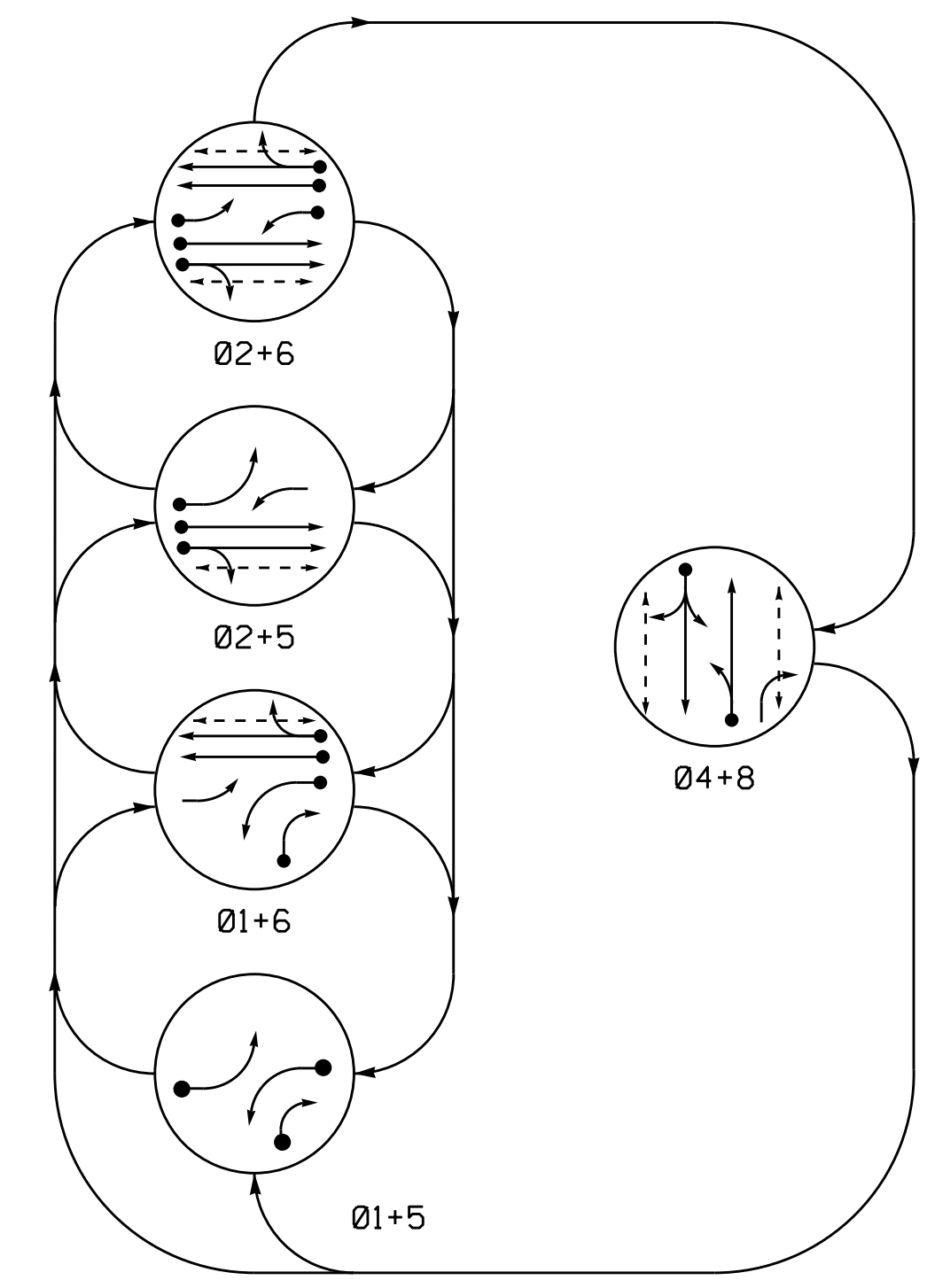


5 Phase Fully Actuated Fayetteville Signal System

PHASING DIAGRAM



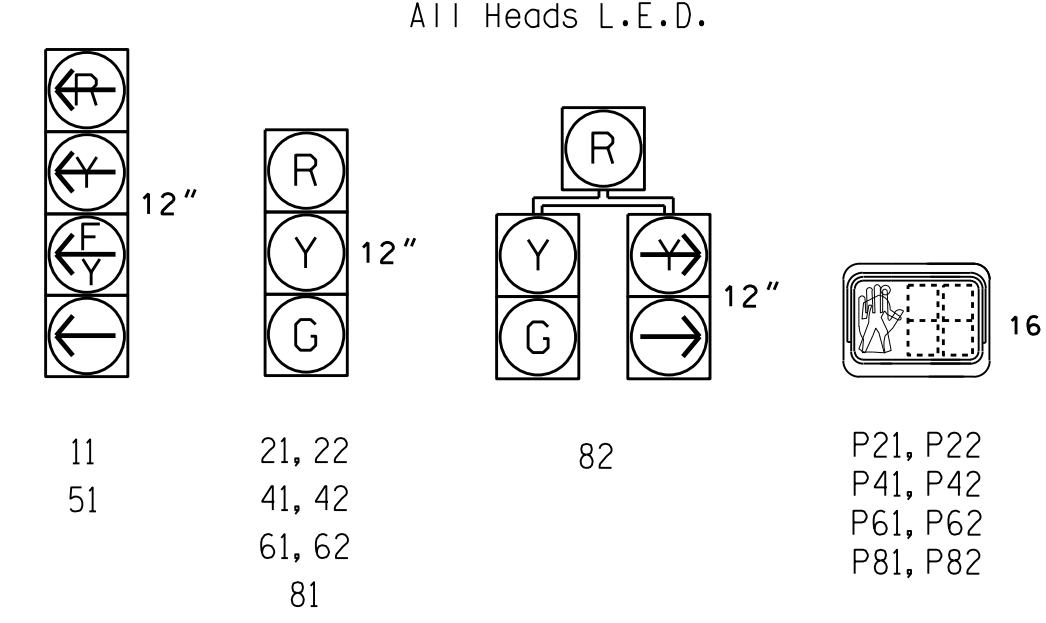
PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE					FLASH
	01+5	01+6	02+5	02+6	04+8	
11			F	F	R	R
21,22	R	R	G	G	R	Y
41,42	R	R	R	R	G	R
51		F		F	R	R
61,62	R	G	R	G	R	Y
81	R	R	R	R	G	R
82	R	R	R	R	G	R
P21,P22	DW	DW	W	W	DW	DRK
P41,P42	DW	DW	DW	DW	W	DRK
P61,P62	DW	W	DW	W	DW	DRK
P81,P82	DW	DW	DW	DW	W	DRK

SIGNAL FACE I.D.

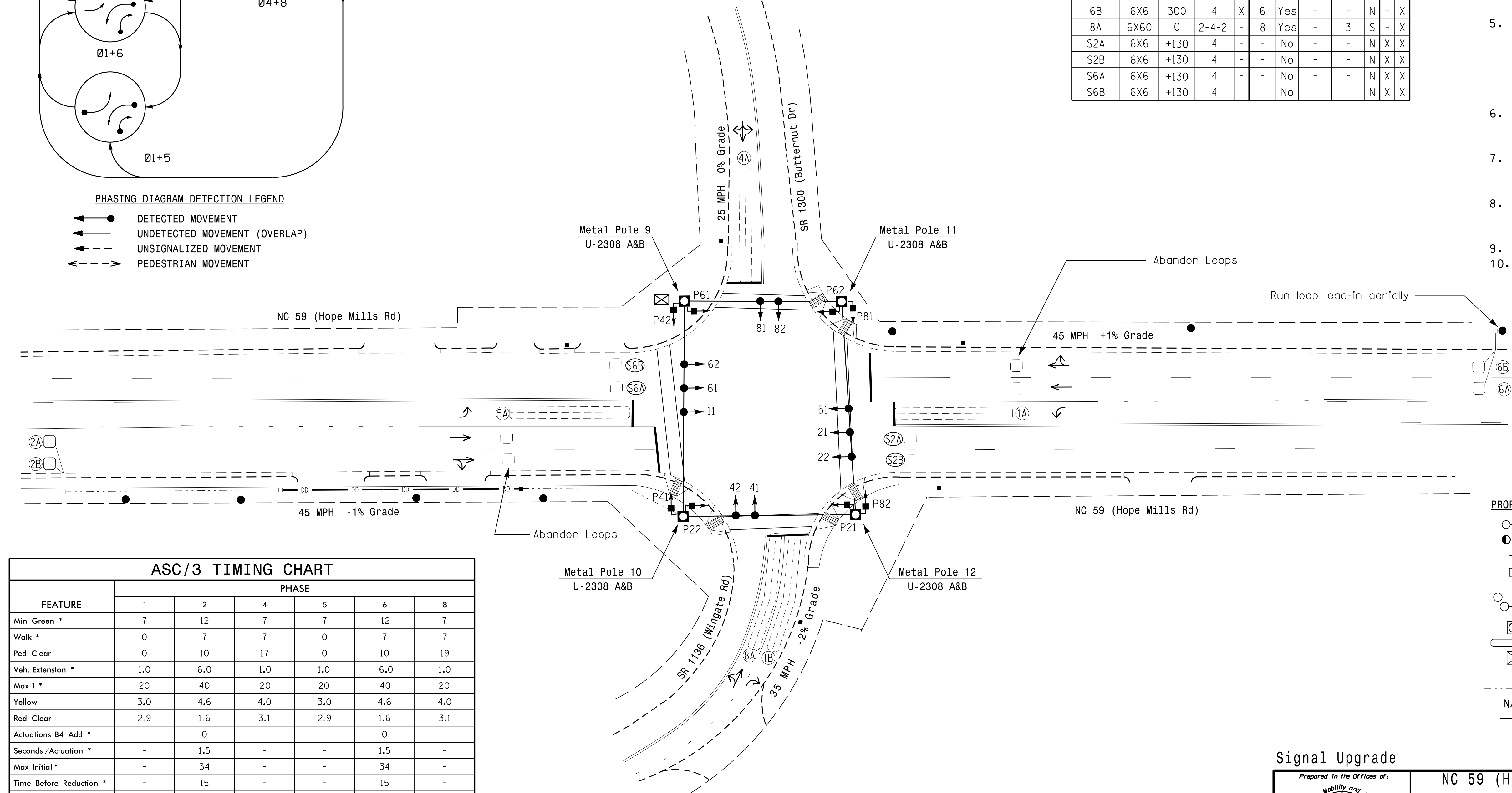


ASC/3 DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING					TYPE	SYSTEM LOOP	NEW CARD
					PHASE	CALLING	EXTEND TIME	DELAY TIME				
1A	6X60	0	2-4-2	-	1	Yes	-	15	S	-	X	
1B	6X60	0	2-4-2	-	6	Yes	-	3	G	-	X	
2A	6X6	300	4	X	2	Yes	-	-	N	-	X	
2B	6X6	300	4	X	2	Yes	-	-	N	-	X	
4A	6X60	0	2-4-2	-	4	Yes	-	15	S	-	X	
5A	6X60	0	2-4-2	-	5	Yes	-	15	S	-	X	
6A	6X6	300	4	X	6	Yes	-	-	N	-	X	
6B	6X6	300	4	X	6	Yes	-	-	N	-	X	
8A	6X60	0	2-4-2	-	8	Yes	-	3	S	-	X	
S2A	6X6	+130	4	-	-	No	-	-	N	X	X	
S2B	6X6	+130	4	-	-	No	-	-	N	X	X	
S6A	6X6	+130	4	-	-	No	-	-	N	X	X	
S6B	6X6	+130	4	-	-	No	-	-	N	X	X	

NOTES

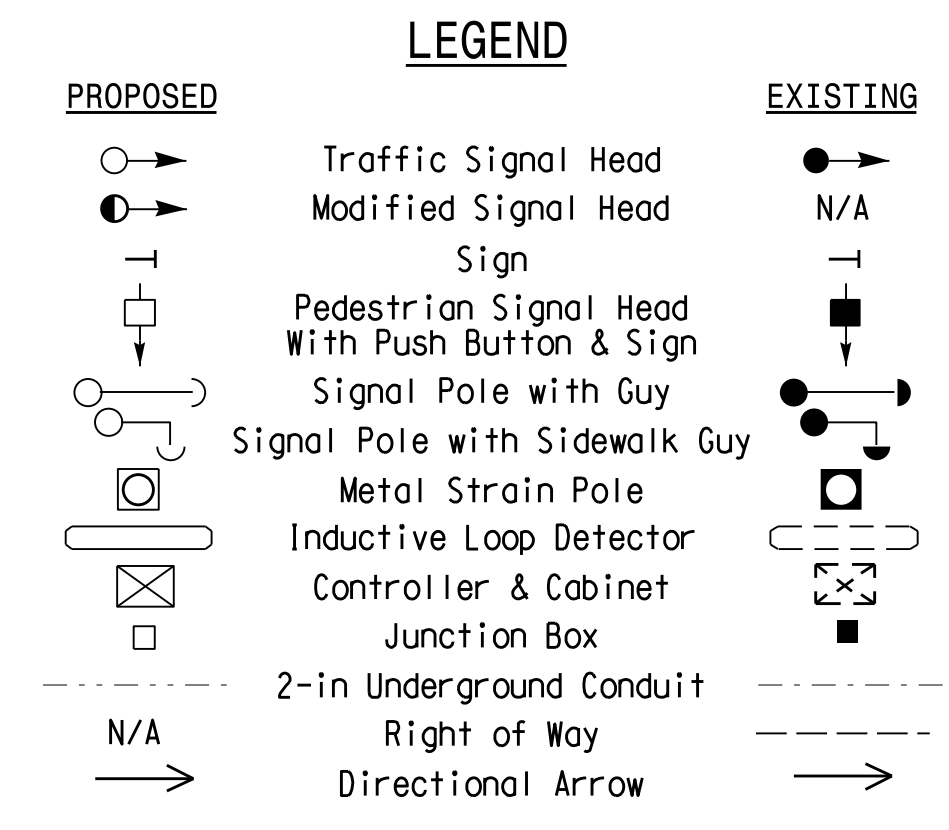
- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Set all detector units 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.



ASC/3 TIMING CHART

FEATURE	PHASE					
	1	2	4	5	6	8
Min Green *	7	12	7	7	12	7
Walk *	0	7	7	0	7	7
Ped Clear	0	10	17	0	10	19
Veh. Extension *	1.0	6.0	1.0	1.0	6.0	1.0
Max I *	20	40	20	20	40	20
Yellow	3.0	4.6	4.0	3.0	4.6	4.0
Red Clear	2.9	1.6	3.1	2.9	1.6	3.1
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	-	X	-	-	X	-
Recall Position	-	VEH. RECALL	-	-	VEH. RECALL	-
Dual Entry	-	-	X	-	-	X
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.



Signal Upgrade

Prepared In the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

NC 59 (Hope Mills Road) at SR 1136 (Wingate Road) / SR 1300 (Butternut Drive)

Division 6 Cumberland County Fayetteville

PLAN DATE: JUNE 2016 REVIEWED BY: JPG

PREPARED BY: KGP, Jr. REVIEWED BY:

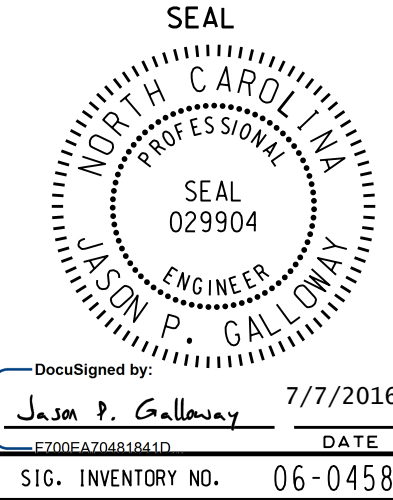
REVISIONS: INIT. DATE

SCALE: 1"=30'

DocuSigned by: Jason P. Galloway 7/7/2016

SIG. INVENTORY NO. 06-0458

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



13-0071-2016-15-18
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 Reference