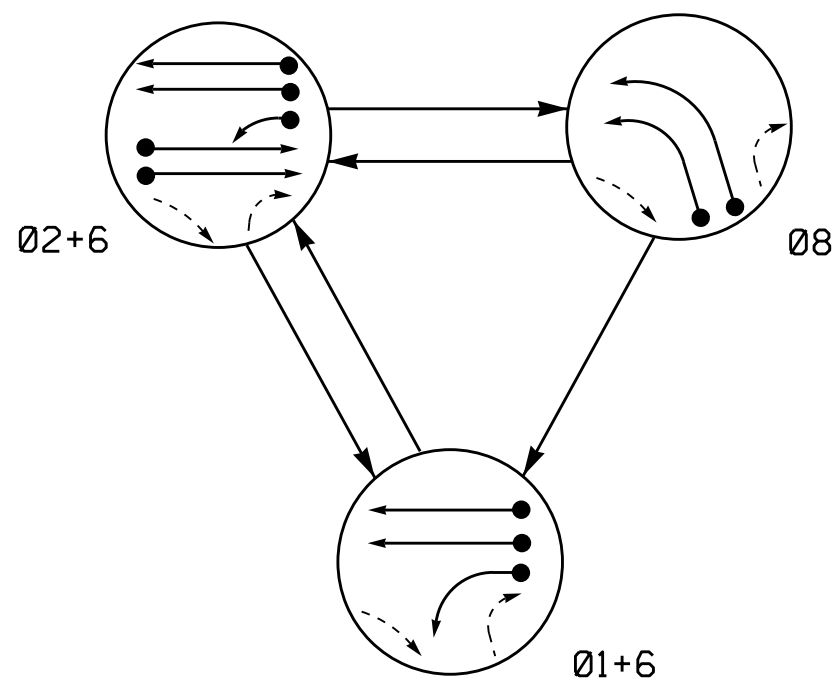
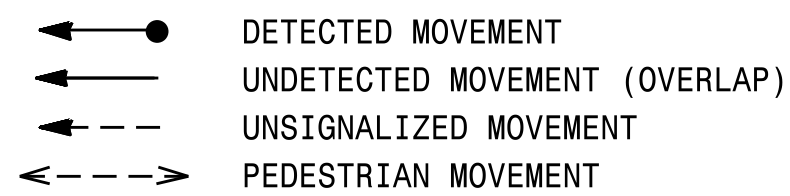


**PHASING DIAGRAM**



**PHASING DIAGRAM DETECTION LEGEND**

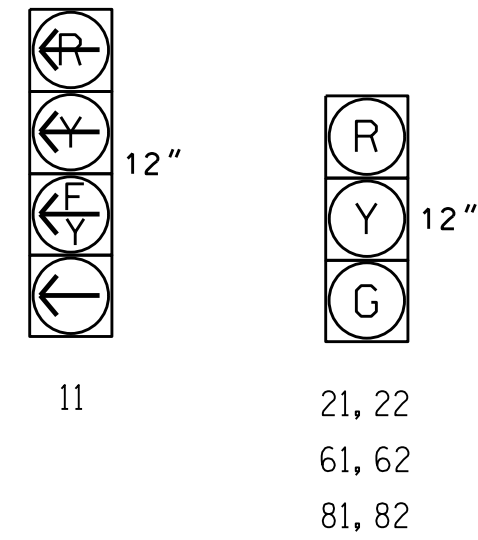


**TABLE OF OPERATION**

SIGNAL FACE	PHASE			
	Ø1+6	Ø2+6	Ø8	FLASH
11	-	F	R	Y
21,22	R	G	R	Y
61,62	G	G	R	Y
81,82	R	R	G	R

**SIGNAL FACE I.D.**

All Heads L.E.D.



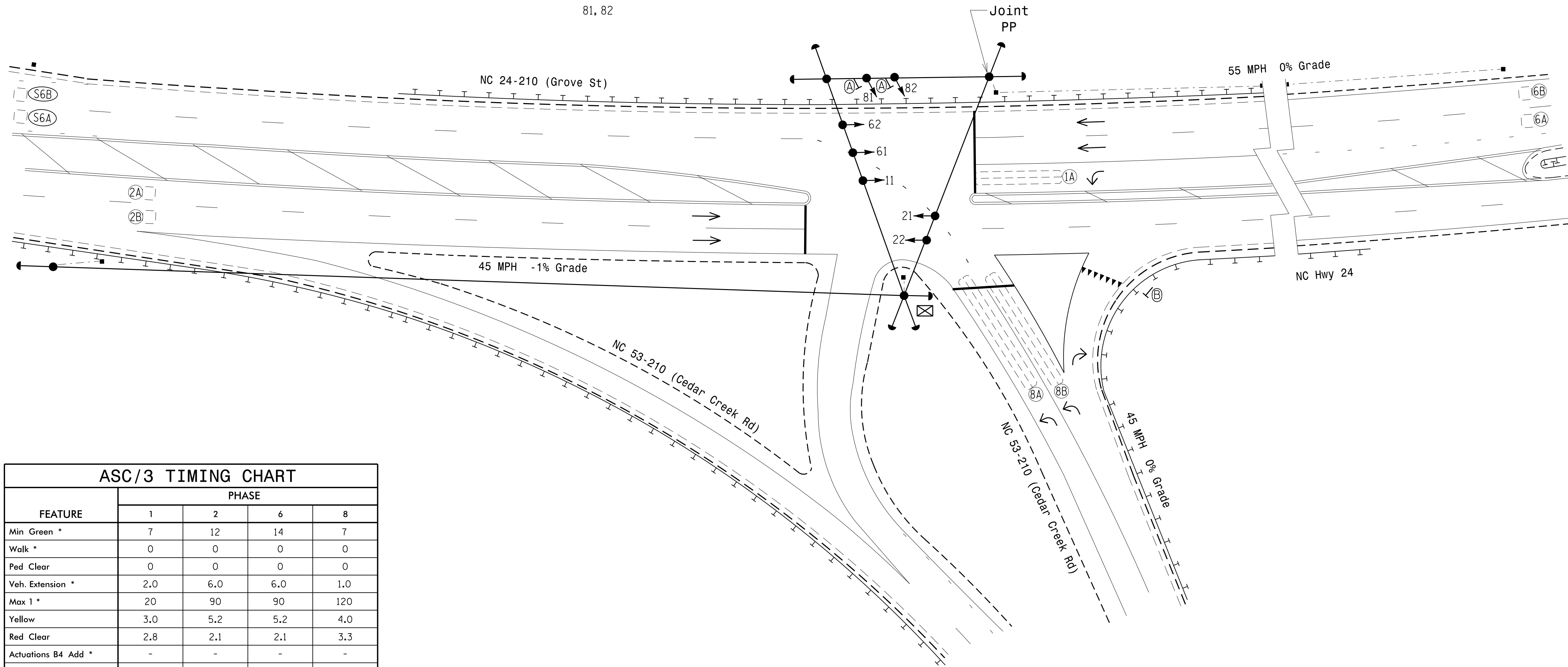
**ASC/3 DETECTOR INSTALLATION CHART**

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING				TYPE	SYSTEM LOOP	NEW CARD
					PHASE	CALLING	EXTEND TIME	DELAY TIME			
1A	6X40	0	2-4-2	-	1	Yes	-	15	S	-	X
					6	Yes	-	3	G	-	X
2A	6X6	300	5	-	2	Yes	-	-	S	-	X
2B	6X6	300	5	-	2	Yes	-	-	S	-	X
6A	6X6	420	6	-	6	Yes	-	-	S	-	X
6B	6X6	420	6	-	6	Yes	-	-	S	-	X
8A	6X60	+5	2-4-2	-	8	Yes	-	-	S	-	X
8B	6X60	+5	2-4-2	-	8	Yes	-	-	S	-	X
S6A	6X6	+438	4	-	-	No	-	-	N	X	X
S6B	6X6	+438	4	-	-	No	-	-	N	X	X

**3 Phase Fully Actuated Fayetteville City System**

**NOTES**

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 may be lagged.
4. Set all detector units to presence mode.
5. 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.
6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red. Pavement markings are existing.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

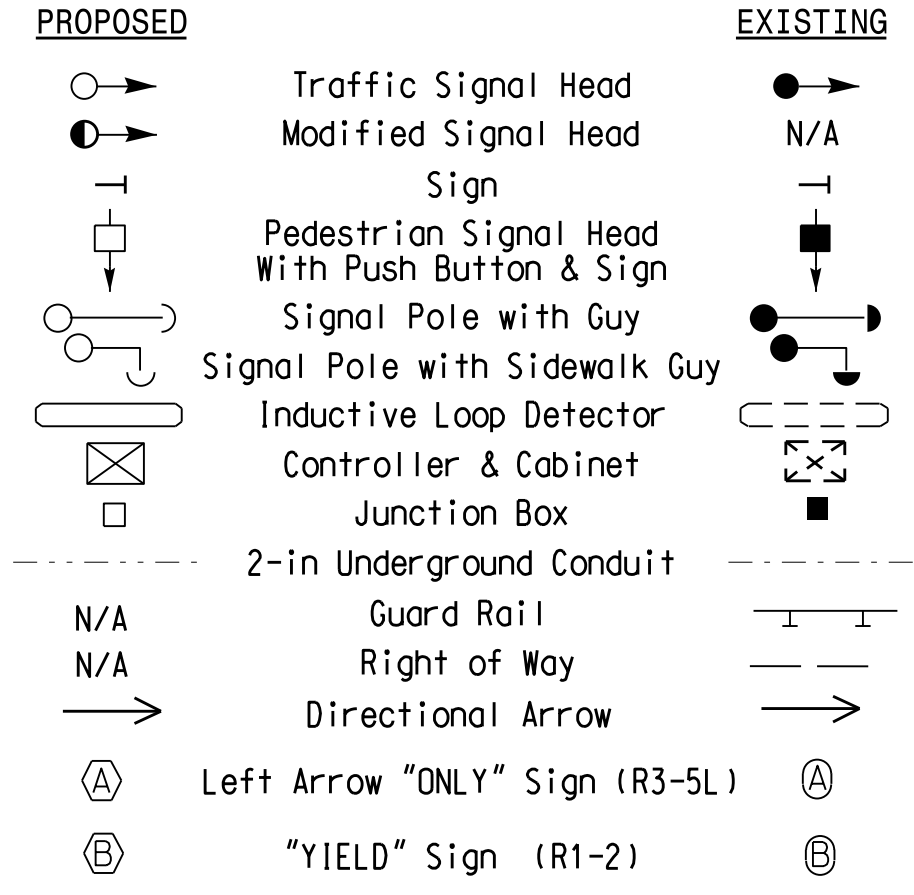


**ASC/3 TIMING CHART**

FEATURE	PHASE			
	1	2	6	8
Min Green *	7	12	14	7
Walk *	0	0	0	0
Ped Clear	0	0	0	0
Veh. Extension *	2.0	6.0	6.0	1.0
Max 1 *	20	90	90	120
Yellow	3.0	5.2	5.2	4.0
Red Clear	2.8	2.1	2.1	3.3
Activations B4 Add *	-	-	-	-
Seconds / Actuation *	-	1.5	1.5	-
Max Initial *	-	34	46	-
Time Before Reduction *	-	15	15	-
Time To Reduce *	-	45	45	-
Minimum Gap	-	3.0	3.4	-
Locking Detector	-	X	X	-
Recall Position	-	VEH. RECALL	VEH. RECALL	-
Dual Entry	-	-	-	-
Simultaneous Gap	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.

**LEGEND**



**Signal Upgrade**

Prepared In the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

NC 24-210 (Grove St)/NC Hwy 24 at NC 53-210 (Cedar Creek Rd)

Division 6 Cumberland County Fayetteville

PLAN DATE: May 2016 REVIEWED BY: JPG, PE

PREPARED BY: EM Minshew REVIEWED BY:

REVISIONS: INIT. DATE

SCALE: 1"=30'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 29904 JASON P. GALLAGHER ENGINEER

DocuSigned by Jason P. Gallaghy 5/19/2016 DATE

SIG. INVENTORY NO. 06-0076

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