

8 Phase Fully Actuated w/ RR Preemption Fayetteville Signal System

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. This location contains railroad preemption phasing. Do not program signal for late night flashing operation.
3. Phase 1 and/or phase 5 may be lagged.
4. Phase 3 and/or phase 7 may be lagged.
5. Set all detector units to presence mode.
6. 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.
7. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
8. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
9. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
10. Pavement markings are existing.
11. Ensure flashing operation does not alter operation of blackout signs.
12. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

LEGEND

PROPOSED	EXISTING
	N/A

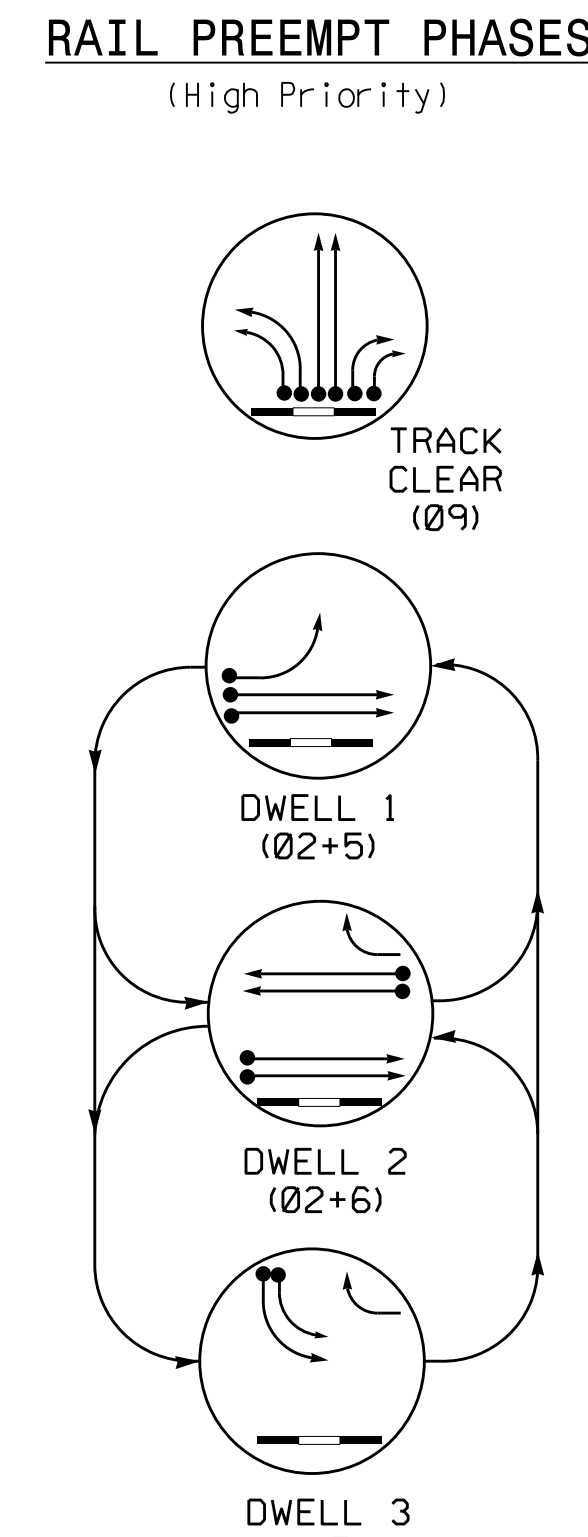
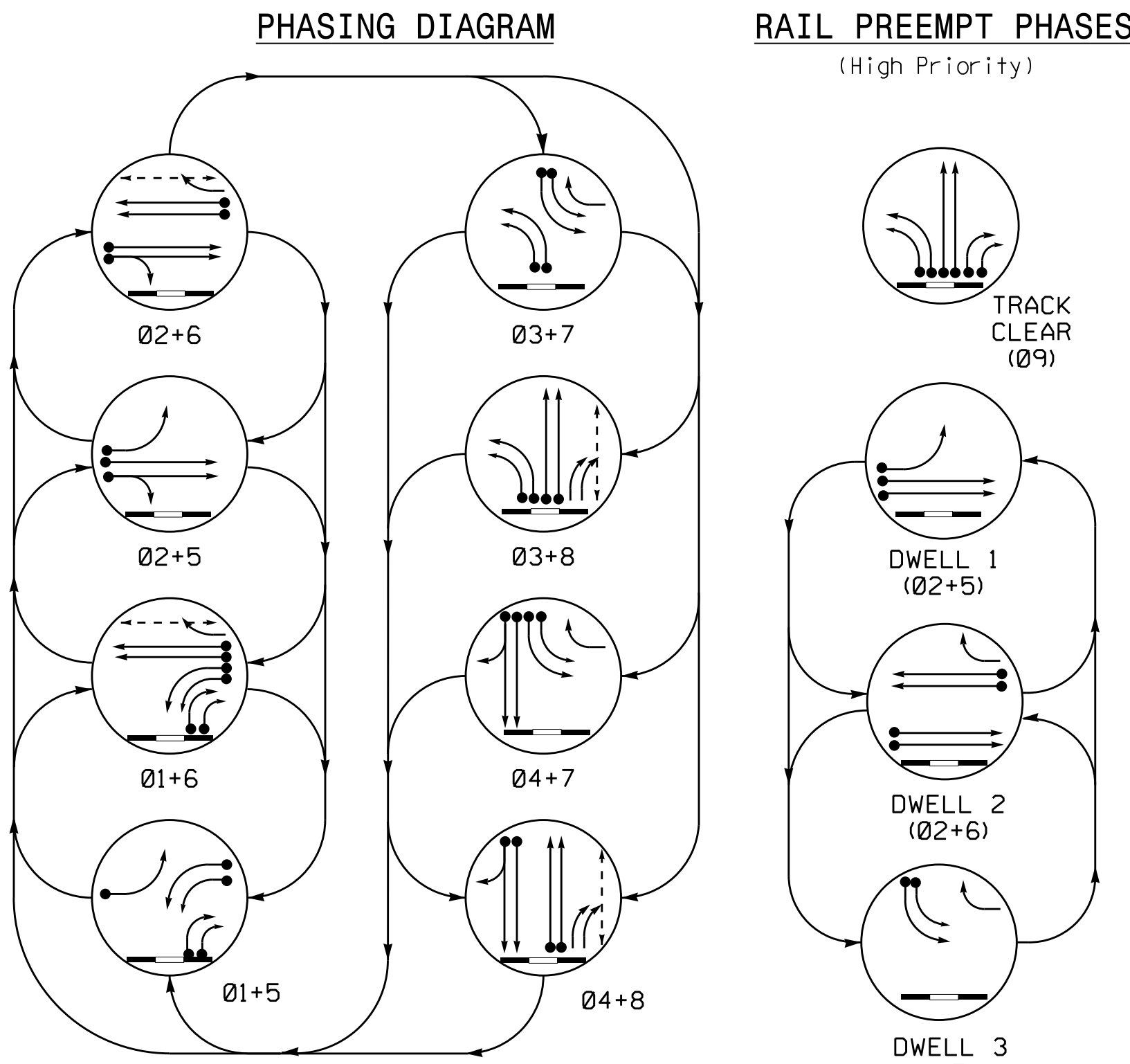


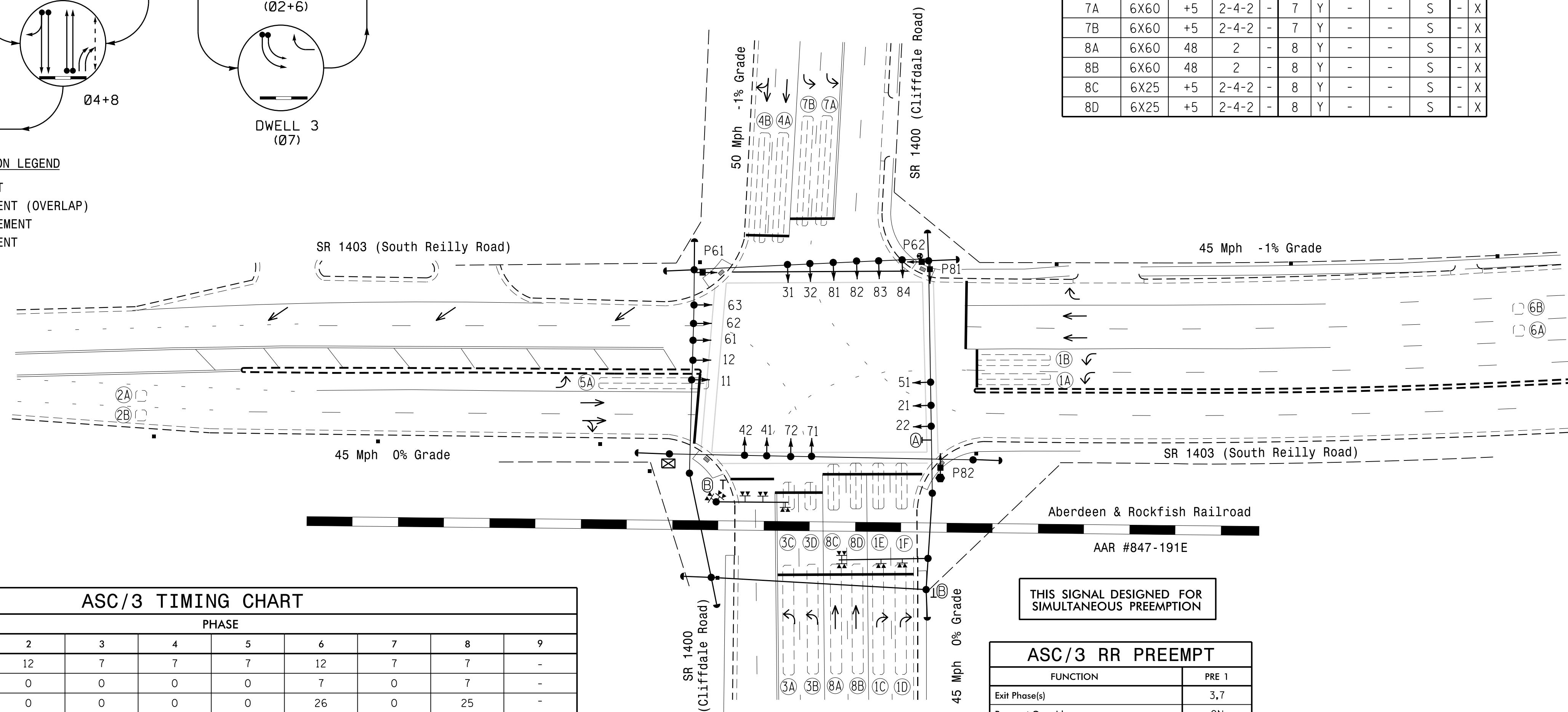
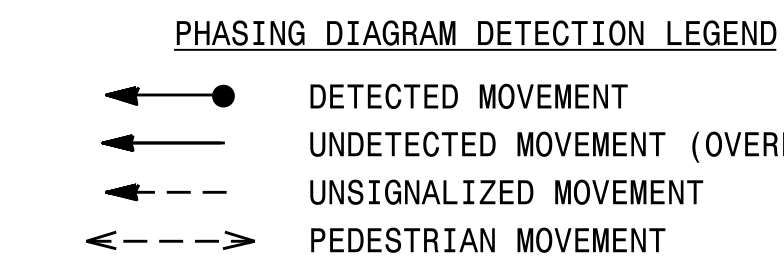
TABLE OF OPERATION

SIGNAL FACE	PHASE															
	Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø3+7	Ø3+8	Ø4+7	Ø4+8	RR1	RR2	RR3	FLASH	RR1	RR2	RR3	FLASH
11, 12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
21, 22	R	R	G	R	R	R	R	R	R	G	R	R	Y	Y	Y	Y
31, 32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
41, 42	R	R	R	R	R	R	G	G	R	R	R	R	R	R	R	R
51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
61, 62	R	G	R	G	R	R	R	R	R	R	R	G	R	Y	Y	Y
63	R	Y	R	Y	—	—	—	—	—	—	—	—	—	—	—	—
71, 72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
81, 82	R	R	R	R	G	R	G	G	R	R	R	R	R	R	R	R
83, 84	—	—	R	R	Y	R	Y	—	R	R	R	R	—	—	—	—
P61, P62	DW	W	DW	W	DW	DW	DW	DW	DW	DW	DW	DRK	DRK	DRK	DRK	DRK
P81, P82	DW	DW	DW	DW	W	DW	W	DW	DW	DW	DW	DRK	DRK	DRK	DRK	DRK
Sign A	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	ON

* See Note 11

ASC/3 DETECTOR INSTALLATION CHART

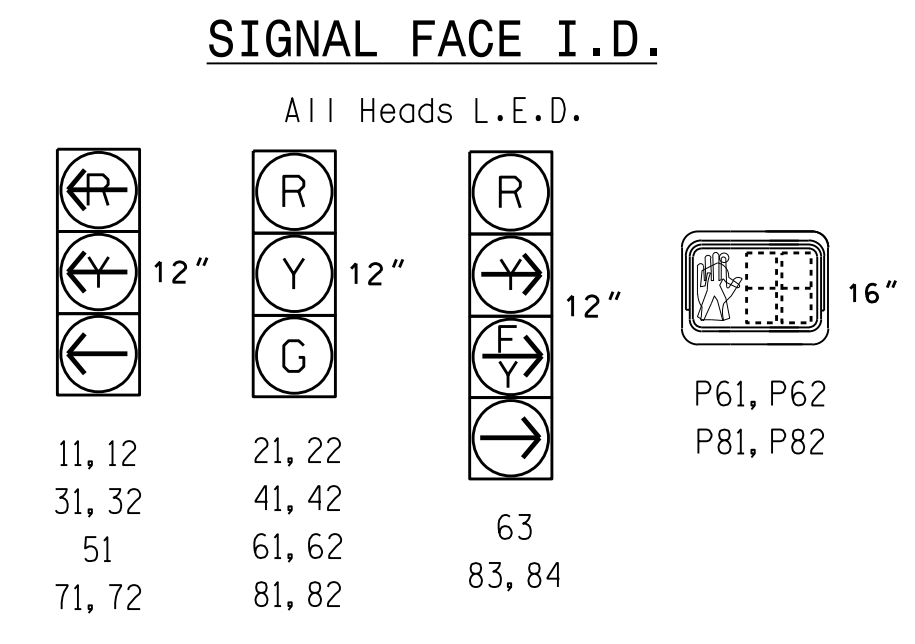
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING				SYSTEM LOOP	NEW CARD	
					PHASE	CALLING	EXTEND TIME	DELAY TIME			TYPE
1A	6X40	0	2-4-2	—	1	Y	—	—	S	—	X
1B	6X40	0	2-4-2	—	1	Y	—	—	S	—	X
1C	6X60	48	2	—	1	Y	—	10	S	—	X
1D	6X60	48	2	—	1	Y	—	10	S	—	X
1E	6X25	+5	2-4-2	—	1	Y	—	10	S	—	X
1F	6X25	+5	2-4-2	—	1	Y	—	10	S	—	X
2A	6X6	300	4	—	2	Y	—	—	N	—	X
2B	6X6	300	4	—	2	Y	—	—	N	—	X
3A	6X60	48	2	—	3	Y	—	—	S	—	X
3B	6X60	48	2	—	3	Y	—	—	S	—	X
3C	6X15	+5	2-4-2	—	3	Y	—	—	S	—	X
3D	6X15	+5	2-4-2	—	3	Y	—	—	S	—	X
4A	6X60	+5	2-4-2	—	4	Y	—	—	S	—	X
4B	6X60	+5	2-4-2	—	4	Y	—	—	S	—	X
5A	6X60	+5	2-4-2	—	5	Y	—	—	S	—	X
6A	6X6	300	5	—	6	Y	—	—	N	—	X
6B	6X6	300	5	—	6	Y	—	—	N	—	X
7A	6X60	+5	2-4-2	—	7	Y	—	—	S	—	X
7B	6X60	+5	2-4-2	—	7	Y	—	—	S	—	X
8A	6X60	48	2	—	8	Y	—	—	S	—	X
8B	6X60	48	2	—	8	Y	—	—	S	—	X
8C	6X25	+5	2-4-2	—	8	Y	—	—	S	—	X
8D	6X25	+5	2-4-2	—	8	Y	—	—	S	—	X



ASC/3 TIMING CHART

FEATURE	PHASE								
	1	2	3	4	5	6	7	8	9
Min Green *	7	12	7	7	7	12	7	7	—
Walk *	0	0	0	0	0	7	0	7	—
Ped Clear	0	0	0	0	0	26	0	25	—
Veh. Extension *	2.0	6.0	2.0	2.0	1.0	6.0	1.0	2.0	—
Max 1 *	20	90	15	20	15	90	30	20	—
Yellow	3.0	4.6	3.0	4.9	3.0	4.6	3.0	4.9	4.9
Red Clear	3.8	2.0	3.3	1.6	3.2	2.0	3.7	1.6	1.6
Actuations B4 Add *	—	0	—	—	—	0	—	—	—
Seconds / Actuation *	—	1.5	—	—	—	1.5	—	—	—
Max Initial *	—	34	—	—	—	34	—	—	—
Time Before Reduction *	—	15	—	—	—	15	—	—	—
Time To Reduce *	—	30	—	—	—	30	—	—	—
Minimum Gap	—	3.0	—	—	—	3.0	—	—	—
Locking Detector	—	X	—	—	—	X	—	—	—
Recall Position	—	VEH. RECALL	—	—	—	VEH. RECALL	—	—	—
Dual Entry	—	—	—	—	—	—	—	—	—
Simultaneous Gap	X	X	X	X	X	X	X	X	X

* 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.



ASC/3 RR PREEMPT

FUNCTION	PRE 1
Exit Phase(s)	3,7
Preempt Override	ON
Delay Time	0
Ped Clear Through Yellow	Y
Terminate Phases	N
Track Clear Reserve	Y
Entrance Walk	1
Entrance Ped Clear	10
Entrance Min Green	1
Entrance Yellow Change	25.5*
Entrance Red Clear	25.5*
Track Clear Min Green	10
Track Clear Yellow Change	25.5*
Track Clear Red Clear	25.5*
Min Dwell Time	7
Exit Yellow Change	25.5*
Exit Red Clear	25.5*

* Allows normal phase times to be used.

Signal Upgrade

Prepared In the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

SR 1403 (S Reilly Road) at SR 1400 (Cliffdale Road)

Division 6 Cumberland County Fayetteville

PLAN DATE: January 2016 REVIEWED BY: JPG

PREPARED BY: Jeff Spence REVIEWED BY:

REVISIONS

INIT. DATE

SCALE: 1"=40'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL: JASON P. GALLAGHER, ENGINEER, No. 029904

10/4/2016

SIG. INVENTORY NO. 06-0364

04-001-2016-11-15
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