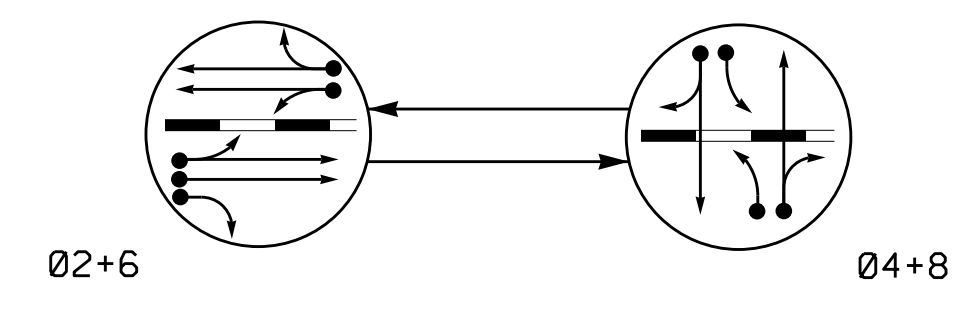


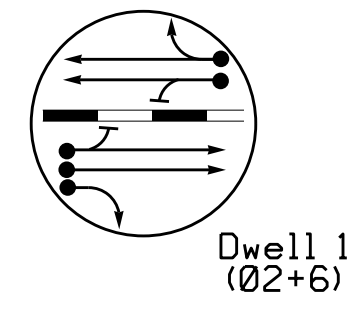
PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

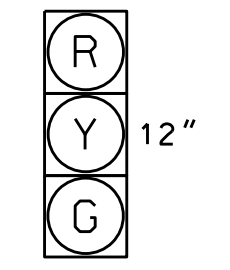
RAIL PREEMPT PHASES (High Priority)



SIGNAL FACE	PHASE			
	02+6	04+8	DWELL 1	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.



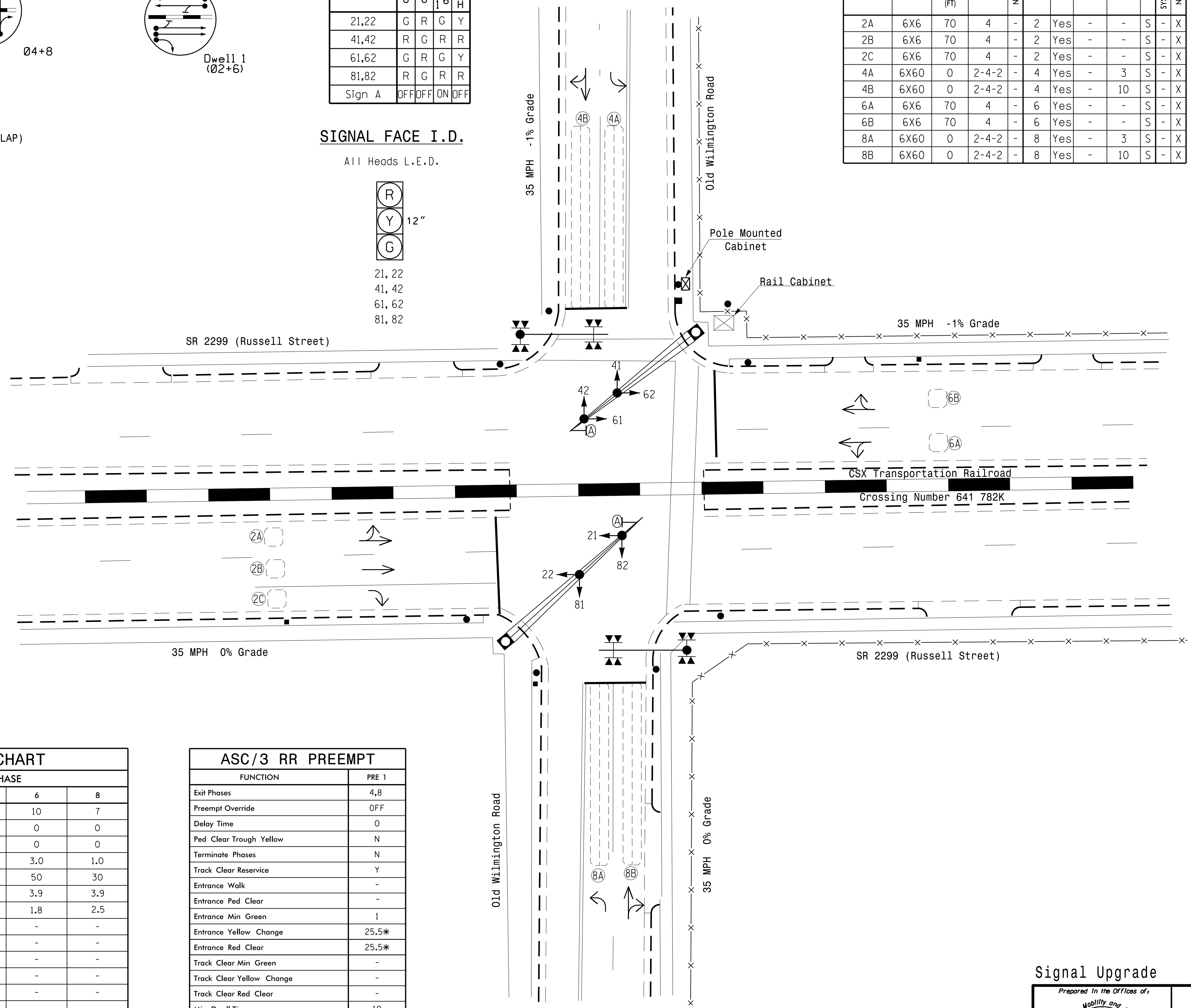
21, 22
41, 42
61, 62
81, 82

ASC/3 DETECTOR INSTALLATION CHART										
DETECTOR					PROGRAMMING					
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	NEW LOOP
2A	6X6	70	4	-	2	Yes	-	-	S	- X
2B	6X6	70	4	-	2	Yes	-	-	S	- X
2C	6X6	70	4	-	2	Yes	-	-	S	- X
4A	6X60	0	2-4-2	-	4	Yes	-	3	S	- X
4B	6X60	0	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	6X60	0	2-4-2	-	8	Yes	-	3	S	- X
8B	6X60	0	2-4-2	-	8	Yes	-	10	S	- X

2 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.
- This location contains railroad preemption phasing. Do not program signal for late night flashing operation.
- 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.
- Ensure flashing operation does not alter operation of blankout signs.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



FEATURE	PHASE			
	2	4	6	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	3.9	3.9	3.9	3.9
Red Clear	1.8	2.5	1.8	2.5
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

FUNCTION	PRE 1
Exit Phases	4,8
Preempt Override	OFF
Delay Time	0
Ped Clear Trough Yellow	N
Terminate Phases	N
Track Clear Reserve	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.
Simultaneous Preemption

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

Signal Upgrade

SR 2299 (Russell Street) at Old Wilmington Road

Division 6 Cumberland County Fayetteville

PLAN DATE: April 2016 REVIEWED BY: JPG

PREPARED BY: EM Minshew REVIEWED BY:

REVISIONS: INIT. DATE

SCALE: 1"=20'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

Jason P. Gallaway 7/21/2016

SIG. INVENTORY NO. 06-0015

24-Jul-2016 11:59
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 emminshew