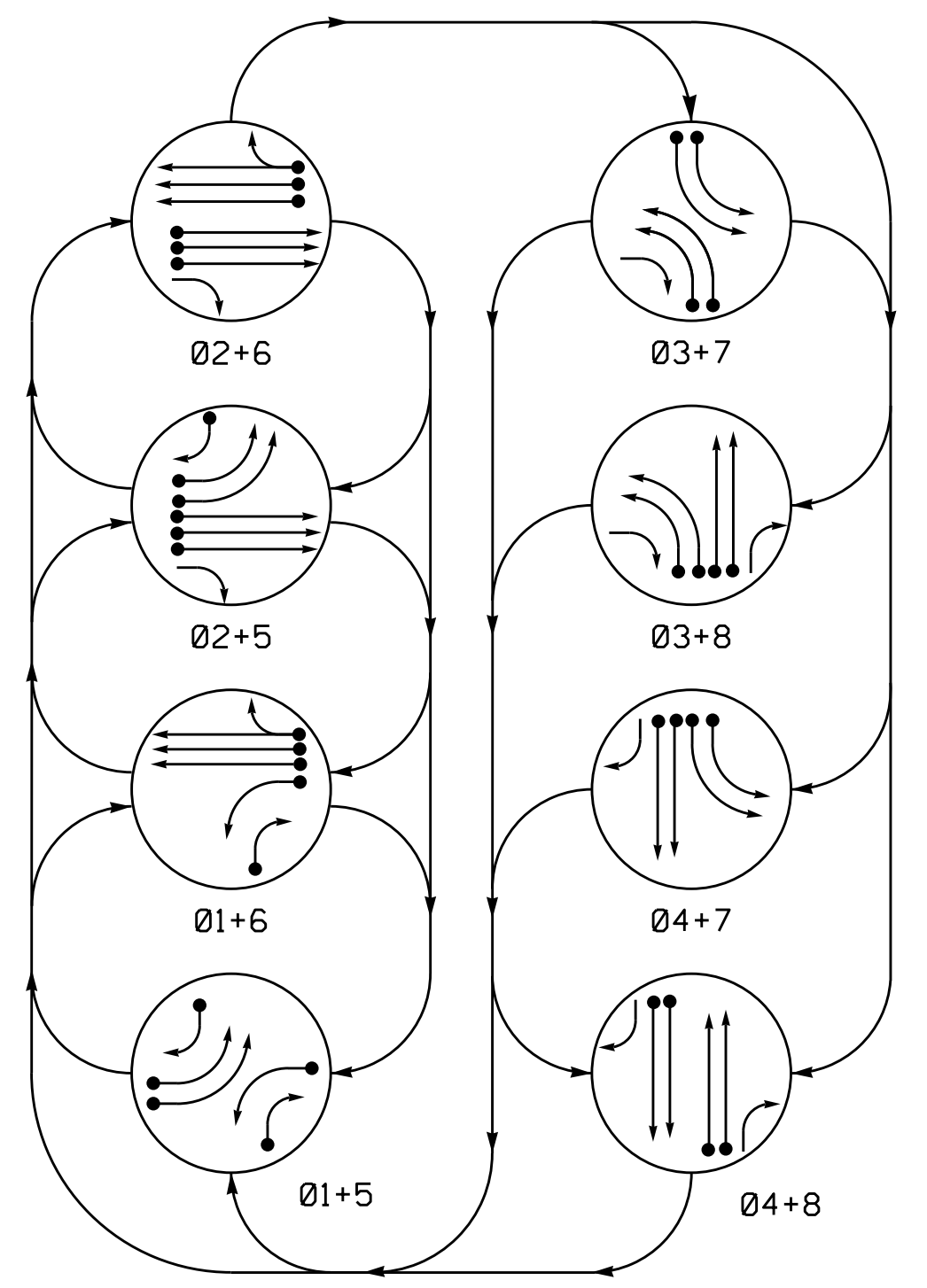


**PHASING DIAGRAM**



**PHASING DIAGRAM DETECTION LEGEND**

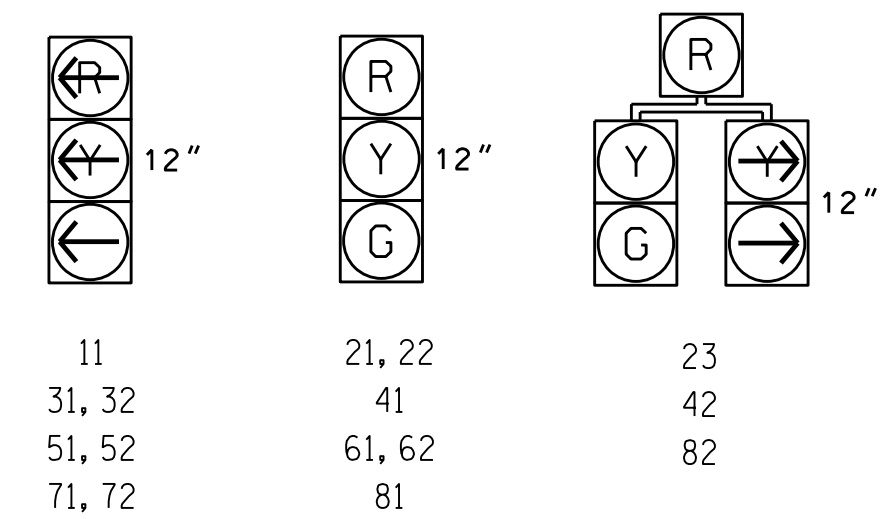
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

**TABLE OF OPERATION**

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8
11	---	---	---	---	---	---	---	---
21,22	R	R	G	G	R	R	R	Y
23	R	R	G	G	R	R	R	Y
31,32	---	---	---	---	---	---	---	---
41	R	R	R	R	R	R	G	G
42	R	R	R	R	R	R	G	G
51,52	---	---	---	---	---	---	---	---
61,62	R	G	R	G	R	R	R	Y
71,72	---	---	---	---	---	---	---	---
81	R	R	R	R	R	G	R	G
82	R	R	R	R	R	G	R	G

**SIGNAL FACE I.D.**

All Heads L.E.D.



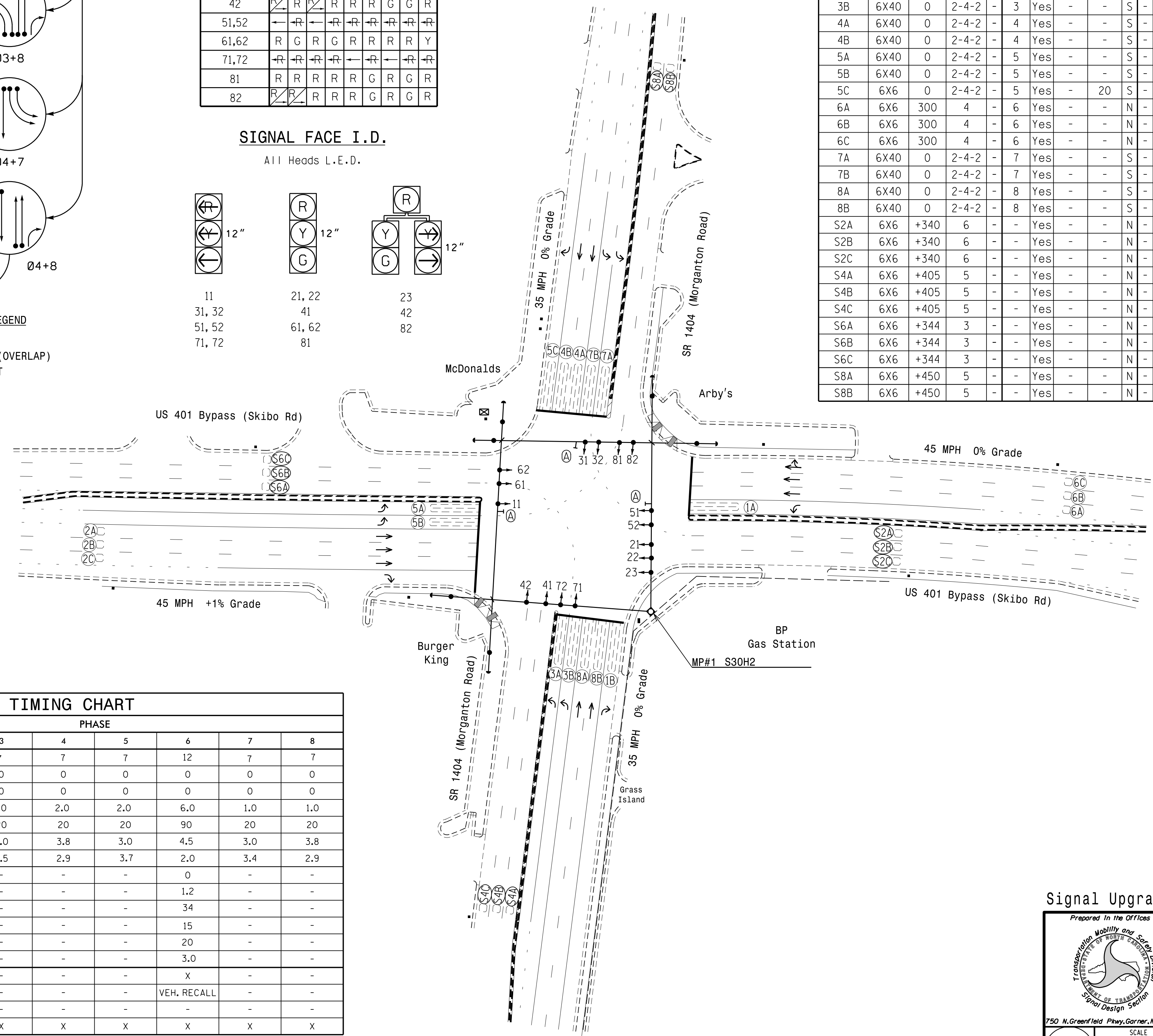
**ASC/3 DETECTOR INSTALLATION CHART**

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING						
					PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	-	1	Yes	-	-	-	S	-
1B	6X40	0	2-4-2	-	1	Yes	-	15	-	S	-
2A	6X6	300	4	-	2	Yes	-	-	-	N	-
2B	6X6	300	4	-	2	Yes	-	-	-	N	-
2C	6X6	300	4	-	2	Yes	-	-	-	N	-
3A	6X40	0	2-4-2	-	3	Yes	-	-	-	S	-
3B	6X40	0	2-4-2	-	3	Yes	-	-	-	S	-
4A	6X40	0	2-4-2	-	4	Yes	-	-	-	S	-
4B	6X40	0	2-4-2	-	4	Yes	-	-	-	S	-
5A	6X40	0	2-4-2	-	5	Yes	-	-	-	S	-
5B	6X40	0	2-4-2	-	5	Yes	-	-	-	S	-
5C	6X6	0	2-4-2	-	5	Yes	-	20	-	S	-
6A	6X6	300	4	-	6	Yes	-	-	-	N	-
6B	6X6	300	4	-	6	Yes	-	-	-	N	-
6C	6X6	300	4	-	6	Yes	-	-	-	N	-
7A	6X40	0	2-4-2	-	7	Yes	-	-	-	S	-
7B	6X40	0	2-4-2	-	7	Yes	-	-	-	S	-
8A	6X40	0	2-4-2	-	8	Yes	-	-	-	S	-
8B	6X40	0	2-4-2	-	8	Yes	-	-	-	S	-
S2A	6X6	+340	6	-	-	Yes	-	-	-	N	-
S2B	6X6	+340	6	-	-	Yes	-	-	-	N	-
S2C	6X6	+340	6	-	-	Yes	-	-	-	N	-
S4A	6X6	+405	5	-	-	Yes	-	-	-	N	-
S4B	6X6	+405	5	-	-	Yes	-	-	-	N	-
S4C	6X6	+405	5	-	-	Yes	-	-	-	N	-
S6A	6X6	+344	3	-	-	Yes	-	-	-	N	-
S6B	6X6	+344	3	-	-	Yes	-	-	-	N	-
S6C	6X6	+344	3	-	-	Yes	-	-	-	N	-
S8A	6X6	+450	5	-	-	Yes	-	-	-	N	-
S8B	6X6	+450	5	-	-	Yes	-	-	-	N	-

**8 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.
- Phase 3 and/or phase 7 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.
- 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	3	4	5	6	7	8
Min Green *	7	12	7	7	7	12	7	7
Walk *	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0	0	0
Veh. Extension *	2.0	6.0	2.0	2.0	2.0	6.0	1.0	1.0
Max I *	20	90	20	20	20	90	20	20
Yellow	3.0	4.5	3.0	3.8	3.0	4.5	3.0	3.8
Red Clear	3.8	2.0	3.5	2.9	3.7	2.0	3.4	2.9
Actuations B4 Add *	-	0	-	-	-	0	-	-
Seconds / Actuation *	-	1.2	-	-	-	1.2	-	-
Max Initial *	-	34	-	-	-	34	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduce *	-	20	-	-	-	20	-	-
Minimum Gap	-	3.0	-	-	-	3.0	-	-
Locking Detector	-	X	-	-	-	X	-	-
Recall Position	-	VEH. RECALL	-	-	-	VEH. RECALL	-	-
Dual Entry	-	-	-	-	-	-	-	-
Simultaneous Gap	X	X	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 Traffic Signal Head                        |  | Existing Traffic Signal Head                        |
|  | Proposed Modified Signal Head                       |  | N/A   |
|  | Proposed Pedestrian Signal Head                     |  | N/A   |
|  | Proposed Signal Pole with Guy                       |  | Existing Signal Pole with Guy                       |
|  | Proposed Metal Strain Pole                          |  | Existing Metal Strain Pole                          |
|  | Proposed Inductive Loop Detector                    |  | Existing Inductive Loop Detector                    |
|  | Proposed Controller & Cabinet                       |  | Existing Controller & Cabinet                       |
|  | Proposed Junction Box                               |  | Existing Junction Box                               |
|  | Proposed Curb Ramp                                  |  | Existing Curb Ramp                                  |
|  | Proposed 2-in-Underground Conduit                   |  | Existing 2-in-Underground Conduit                   |
|  | Proposed Right of Way                               |  | Existing Right of Way                               |
|  | Proposed Directional Arrow                          |  | Existing Directional Arrow                          |
|  | Proposed "U-TURN YIELD TO RIGHT TURN" Sign (R10-16) |  | Existing "U-TURN YIELD TO RIGHT TURN" Sign (R10-16) |

**Signal Upgrade**

**US 401 Bypass (Skibo Road) at SR 1404 (Morganton Road)**

Division 6 Cumberland County Fayetteville

PLAN DATE: October 2015 REVIEWED BY: JPG

PREPARED BY: KGP, Jr. REVIEWED BY:

SEAL

Jason P. Gallaway 4/19/2016

SIG. INVENTORY NO. 06-0095

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE 0 50 1"=50'

08-SEP-2016 13:47  
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