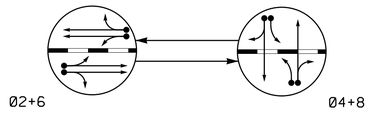
PROJECT REFERENCE NO.	SHEET NO.
U-5742	Sig. 118.0

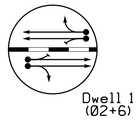
2 Phase Fully Actuated Fayetteville Signal System

PHASING DIAGRAM



RAIL PREEMPT PHASES

(High Priority)



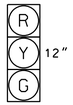
PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION				
SIGNAL FACE	PHASE Ø2+6	PHASE Ø4+8	DWELL	FLASH
21,22	G	R	G	Y
41,42	R	G	R	R
61,62	G	R	G	Y
81,82	R	G	R	R
Sign A	OFF	OFF	ON	OFF

SIGNAL FACE I.D.

All Heads L.E.D.



21,22
41,42
61,62
81,82

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
2A	6X6	70	4	-	2	Yes	-	-	S	-	X
2B	6X6	70	4	-	2	Yes	-	-	S	-	X
4A	6X40	0	2-4-2	-	4	Yes	-	3	S	-	X
4B	6X40	+5	2-4-2	-	4	Yes	-	10	S	-	X
6A	6X6	70	4	-	6	Yes	-	-	S	-	X
6B	6X6	70	4	-	6	Yes	-	-	S	-	X
8A	6X40	0	2-4-2	-	8	Yes	-	3	S	-	X
8B	6X40	+5	2-4-2	-	8	Yes	-	10	S	-	X

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. This location contains railroad preemption phasing. Do not program signal for late night flashing operation.
3. Set all detector units to presence mode.
4. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
5. Pavement markings are existing.
6. Ensure flashing operation does not alter operation of blankout signs.
7. 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	PHASE 4	PHASE 6	PHASE 8
Min Green *	10	7	10	7
Walk *	0	0	0	0
Ped Clear	0	0	0	0
Veh. Extension *	3.0	1.0	3.0	1.0
Max 1 *	50	30	50	30
Yellow	4.0	4.0	4.0	4.0
Red Clear	2.0	2.0	2.0	2.0
Actuations B4 Add *	-	-	-	-
Seconds /Actuation *	-	-	-	-
Max Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Locking Detector	X	-	X	-
Recall Position	VEH. RECALL	-	VEH. RECALL	-
Dual Entry	-	X	-	X
Simultaneous Gap	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.

ASC/3 RR PREEMPT

FUNCTION	PRE 1
Exit Phase(s)	4,8
Preempt Override	ON
Delay Time	0
Ped Clear Trough Yellow	N
Terminate Phases	N
Track Clear Reservice	Y
Entrance Walk	-
Entrance Ped Clear	-
Entrance Min Green	1
Entrance Yellow Change	25.5*
Entrance Red Clear	25.5*
Track Clear Min Green	-
Track Clear Yellow Change	-
Track Clear Red Clear	-
Min Dwell Time	10
Exit Yellow Change	25.5*
Exit Red Clear	25.5*

* Allows normal phase times to be used.

This signal was designed for Simultaneous Preemption

LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Metal Pole with Mastarm	
N/A	Railroad Cantilever	
N/A	Railroad Tracks	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
A	NO LEFT TURN Sign - Train Fiber Optic Blankout Sign	A

Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Offices of:
Transportation Mobility and Safety Division
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy.Garner,NC 27529

SR 2299 (Russell Street) at Cool Spring Street

Division 6 Cumberland County Fayetteville

PLAN DATE:	May 2016	REVIEWED BY:	JPG
PREPARED BY:	KPG, Jr.	REVIEWED BY:	

REVISIONS	INIT.	DATE

SCALE 0 20 1"=20'

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 029904 ENGINEER JASON P. GALLOWAY

DocuSigned by: Jason P. Galloway 9/22/2016
F7D0EA7D4B1841D... DATE

SIG. INVENTORY NO. 06-0443

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jgalloway