

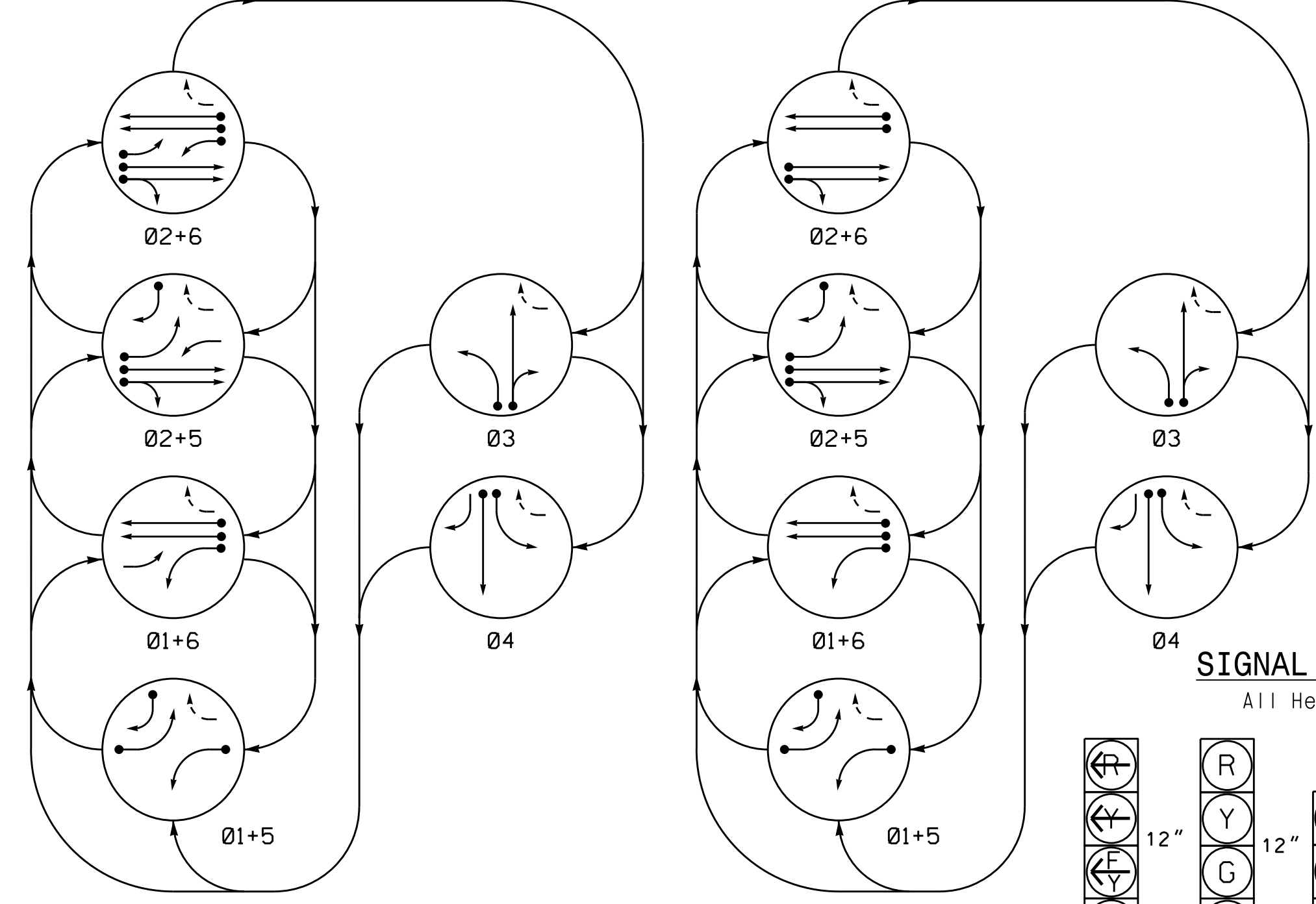
6 Phase Fully Actuated Fayetteville Signal System

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. The order of phase 3 and phase 4 may be reversed.
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. The Division Traffic Engineer will determine the hours of use for each phasing plan.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

DEFAULT PHASING DIAGRAM

ALTERNATE PHASING DIAGRAM



DEFAULT TABLE OF OPERATION

SIGNAL FACE	PHASE					
	01+5	01+6	02+5	02+6	03	04
11	---	---	---	---	---	---
21,22	R	R	G	G	R	Y
31	R	R	R	R	G	R
32	R	R	R	R	G	R
41	R	R	R	R	G	R
42	R	R	R	R	G	R
51	---	---	---	---	---	---
61,62	R	G	R	G	R	Y

ALTERNATE TABLE OF OPERATION

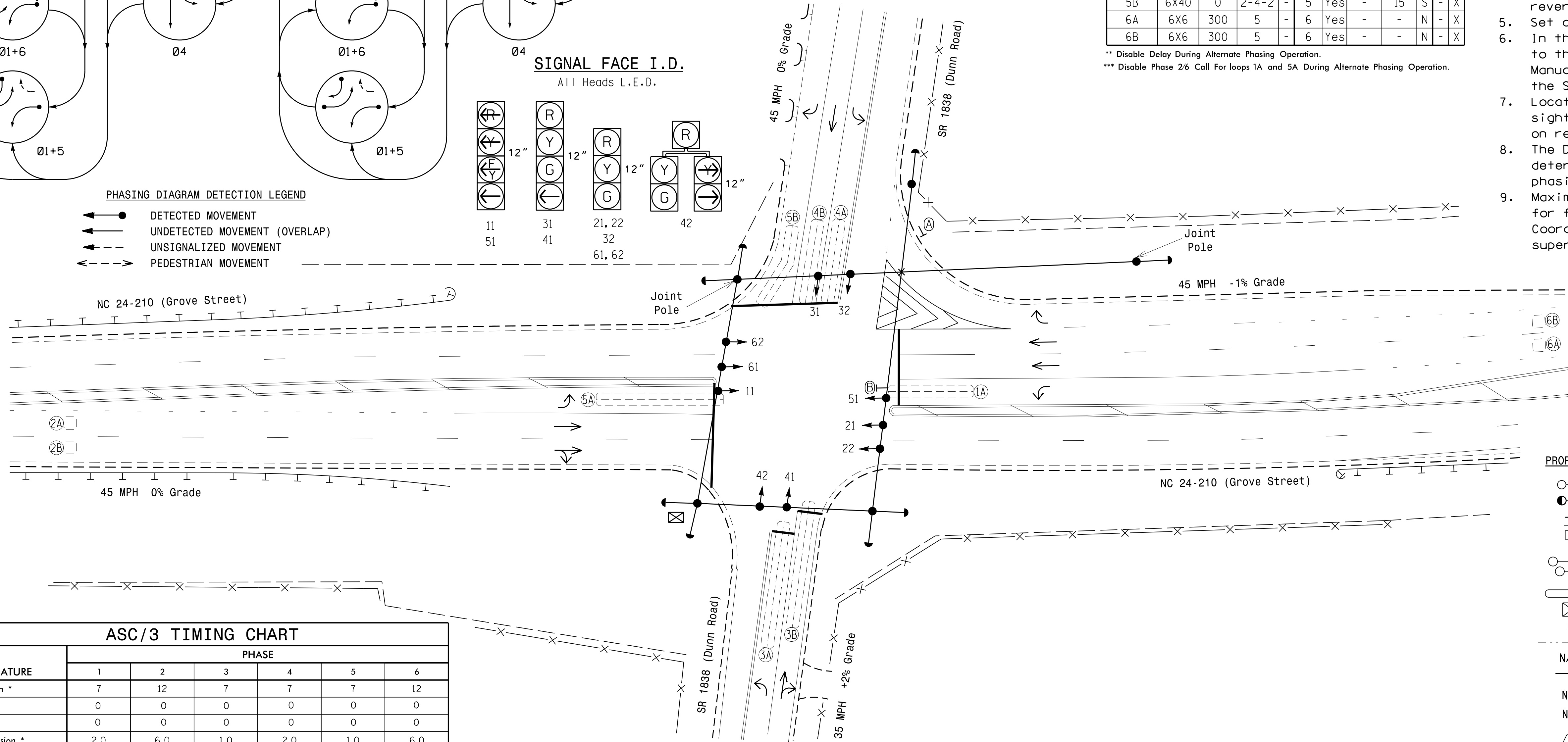
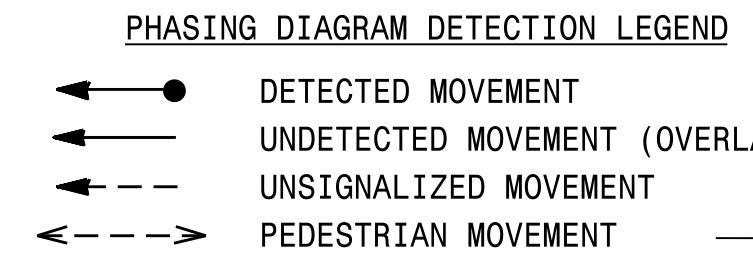
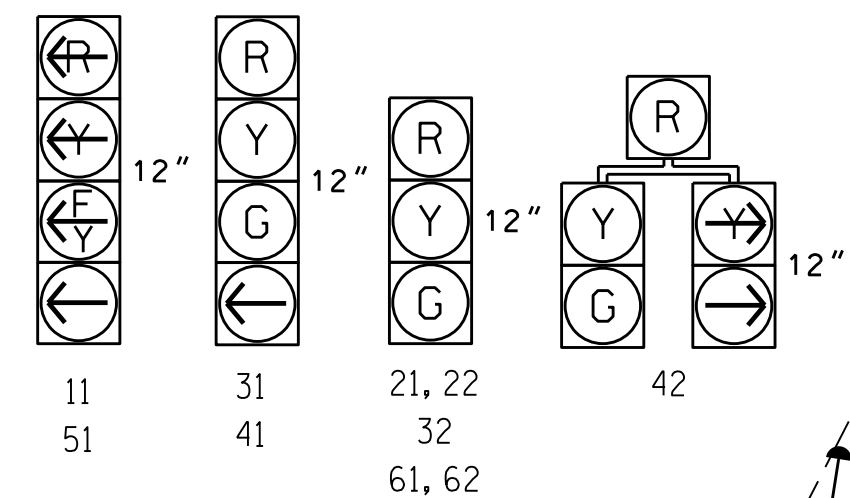
SIGNAL FACE	PHASE					
	01+5	01+6	02+5	02+6	03	04
11	---	---	---	---	---	---
21,22	R	R	G	G	R	Y
31	R	R	R	R	G	R
32	R	R	R	R	G	R
41	R	R	R	R	G	R
42	R	R	R	R	G	R
51	---	---	---	---	---	---
61,62	R	G	R	G	R	Y

ASC/3 DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING						
					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	5	-	2	Yes	-	-	N	-	X
2B	6X6	300	5	-	2	Yes	-	-	N	-	X
3A	6X60	+5	2-4-2	-	3	Yes	-	3	S	-	X
3B	6X60	+5	2-4-2	-	3	Yes	-	10	S	-	X
4A	6X40	0	2-4-2	-	4	Yes	-	3	S	-	X
4B	6X40	0	2-4-2	-	4	Yes	-	-	S	-	X
5A	6X60	+5	2-4-2	-	5	Yes	-	**15	S	-	X
					**2	Yes	-	3	G	-	X
5B	6X40	0	2-4-2	-	5	Yes	-	15	S	-	X
6A	6X6	300	5	-	6	Yes	-	-	N	-	X
6B	6X6	300	5	-	6	Yes	-	-	N	-	X

** Disable Delay During Alternate Phasing Operation.
 *** Disable Phase 2/6 Call For Loops 1A and 5A During Alternate Phasing Operation.

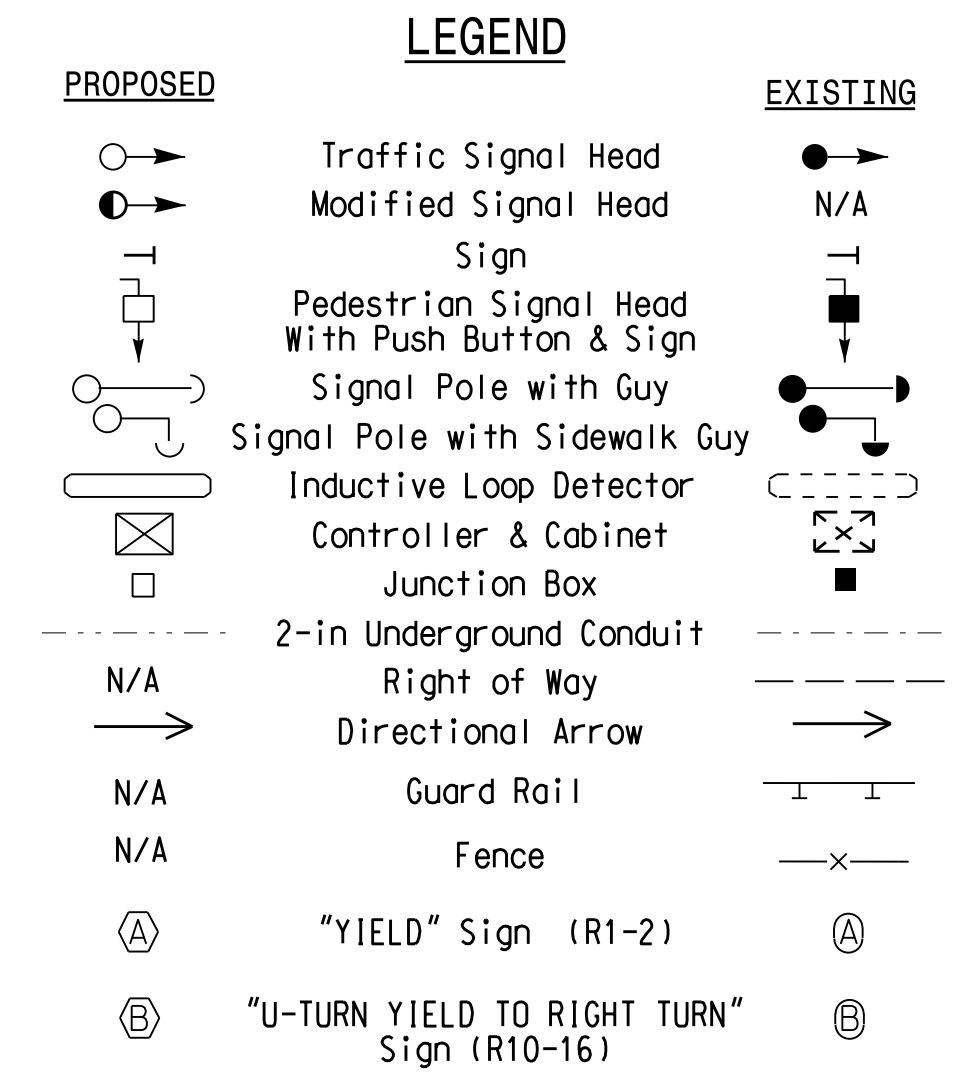
SIGNAL FACE I.D.
All Heads L.E.D.



ASC/3 TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Min Green *	7	12	7	7	7	12
Walk *	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0
Veh. Extension *	2.0	6.0	1.0	2.0	1.0	6.0
Max I *	20	90	25	25	20	90
Yellow	3.0	4.6	3.7	4.5	3.0	4.6
Red Clear	2.4	1.1	1.9	1.3	2.4	1.1
Actuations B4 Add *	-	0	-	-	-	0
Seconds / Actuation *	-	1.5	-	-	-	1.5
Max Initial *	-	34	-	-	-	34
Time Before Reduction *	-	15	-	-	-	15
Time To Reduce *	-	45	-	-	-	45
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

* 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 Upgrade

Prepared In the Offices of:

NC 24-210 (Grove Street) at SR 1838 (Dunn Road)

Division 6 Cumberland County Fayetteville

PLAN DATE: April 2016 REVIEWED BY: PLA, PE

PREPARED BY: EM Minshew REVIEWED BY:

REVISIONS: INIT. DATE

SCALE: 1"=30'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SIG. INVENTORY NO. 06-0371

07-07-2016 13:32
 S:\IT\5151\15\Sigs\Signal\Signal Design Section\Eastern Region\04\U-5742 Fayetteville\11e ASC\3\66-0371\660371_sigs_dsn_2016mmds.dgn
 emminshew