

## 2 Phase Fully Actuated Fayetteville Signal System

## <u>NOTES</u>

- 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. Set all detector units to presence mode.
- 4. 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.
- 5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.6. The cabinet should be designed
- to include an Auxiliary Output file for future use.
- 7. Pavement markings are existing.
- 8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

**LEGEND** 

Traffic Signal Head Modified Signal Head <u>EXISTING</u>

SIG. INVENTORY NO. 06-0044

	ASC/3	DETE	CTOR :	INS	STAL	LAT:	ION C	HART			
DETECTOR				PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	SYSTEM LOOP	NEW CARD
2A,2B	6X6	300	4	-	2	Yes	-	-	N	-	Χ
2C	6X40	+5	2-4-2	-	2	Yes	ı	-	S	-	Χ
4A	6X60	+5	2-4-2	-	4	Yes	_	3	S	-	Χ
4B	6X60	+5	2-4-2	-	4	Yes	_	15	S	-	Χ
6A.6B.6C	6X6	300	4	_	6	Yes	_	_	N	_	Χ

## PHASING DIAGRAM DETECTION LEGEND

PHASING DIAGRAM

DETECTED MOVEMENT

UNDETECTED MOVEMENT (OVERLAP)

UNSIGNALIZED MOVEMENT

PEDESTRIAN MOVEMENT

## SIGNAL FACE I.D.

TABLE OF OPERATION

FACE

21,22

41,42

61,62

PHASE

All Heads L.E.D.

R Y G	12″
21,22 41,42 61,62	

US 401 Business (Ramsey Street)				45 Mph +1% Grade	opero signo super
			Abandon Loops — — — — — — — — — — — — — — — — — — —		====================================
		→62 →61			
	<u> </u>		—————————————————————————————————————	<u> </u>	
<u></u>		21			
= = = = = = = = = = = = = = = = = = =		42 41 = = = = = = = = =		US 401 Business (Ramsey Street)	

ASC/3	TIMING	G CHAR	Γ			
		PHASE				
FEATURE	2	4	6			
Min Green *	12	7	12			
Walk *	0	0	0			
Ped Clear	0	0	0			
Veh. Extension *	2.0	1.0	2.0			
Max 1 *	60	35	60			
Yellow	4.6	3.0	4.6			
Red Clear	1.0	2.8	1.0			
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	Х	-	Х			
Recall Position	VEH. RECALL	-	VEH. RECALI			
Dual Entry	-	-	-			
Simultaneous Gap	X	X	Х			

\* 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.

	Pedestrian Signal Head With Push Button & Sign	<b>#</b>
· )	Signal Pole with Guy	•
S	ignal Pole with Sidewalk Gu	y • • • • • • • • • • • • • • • • • • •
	Inductive Loop Detector	$\subset = = \supset$
	Controller & Cabinet	K X Z
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
$\longrightarrow$	Directional Arrow	$\longrightarrow$
		With Push Button & Sign  Signal Pole with Guy  Signal Pole with Sidewalk Guy  Inductive Loop Detector  Controller & Cabinet  Junction Box  2-in Underground Conduit  N/A  Right of Way

**PROPOSED** 

Signal Upgrade

Prepared In the Offices of:

US 401 Bus (Ramsey Street)

at

Hillsboro Street

Division 6 Cumberland County Fayetteville

PLAN DATE: November 2015 REVIEWED BY: JPG

750 N.Greenfield Pkwy.Garner.NC 27529 PREPARED BY: Jeff Spence REVIEWED BY:

O 30

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

O 29904

Division 6 Cumberland County Fayetteville

PLAN DATE: November 2015 REVIEWED BY: JPG

Docusigned Usy, JULIAN DATE: November 2015 REVIEWED BY: JPG

PREPARED BY: Jeff Spence REVIEWED BY: Jeff Spence REVIEWE

S:\*ITS&SU\*ITS Signals\*Signal Design Section\*Easi jgalloway