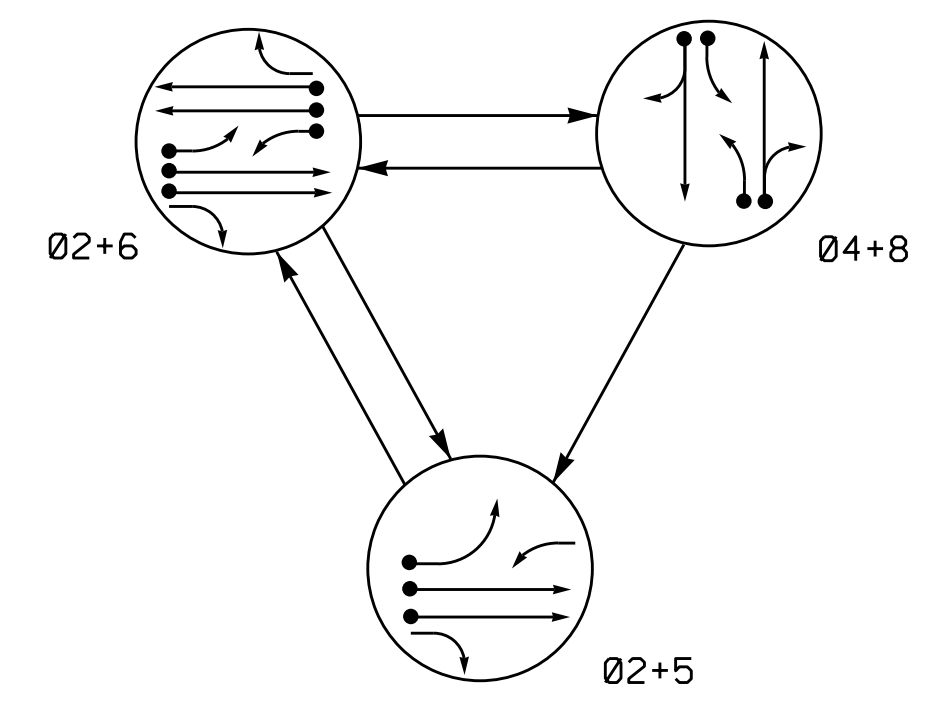


**PHASING DIAGRAM**



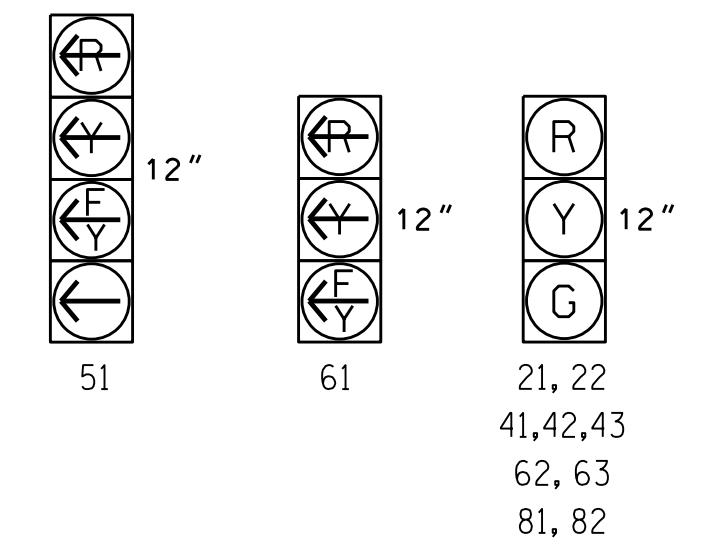
**PHASING DIAGRAM DETECTION LEGEND**

- ←●→ DETECTED MOVEMENT
- ←○→ UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- ←- - -> PEDESTRIAN MOVEMENT

**TABLE OF OPERATION**

SIGNAL FACE	PHASE			
	Ø 2+5	Ø 2+6	Ø 4+8	F L P
21, 22	G	G	R	Y
41, 42, 43	R	R	G	R
51	---	---	---	---
61	F	F	P	P
62, 63	R	G	R	Y
81, 82	R	R	G	R

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



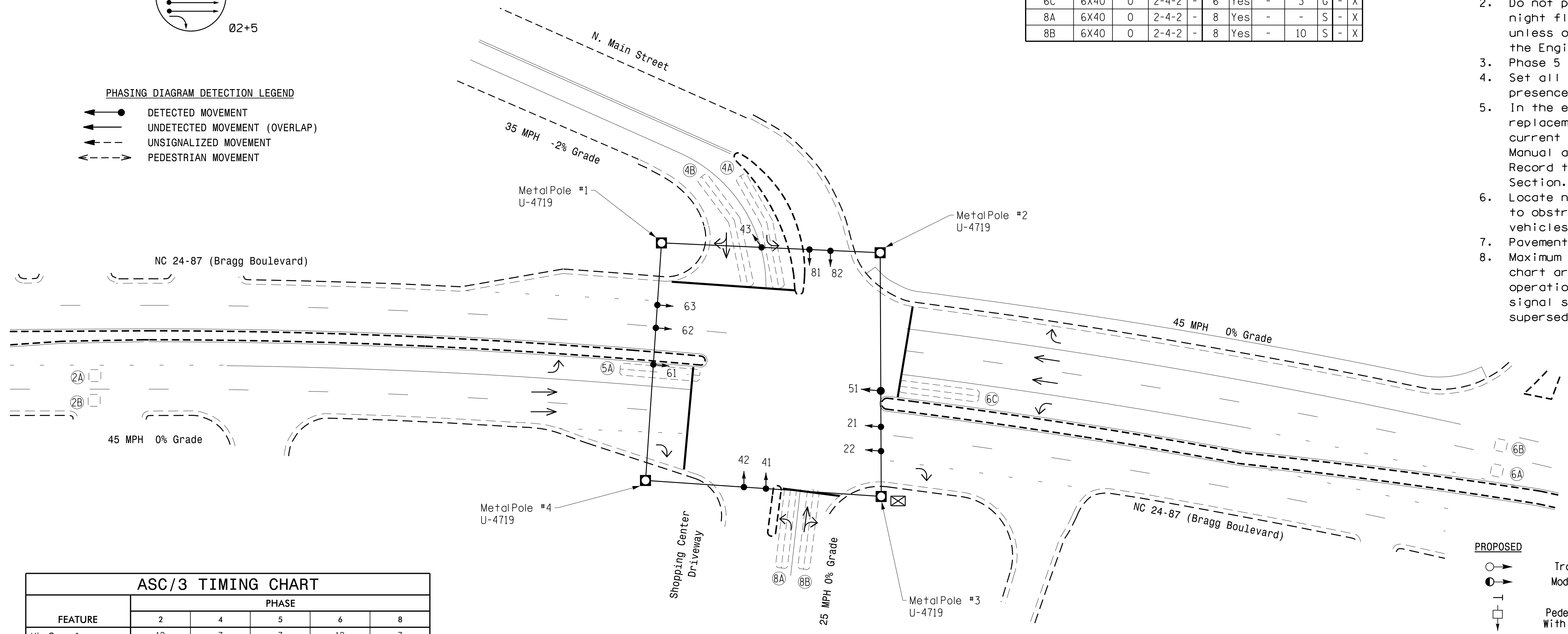
**ASC/3 DETECTOR INSTALLATION CHART**

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING						
					PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	SYSTEM LOOP	NEW CARD
2A	6X6	300	6	-	2	Yes	-	-	N	-	X
2B	6X6	300	6	-	2	Yes	-	-	N	-	X
4A	6X60	0	2-4-2	-	4	Yes	-	-	S	-	X
4B	6X60	0	2-4-2	-	4	Yes	-	5	S	-	X
5A	6X40	0	2-4-2	-	5	Yes	-	15	S	-	X
6A	6X6	300	6	-	6	Yes	-	-	N	-	X
6B	6X6	300	6	-	6	Yes	-	-	N	-	X
6C	6X40	0	2-4-2	-	6	Yes	-	3	G	-	X
8A	6X40	0	2-4-2	-	8	Yes	-	-	S	-	X
8B	6X40	0	2-4-2	-	8	Yes	-	10	S	-	X

**3 Phase Fully Actuated Fayetteville Signal System**

**NOTES**

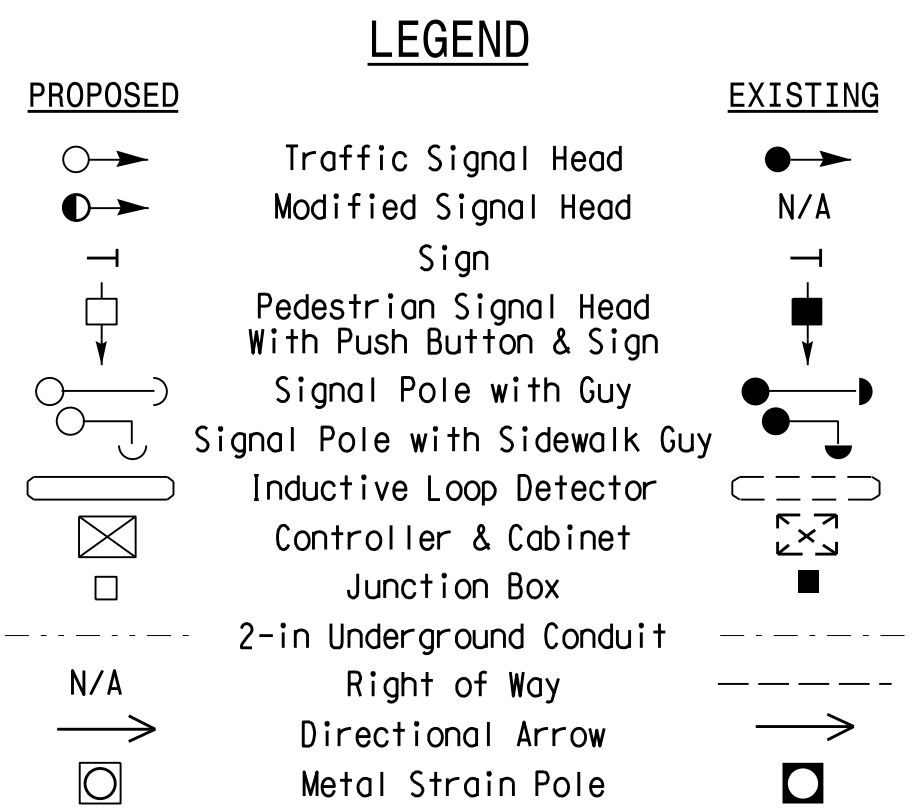
- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 5 may be lagged.
- Set all detector units to presence mode.
- 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.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Pavement markings are existing.
- 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				
	2	4	5	6	8
Min Green *	12	7	7	12	7
Walk *	0	0	0	0	0
Ped Clear	0	0	0	0	0
Veh. Extension *	6.0	1.0	2.0	6.0	2.0
Max 1 *	90	25	15	90	90
Yellow	4.5	4.0	3.0	4.5	3.2
Red Clear	1.6	1.9	2.6	1.6	2.8
Red Revert	0.0	0.0	0.0	0.0	0.0
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

\* 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 24-87 (Bragg Boulevard) at North Main Street/ Shopping Center Drive**  
 Division 6 Cumberland County Spring Lake  
 PLAN DATE: October 2015 REVIEWED BY: PLA  
 PREPARED BY: JPG REVIEWED BY:  
 SCALE: 1"=30'  
 REVISIONS: \_\_\_\_\_ INIT. DATE  
 SEAL: JASON P. GALLOWAY, PROFESSIONAL ENGINEER, No. 029904  
 DATE: 3/14/2016  
 SIG. INVENTORY NO. 06-0379

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

I:\1485-2016\_08-19\_Sig\14852016\_ITS\_Signal\Signal\_Design\_Section\Eastern\_Region\04\U-5742\_Fayetteville\ASC3\606-0379\60379\_s1a.dsn\_20151006.dgn  
 J:\Galloway