## 3 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 may be lagged.
- 4. Set all detector units to presence mode.
- 5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- 6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- 7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- 8. Pavement markings are existing.
- 9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

ASC/3 DETECTOR INSTALLATION CHART											
DETECTOR				PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2		1	Yes	-	15	S	-	Χ
		0	2-4-2		6	Yes	-	3	G	-	Χ
2A	6X6	300	5	-	2	Yes	-	-	N	-	Χ
2B	6X6	300	5	-	2	Yes	-	-	N	-	Χ
4A	6X40	0	2-4-2	-	4	Yes	-	_	S	-	Χ
4B	6X40	0	2-4-2	-	4	Yes	-	-	S	-	Χ
4C	6X40	0	2-4-2	_	4	Yes	-	10	S	-	Χ
4D	6X40	0	2-4-2	-	4	Yes	-	15	S	_	Χ
6A	*	300	*	-	6	Yes	-	_	N	-	Χ

\*Microwave Detection Zone

## PHASING DIAGRAM DETECTION LEGEND

DETECTED MOVEMENT

PHASING DIAGRAM

02+6

UNDETECTED MOVEMENT (OVERLAP) UNSIGNALIZED MOVEMENT

← − − > PEDESTRIAN MOVEMENT

All Heads L.E.D.						
12"	R Y 12" 21,22 41,42,43 61,62	P21,P22 P41,P42,P43,P44 P61,P62				

SIGNAL FACE I.D.

TABLE OF OPERATION

SIGNAL

FACE

21,22

41,42,43

61,62

P21**,**P22

P41**,**P42

P61**,**P62

PHASE

SR 1437 (Santa Fe Drive)	P61 // P62 P44 45 Mph - 2% Grade
	►62 ►61 ►11
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
= = = = = = = = = = = = = = = = = = =	43 42 41 P43 P43 P43 SR 1437 (Santa Fe Drive)
	P21/ ↔

ASC	C/3 TI	MING CH	HART			
	PHASE					
FEATURE	1	2	4	6		
Min Green *	7	12	7	12		
Walk *	0	7	7	7		
Ped Clear	0	14	22	27		
Veh. Extension *	2.0	6.0	2.0	6.0		
Max 1 *	30	90	40	90		
Yellow	3.0	4.7	3.7	4.7		
Red Clear	3 <b>.</b> 5	2.1	2.1	2.1		
Actuations B4 Add *	-	0	-	0		
Seconds /Actuation *	-	1.8	-	1.8		
Max Initial *	-	34	-	34		
Time Before Reduction *	-	30	-	30		
Time To Reduce *	-	45	-	45		
Minimum Gap	-	3.0	-	3.0		
Locking Detector	-	Х	-	X		
Recall Position	-	VEH. RECALL	-	VEH. RECALL		
Dual Entry	_	-	-	-		
Simultaneous Gan	Y	Υ	Y	Y		

lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

= <del>:</del>		LEGEND	
	PROPOSED	<u></u>	<u>EXISTING</u>
	$\bigcirc$	Traffic Signal Head	<b></b>
	<b>O</b> ->	Modified Signal Head	N/A
	$\dashv$	Sign	
	$\downarrow$	Pedestrian Signal Head With Push Button & Sign	<b>#</b>
	<u> </u>	Signal Pole with Guy	•
		Signal Pole with Sidewalk Guy	
		Inductive Loop Detector	$\subseteq = = \supset$
	$\boxtimes$	Controller & Cabinet	K K K
		Junction Box	
-		2-in Underground Conduit	
	N/A	Right of Way	
	$\longrightarrow$	Directional Arrow	$\longrightarrow$
		Out of Pavement Detection Zone	
	N/A	Wheelchair Ramp	
	$\bigcirc$	Pedestal	
	$\langle A \rangle$	No Left Turn Sign (R3-2)	$\triangle$
	B	Left Arrow "ONLY" Sign (R3-5L)	$^{lack}$
	<u>(C)</u>	Combined Through and Right Arrow Sign (R3-6R)	©
	$\bigcirc$	Right Arrow "ONLY" Sign (R3-5R	
	E	Street Name Sign	Ē

Signal Upgrade SR 1437 (Santa Fe Drive) 750 N.Greenfleld Pkwy.Garner.NC 27529 PREPARED BY: Jeff Spence REVIEWED BY:

at
SR 1007 Southbound Ramps
(All American Freeway) Division 6 Cumberland County

PLAN DATE: December 2015 REVIEWED BY: REVISIONS INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SIG. INVENTORY NO.