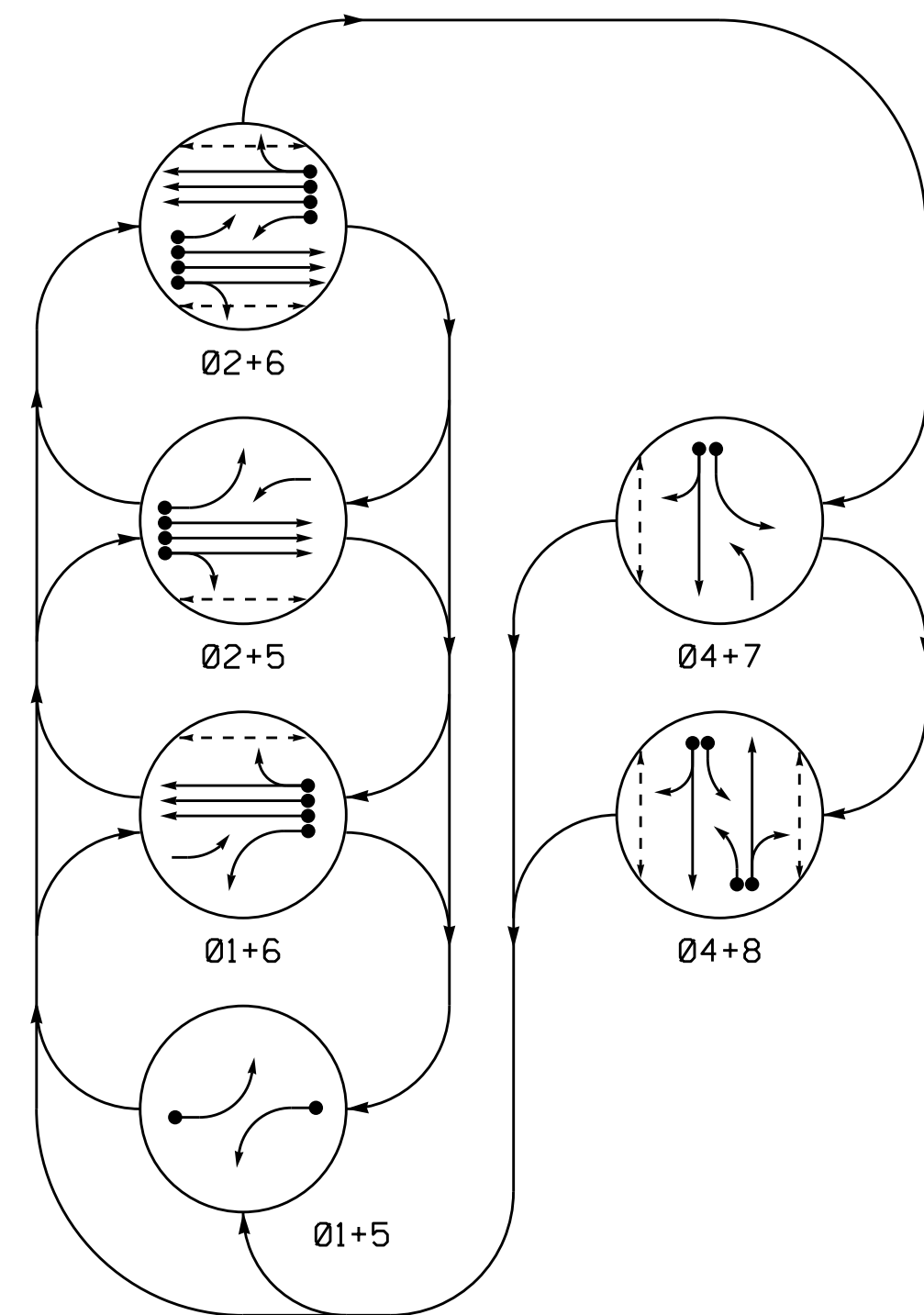
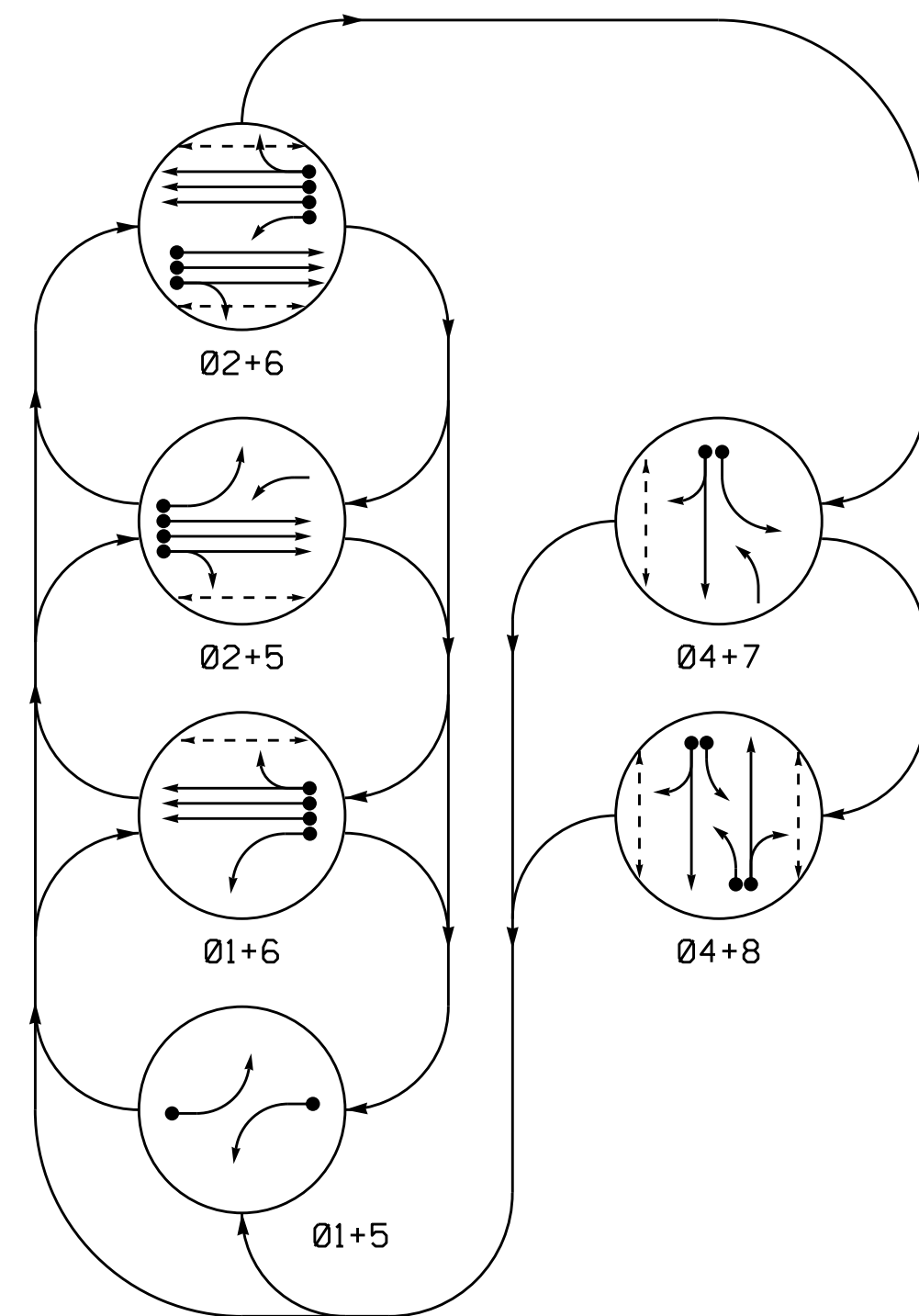


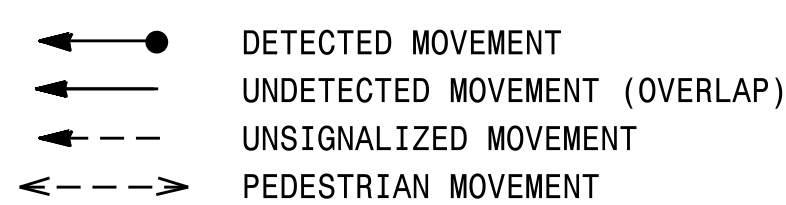
DEFAULT PHASING DIAGRAM



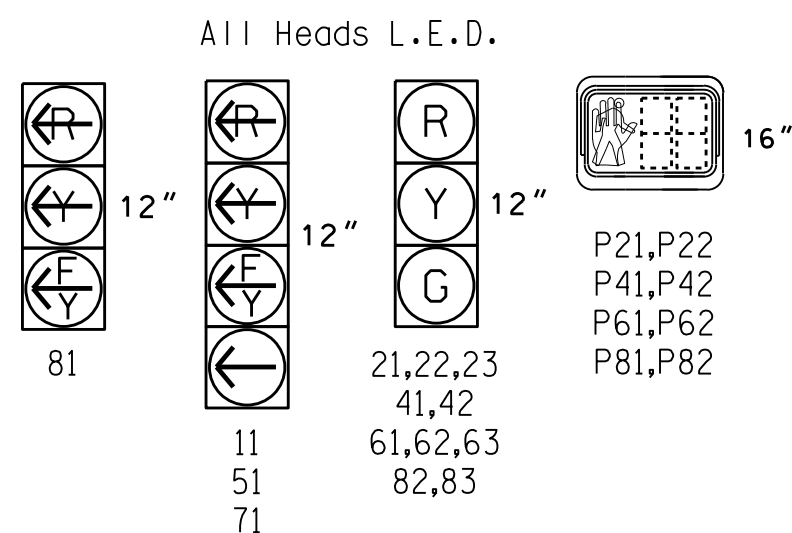
ALTERNATE PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND



SIGNAL FACE I.D.



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	04+7	04+8	F L A S H	P E D
11	←	←	←	←	←	←	←	←
21,22,23	R	R	G	G	R	R	Y	
41,42	R	R	R	R	G	G	R	
51	←	←	←	←	←	←	←	←
61,62,63	R	G	R	G	R	R	Y	
71	←	←	←	←	←	←	←	←
81	←	←	←	←	←	←	←	←
82,83	R	R	R	R	R	G	R	
P21,P22	DW	DW	W	W	DW	DW	DRK	
P41,P42	DW	DW	DW	DW	W	W	DRK	
P61,P62	DW	W	DW	W	DW	DW	DRK	
P81,P82	DW	DW	DW	DW	DW	W	DRK	

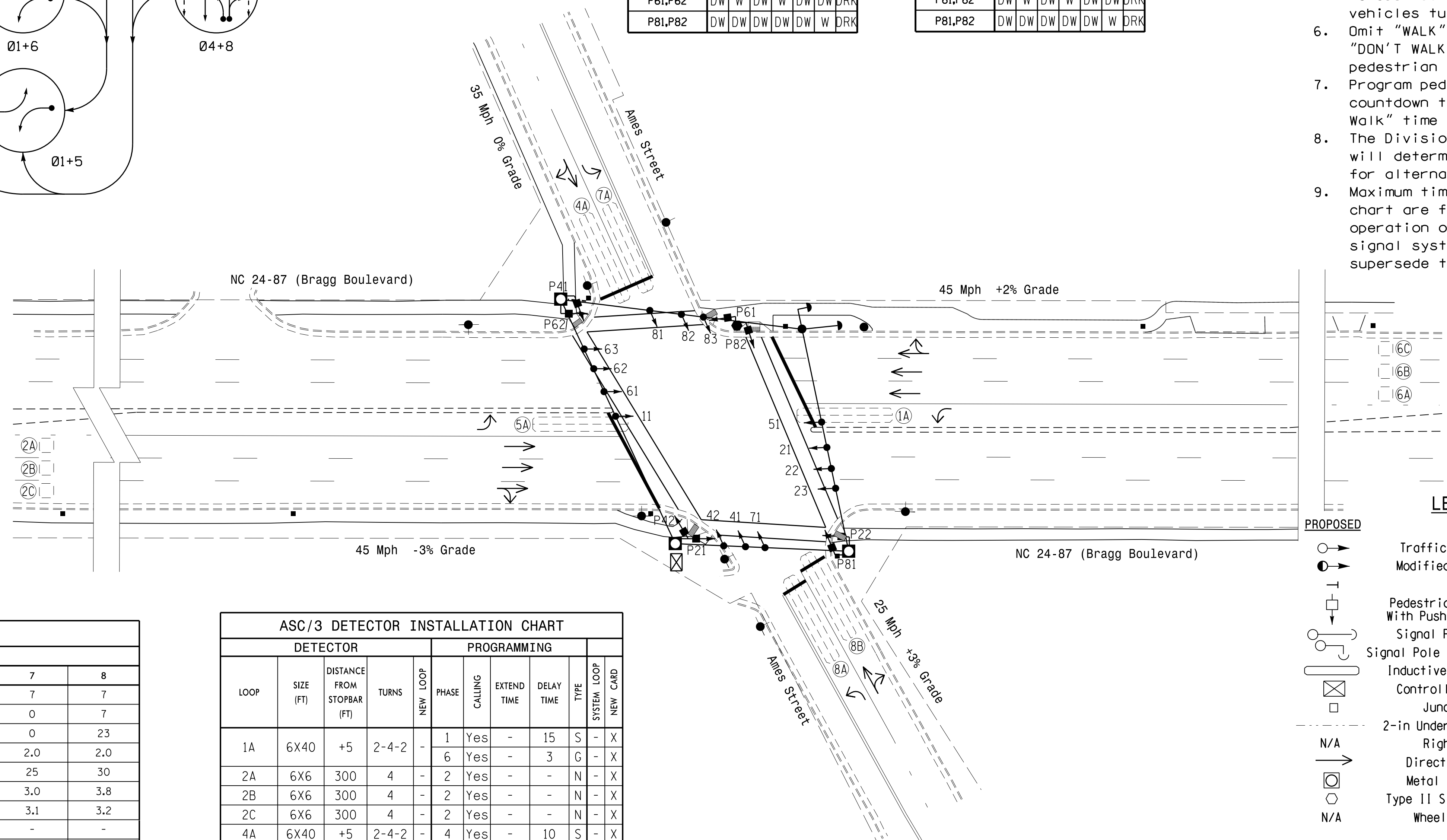
ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	04+7	04+8	F L A S H	P E D
11	←	←	←	←	←	←	←	←
21,22,23	R	R	G	G	R	R	Y	
41,42	R	R	R	R	G	G	R	
51	←	←	←	←	←	←	←	←
61,62,63	R	G	R	G	R	R	Y	
71	←	←	←	←	←	←	←	←
81	←	←	←	←	←	←	←	←
82,83	R	R	R	R	R	G	R	
P21,P22	DW	DW	W	W	DW	DW	DRK	
P41,P42	DW	DW	DW	DW	W	W	DRK	
P61,P62	DW	W	DW	W	DW	DW	DRK	
P81,P82	DW	DW	DW	DW	DW	W	DRK	

6 Phase Fully Actuated Fayetteville Signal System

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.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red. 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 Traffic Engineer will determine the hours of use for alternate phasing plan.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



ASC/3 TIMING CHART

FEATURE	PHASE							
	1	2	4	5	6	7	8	
Min Green *	7	12	7	7	12	7	7	
Walk *	0	7	7	0	7	0	7	
Ped Clear	0	11	24	0	11	0	23	
Veh. Extension *	2.0	6.0	2.0	2.0	6.0	2.0	2.0	
Max I *	20	90	25	20	90	25	30	
Yellow	3.0	4.9	3.8	3.0	4.9	3.0	3.8	
Red Clear	2.1	1.2	3.2	1.9	1.2	3.1	3.2	
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	-	-	X	-	-	-	X	
Simultaneous Gap	X	X	X	X	X	X	X	

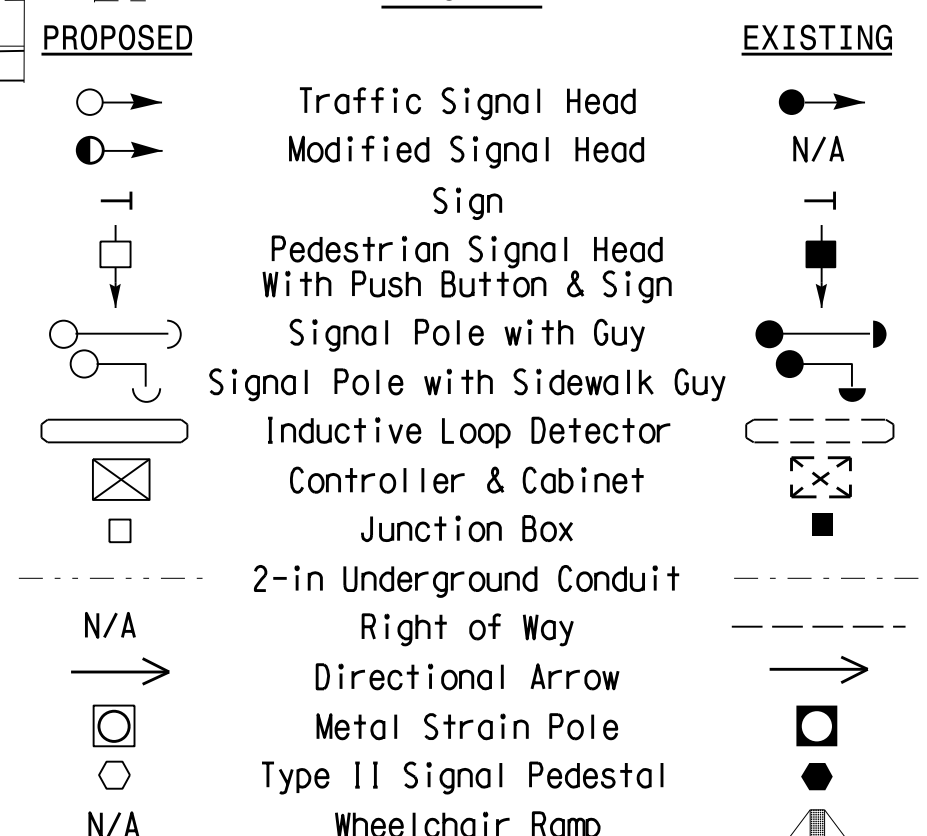
\* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

ASC/3 DETECTOR INSTALLATION CHART

LOOP	DETECTOR				PROGRAMMING						
	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	+5	2-4-2	-	1	Yes	-	15	S	-	X
					6	Yes	-	3	G	-	X
2A	6X6	300	4	-	2	Yes	-	-	N	-	X
2B	6X6	300	4	-	2	Yes	-	-	N	-	X
2C	6X6	300	4	-	2	Yes	-	-	N	-	X
4A	6X40	+5	2-4-2	-	4	Yes	-	10	S	-	X
5A	6X40	+5	2-4-2	-	5	Yes	-	15*	S	-	X
					2**	Yes	-	3	G	-	X
6A	6X6	300	4	-	6	Yes	-	-	N	-	X
6B	6X6	300	4	-	6	Yes	-	-	N	-	X
6C	6X6	300	4	-	6	Yes	-	-	N	-	X
7A	6X40	+5	2-4-2	-	7	Yes	-	15	S	-	X
					4	Yes	-	3	S	-	X
8A	6X40	+5	2-4-2	-	8	Yes	-	3	S	-	X
8B	6X40	+5	2-4-2	-	8	Yes	-	10	S	-	X

\* Disable Delay During Alternate Phasing Operation.  
\*\* Disable Phase 2 Call For Loops 5A During Alternate Phasing Operation.

LEGEND



Signal Upgrade

Prepared In the Offices of:  
TRANSPORTATION MOBILITY AND SAFETY DIVISION  
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
Signal Design Section  
750 N. Greenfield Pkwy, Garner, NC 27529

NC 24-87 (Bragg Boulevard) at Ames Street Fayetteville  
Division 6 Cumberland County  
Division 6  
PLAN DATE: January 2016 REVIEWED BY: JPG  
PREPARED BY: Jeff Spence REVIEWED BY:  
REVISIONS INIT. DATE  
SCALE 1"=30'  
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED  
SEAL  
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 029904  
JASON P. GALLOWAY  
6/1/2016  
SIG. INVENTORY NO. 06-0565