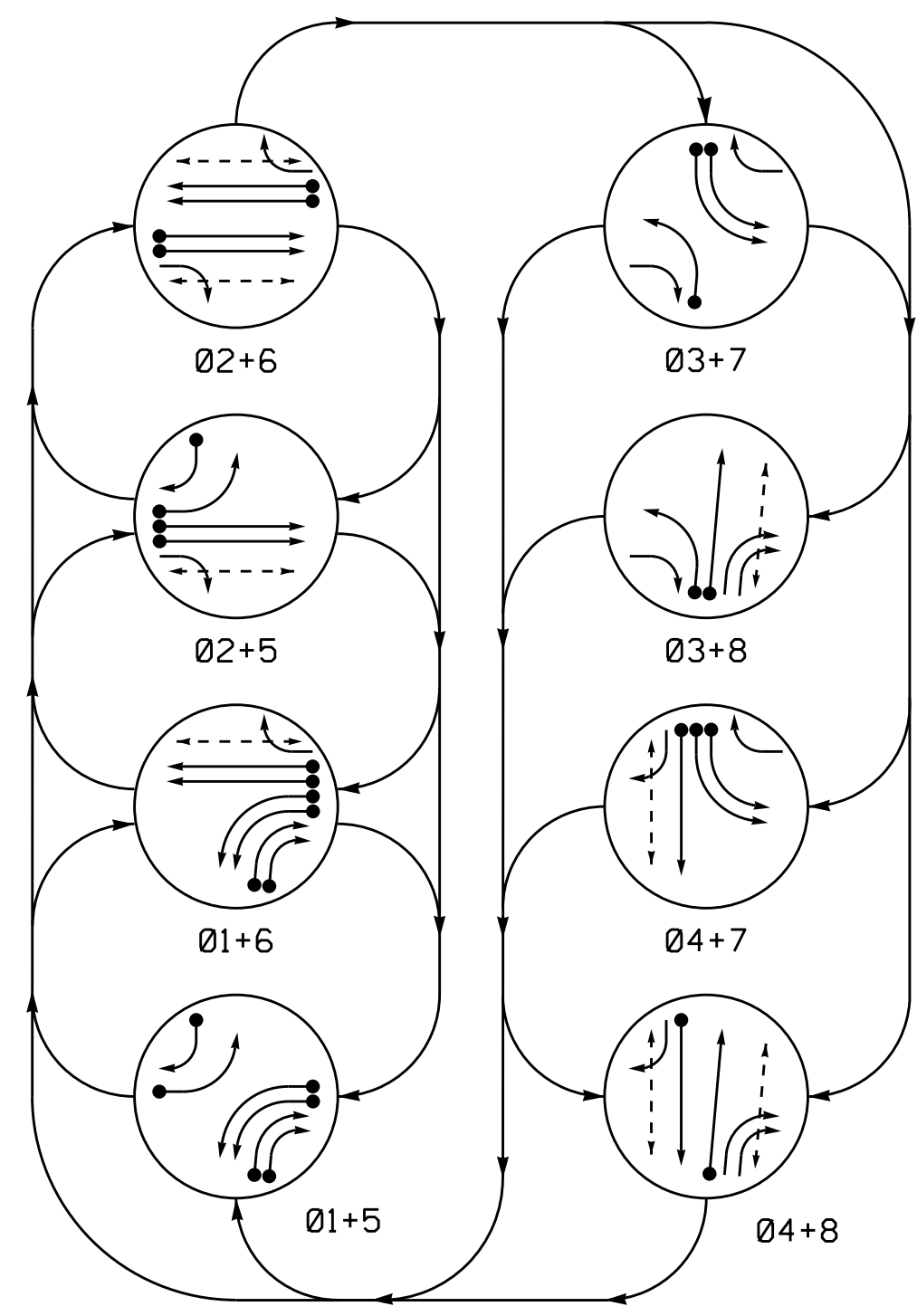


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

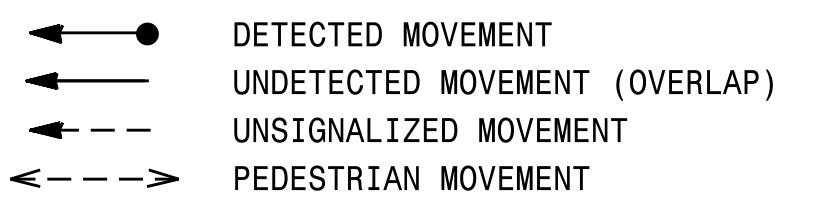
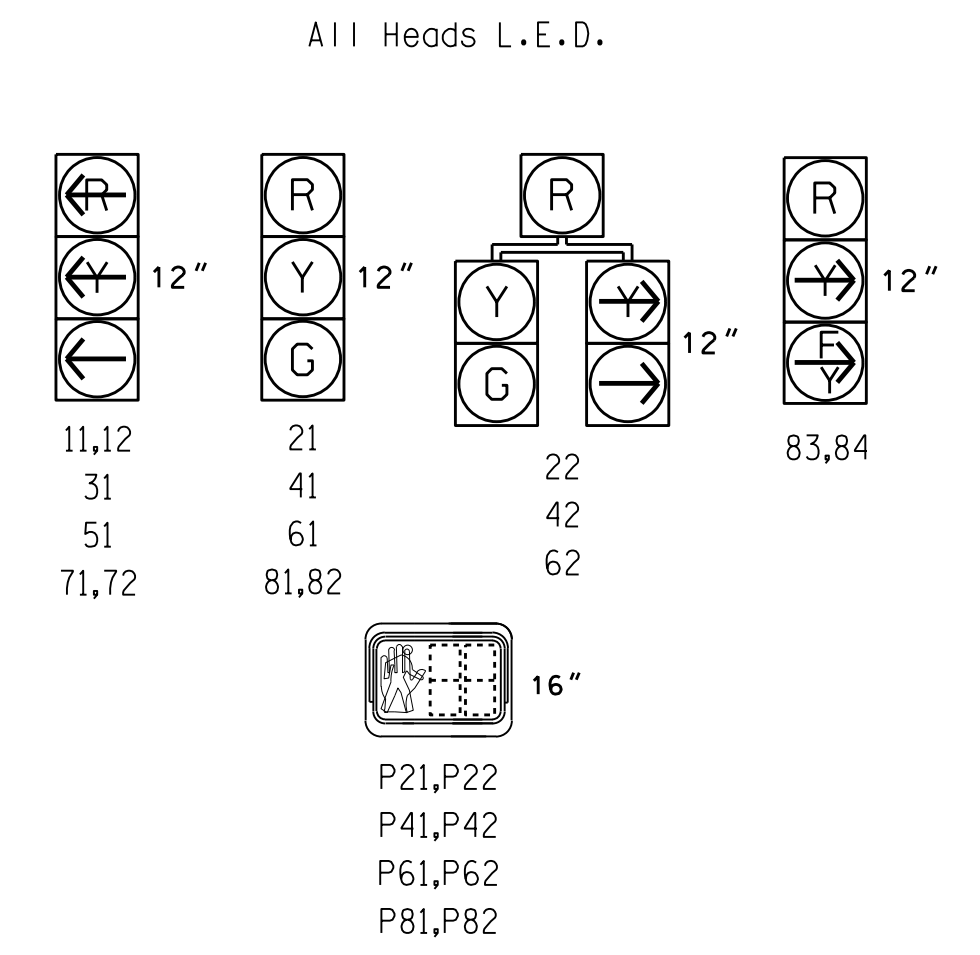


TABLE OF OPERATION

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8
11,12	---	---	---	---	---	---	---	---
21	R	R	G	G	R	R	R	Y
22	R	R	G	G	R	R	R	Y
31	---	---	---	---	---	---	---	---
41	R	R	R	R	R	G	G	R
42	R	R	R	R	R	G	G	R
51	---	---	---	---	---	---	---	---
61	R	G	R	G	R	R	R	Y
62	R	G	R	G	R	R	R	Y
71,72	---	---	---	---	---	---	---	---
81,82	R	R	R	R	G	R	G	R
83,84	---	---	---	---	---	---	---	---
P21,P22	DW	DW	W	W	DW	DW	DW	DRK
P41,P42	DW	DW	DW	DW	DW	W	W	DRK
P61,P62	DW	W	DW	W	DW	DW	DW	DRK
P81,P82	DW	DW	DW	DW	W	DW	W	DRK

SIGNAL FACE I.D.



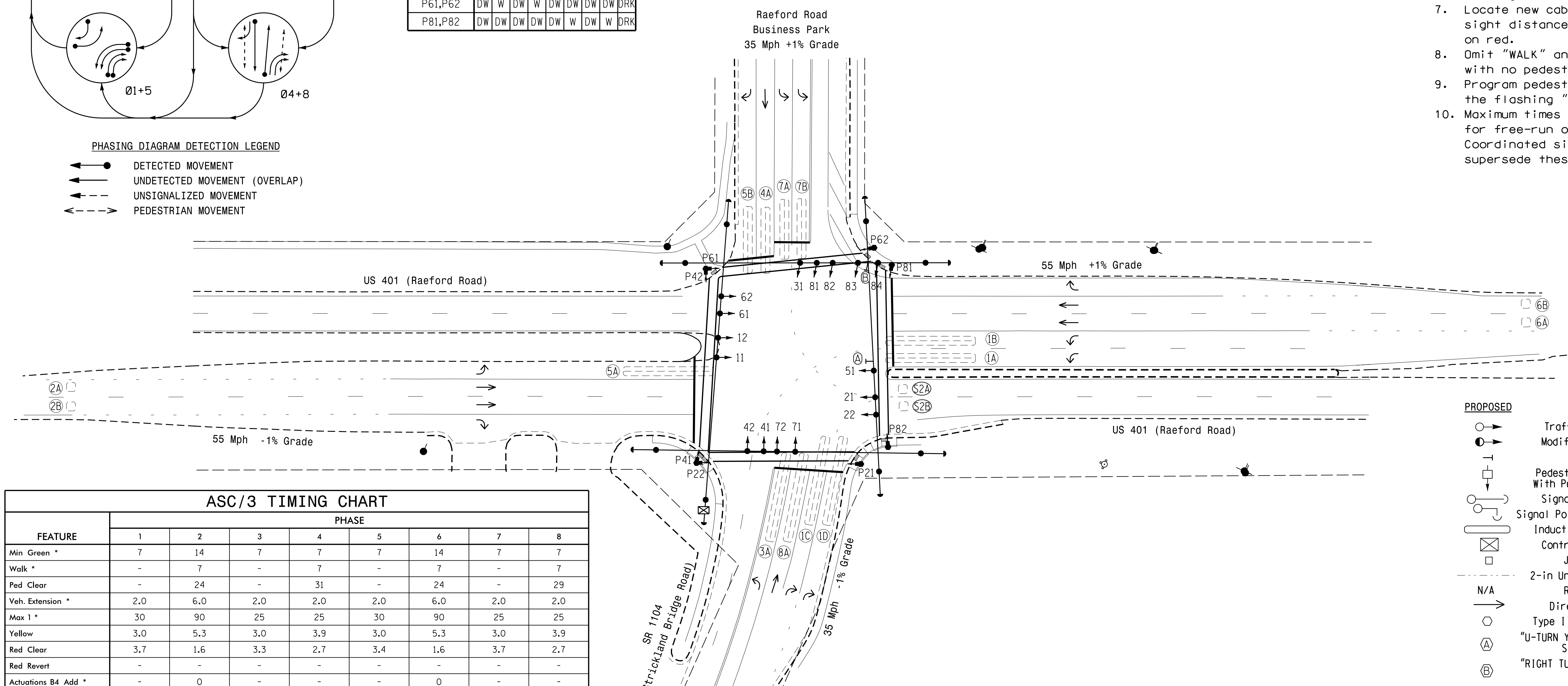
ASC/3 DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING				TYPE	LOOP SYSTEM	NEW CARD
					PHASE	CALLING	EXTEND TIME	DELAY TIME			
1A, 1B	6X60	+5	2-4-2	-	1	Yes	-	-	S	-	X
1C, 1D	6X60	+23	2-4-2	-	1	Yes	-	10	S	-	X
2A	6X6	414	4	-	2	Yes	-	-	N	-	X
2B	6X6	414	4	-	2	Yes	-	-	N	-	X
3A	6X60	+10	2-4-2	-	3	Yes	-	-	S	-	X
4A	6X45	+10	2-4-2	-	4	Yes	-	-	S	-	X
5A	6X60	+12	2-4-2	-	5	Yes	-	-	S	-	X
5B	6X45	+10	2-4-2	-	5	Yes	-	10	S	-	X
6A	6X6	420	4	-	6	Yes	-	-	N	-	X
6B	6X6	420	4	-	6	Yes	-	-	N	-	X
7A, 7B	6X40	+10	2-4-2	-	7	Yes	-	-	S	-	X
8A	6X60	+10	2-4-2	-	8	Yes	-	-	S	-	X
S2A	6X6	+137	4	-	-	No	-	-	N	X	X
S2B	6X6	+137	4	-	-	No	-	-	N	X	X

8 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.
- Phase 3 and/or phase 7 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.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time on.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

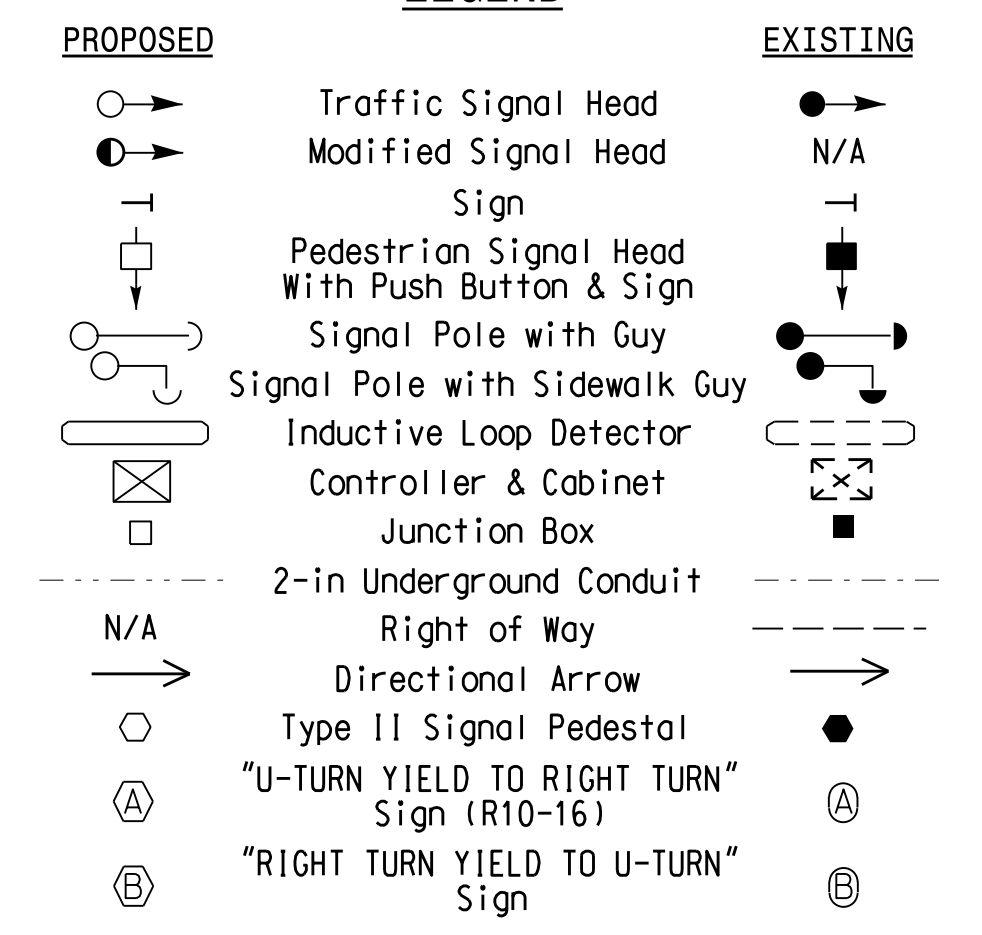


ASC/3 TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green *	7	14	7	7	7	14	7	7
Walk *	-	7	-	7	-	7	-	7
Ped Clear	-	24	-	31	-	24	-	29
Veh. Extension *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max 1 *	30	90	25	25	30	90	25	25
Yellow	3.0	5.3	3.0	3.9	3.0	5.3	3.0	3.9
Red Clear	3.7	1.6	3.3	2.7	3.4	1.6	3.7	2.7
Red Revert	-	-	-	-	-	-	-	-
Actuations B4 Add *	-	0	-	-	-	0	-	-
Seconds /Actuation *	-	1.5	-	-	-	1.5	-	-
Max Initial *	-	46	-	-	-	46	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduce *	-	30	-	-	-	30	-	-
Minimum Gap	-	3.4	-	-	-	3.4	-	-
Locking Detector	-	X	-	-	-	X	-	-
Recall Position	-	VEH. RECALL	-	-	-	VEH. RECALL	-	-
Dual Entry	-	-	-	-	-	-	-	-
Simultaneous Gap	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.

LEGEND



Signal Upgrade

Prepared in the Offices of:

US 401 (Raeford Road) at SR 1104 (Strickland Bridge Road)

Division 6 Cumberland County Fayetteville

PLAN DATE: March 2016 REVIEWED BY: JPG

PREPARED BY: JPG/DJS REVIEWED BY:

REVISIONS INIT. DATE

SCALE: 1" = 40'

750 N. Greenfield Pkwy, Garner, NC 27529

SEAL: JASON P. GALLOWAY, PROFESSIONAL ENGINEER, No. 029904

DATE: 10/4/2016

SIG. INVENTORY NO. 06-0596

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

04-001-2016-11-38 S:\ITS\ASU\ITS_Signal\Signal Design\Section\Eastern Region\01\U-5742 Fayetteville ASC/3\06-0596\060596_s1a.dsn_2016mmds.dgn ksparedm