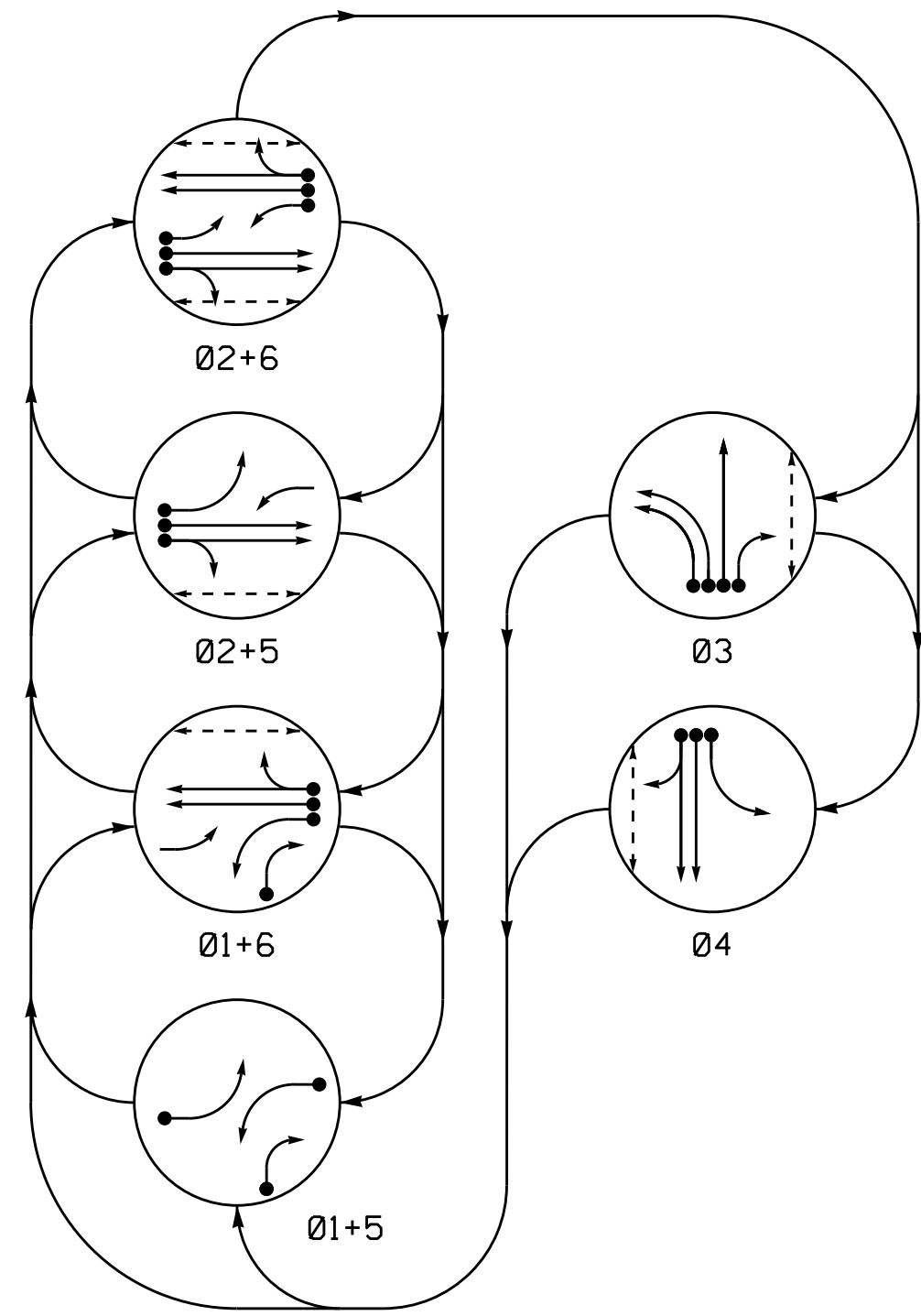


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

- ←●→ DETECTED MOVEMENT
- ←○→ UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- ←- - -> PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE					
	01+5	01+6	02+5	02+6	03	04
11	←	←	←	←	←	←
21, 22	R	R	G	G	R	R
31, 32	←	←	←	←	←	←
33	R	R	R	R	G	R
34	←	←	R	R	G	R
41	R	R	R	R	R	G
42	R	R	R	R	R	G
51	←	←	←	←	←	←
61, 62	R	G	R	G	R	R
P21, P22	DW	DW	W	W	DW	DRK
P31, P32	DW	DW	DW	DW	W	DRK
P41, P42	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DRK

ASC/3 DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	CROSS SWITCH PHASE	EXTEND TIME	DELAY TIME	TYPE	SYSTEM LOOP	NEW CARD
1A	6X60	+5	2-4-2	-	1	Yes	-	-	15	S	-	X
*1B	6X60	+5	2-4-2	-	1	Yes	3	-	15	N	-	X
2A, 2B	6X6	70	4	-	2	Yes	-	-	-	S	-	X
3A	6X60	+5	2-4-2	-	3	Yes	-	-	3	S	-	X
3B	6X60	+5	2-4-2	-	3	Yes	-	-	-	S	-	X
3C	6X60	+5	2-4-2	-	3	Yes	-	-	-	S	-	X
4A	6X60	+5	2-4-2	-	4	Yes	-	-	3	S	-	X
4B	6X60	+5	2-4-2	-	4	Yes	-	-	-	S	-	X
4C	6X60	+5	2-4-2	-	4	Yes	-	-	10	S	-	X
5A	6X60	+5	2-4-2	-	5	Yes	-	-	15	S	-	X
6A, 6B	6X6	70	4	-	6	Yes	-	-	-	S	-	X

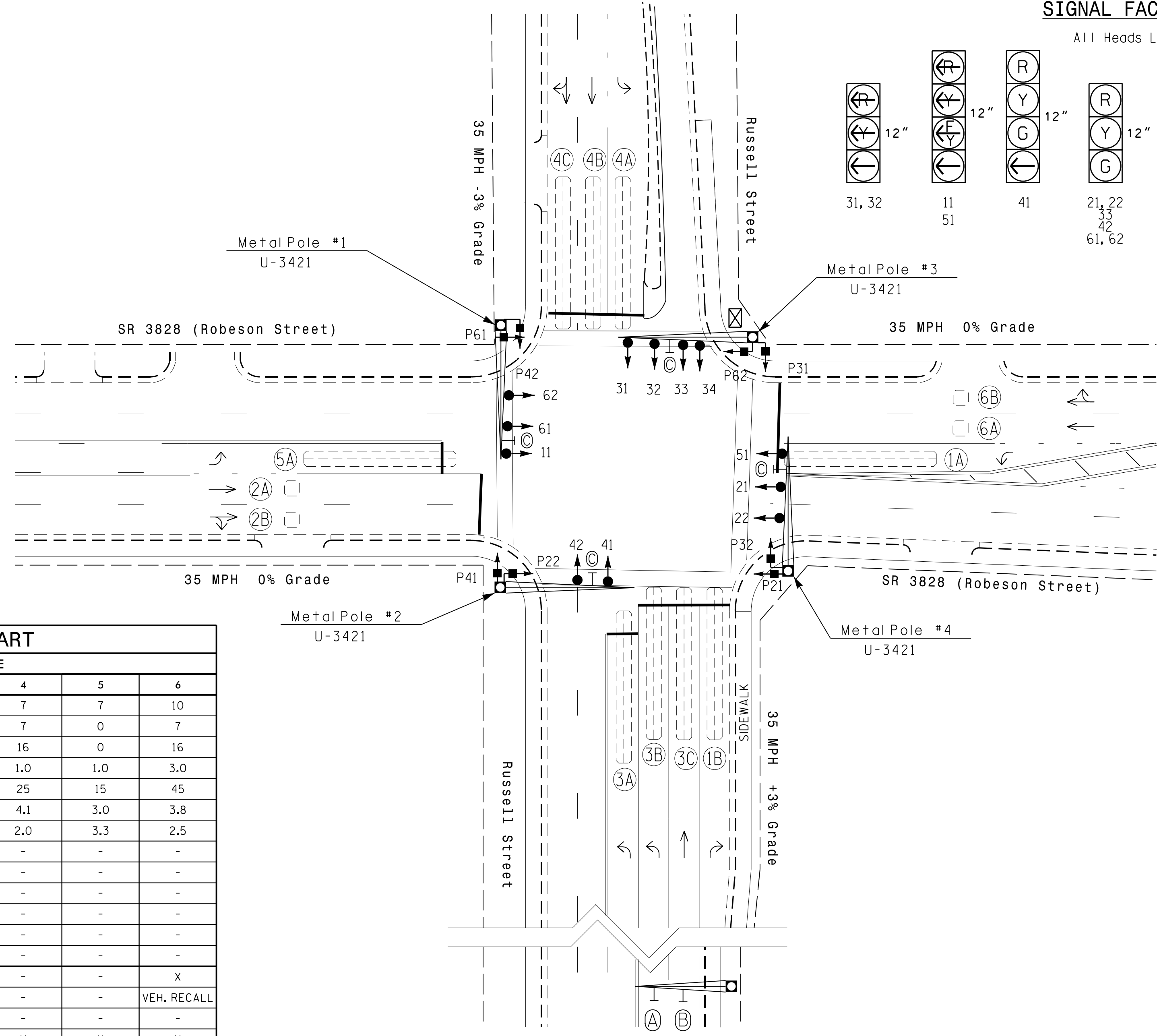
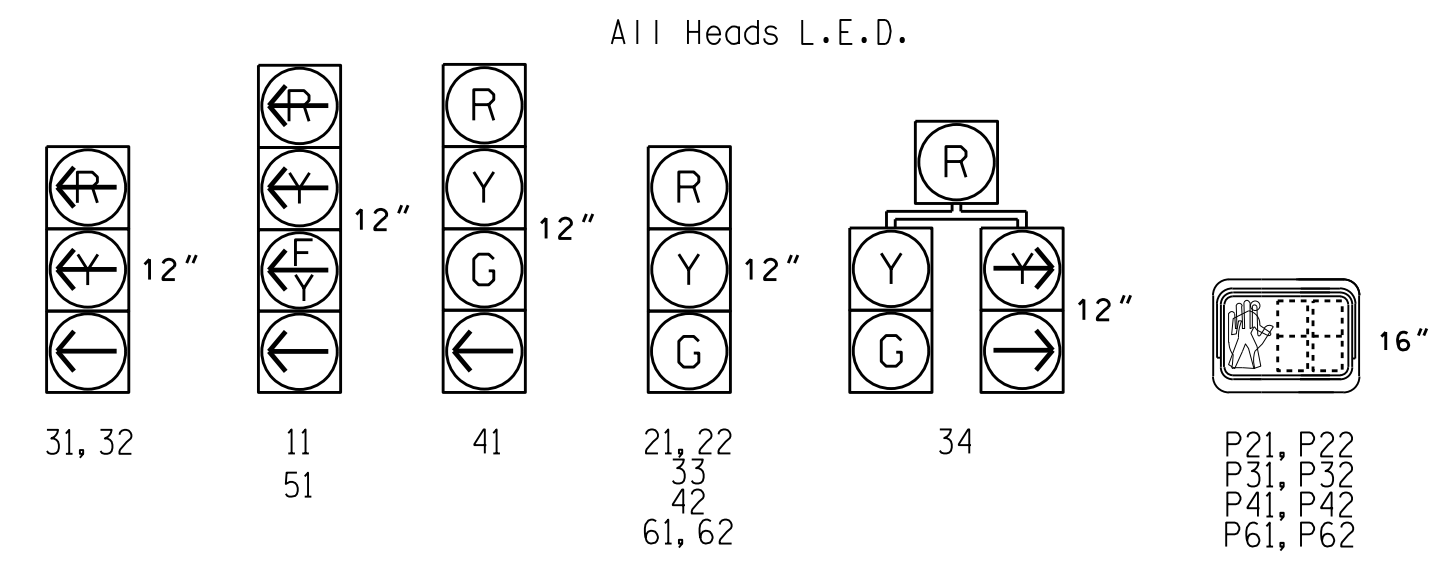
\* Enable Cross Switch Detector

6 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.
- The order of phase 3 and phase 4 may be reversed.
- 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 only.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

SIGNAL FACE I.D.



ASC/3 TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Min Green *	7	10	7	7	7	10
Walk *	0	7	7	7	0	7
Ped Clear	0	20	20	16	0	16
Veh. Extension *	1.0	3.0	1.0	1.0	1.0	3.0
Max 1 *	15	45	30	25	15	45
Yellow	3.0	3.8	3.7	4.1	3.0	3.8
Red Clear	2.9	2.5	2.4	2.0	3.3	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	-	-	-	-	-	-
Simultaneous Gap	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

- | PROPOSED   | EXISTING  |
|--|-----------|
| ○ → Traffic Signal Head                            | ● → N/A   |
| ● → Modified Signal Head                           | ○ → N/A   |
| □ → Sign   | □ → N/A   |
| □ → Pedestrian Signal Head With Push Button & Sign | □ → N/A   |
| □ → Signal Pole with Guy                           | □ → N/A   |
| □ → Signal Pole with Sidewalk Guy                  | □ → N/A   |
| □ → Inductive Loop Detector                        | □ → N/A   |
| □ → Controller & Cabinet                           | □ → N/A   |
| □ → Junction Box                                   | □ → N/A   |
| - - - 2-in Underground Conduit                     | - - - N/A |
| - - - N/A Right of Way                             | - - - N/A |
| → Directional Arrow                                | → N/A     |
| ○ → Metal Pole with Mastarm                        | ○ → N/A   |
| ⓐ Left Arrow "ONLY" Sign (R3-5L)                   | ⓐ N/A     |
| ⓑ Through Arrow "ONLY" Sign (R3-5A)                | ⓑ N/A     |
| ⓒ Street Name Sign                                 | ⓒ N/A     |

Signal Upgrade

Prepared In the Offices of:  
  
 750 N. Greenfield Pkwy, Garner, NC 27529

Division 6 Cumberland County Fayetteville  
 SR 3828 (Robeson Street) at SR 2299 (Russell Street)

PLAN DATE: June 2016 REVIEWED BY: JPG  
 PREPARED BY: KGP, Jr. REVIEWED BY:

REVISIONS: \_\_\_\_\_ INIT: \_\_\_\_\_ DATE: \_\_\_\_\_

SCALE: 1" = 30'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL: JASON P. GALLAGHER, PROFESSIONAL ENGINEER, No. 029904, State of North Carolina

Jason P. Gallagher 9/7/2016  
 DATE: \_\_\_\_\_  
 SIG. INVENTORY NO. 06-0010

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 S:\ITS\ASU\ITS\_Signal\Signal Design\Section\Eastern Region\01\U-5742 Fayetteville ASC/3\06-U-5742 Fayetteville ASC/3\06-0010\060010\_s1a.dsn\_2016mdd.dgn  
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