
VEHICLE EXT. *	2.0 SEC.	6.0 SEC.	2.0 SEC.	2.0 SEC.	2.0 SEC.	5.0 SEC.	2.0 SEC.	2.0 SEC.
YELLOW CHANGE INT.	3.0 SEC.	4.8 SEC.	3.0 SEC.	3.6 SEC.	3.0 SEC.	4.8 SEC.	3.0 SEC.	3.6 SEC.
RED CLEARANCE	3.2 SEC.	2.0 SEC.	3.4 SEC.	2.9 SEC.	3.3 SEC.	2.0 SEC.	3.6 SEC.	2.9 SEC.
MAX. I *	20 SEC.	120 SEC.	20 SEC.	30 SEC.	15 SEC.	120 SEC.	20 SEC.	30 SEC.
RECALL POSITION	NONE	MIN. RECALL	NONE	NONE	NONE	MIN. RECALL	NONE	NONE
LOCK DET.	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
WALK *	- SEC.	7 SEC.	- SEC.	7 SEC.	- SEC.	7 SEC.	- SEC.	- SEC.
PED. CLEAR	- SEC.	21 SEC.	- SEC.	30 SEC.	- SEC.	22 SEC.	- SEC.	- SEC.
VOLUME DENSITY	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
ACTUATION B4 ADD *	- VEH.	- VEH.	- VEH.	- VEH.	- VEH.	- VEH.	- VEH.	- VEH.
SEC. PER ACTUATION *	- SEC.	1.0 SEC.	- SEC.	- SEC.	- SEC.	1.0 SEC.	- SEC.	- SEC.
MAX. INITIAL *	- SEC.	34 SEC.	- SEC.	- SEC.	- SEC.	30 SEC.	- SEC.	- SEC.
TIME B4 REDUCTION *	- SEC.	20 SEC.	- SEC.	- SEC.	- SEC.	20 SEC.	- SEC.	- SEC.
TIME TO REDUCE *	- SEC.	40 SEC.	- SEC.	- SEC.	- SEC.	40 SEC.	- SEC.	- SEC.
MINIMUM GAP	- SEC.	3.0 SEC.	- SEC.	- SEC.	- SEC.	3.0 SEC.	- SEC.	- SEC.
DUAL ENTRY	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
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 FACE I.D.



LEGEND



Signal Upgrade - Final Design

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:

SCALE 0 40 1"=40'

750 N. Greenfield Pkwy, Garner, NC 27529

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SEAL NORTH CAROLINA PROFESSIONAL ENGINEER ROBERT J. ZIEGLER

7/24/2019 DATE

SIG. INVENTORY NO. 05-1726