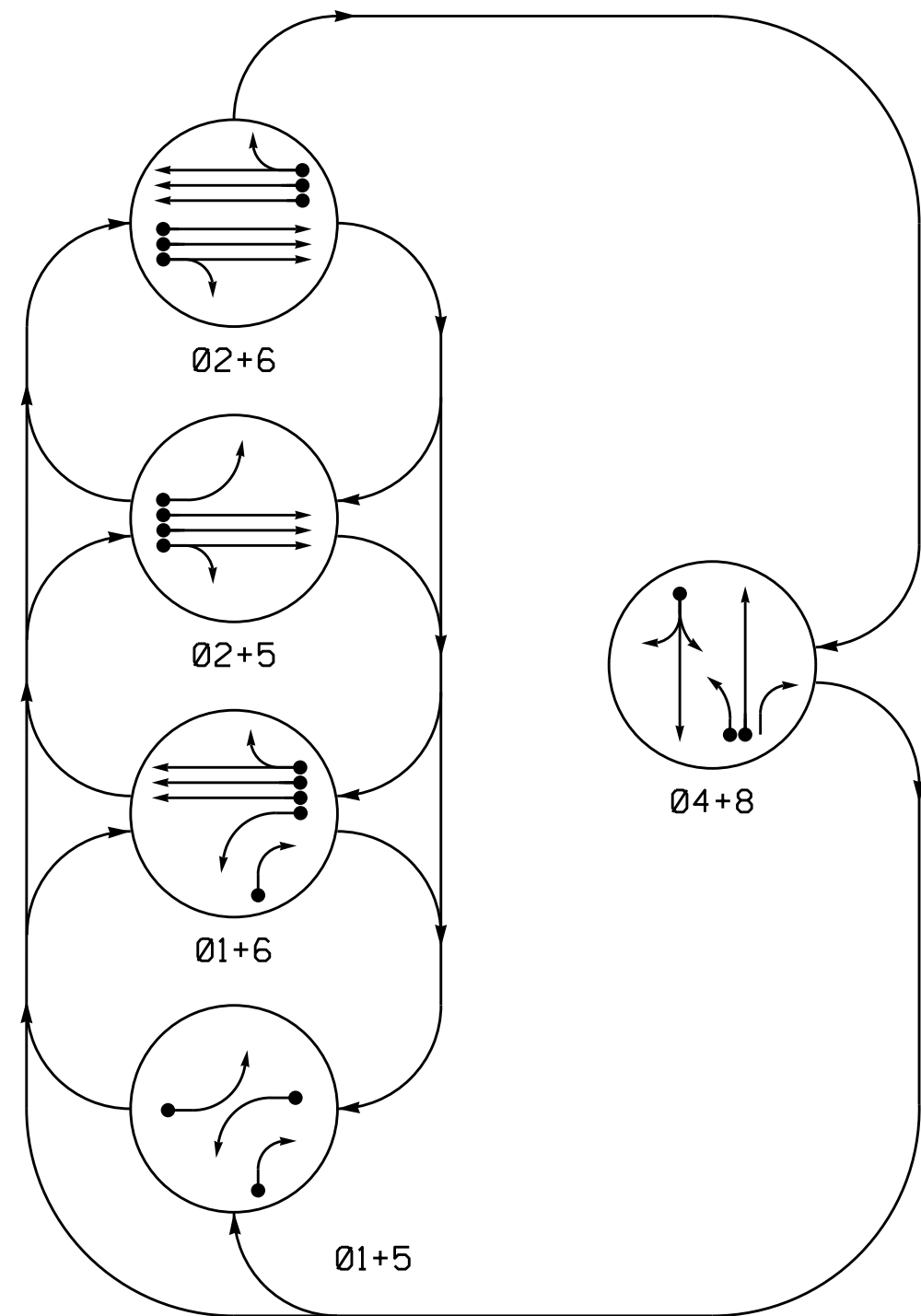


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

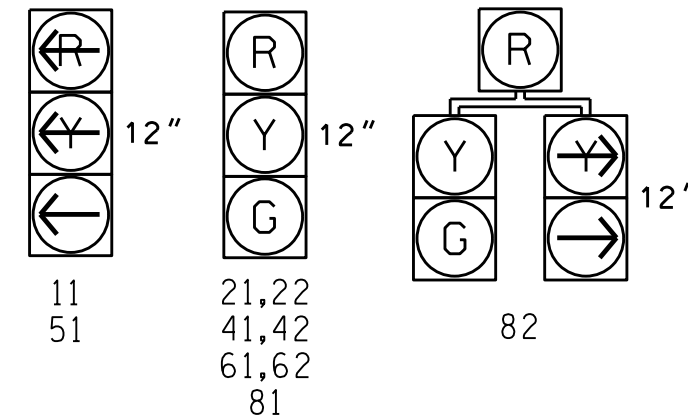
- ←●→ DETECTED MOVEMENT
- ←○→ UNDETECTED MOVEMENT (OVERLAP)
- ←---→ UNSIGNALIZED MOVEMENT
- ←- - -> PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE					
	01+5	01+6	02+5	02+6	04+8	F L
11	←	←	←	←	←	←
21,22	R	R	G	G	R	Y
41,42	R	R	R	R	G	R
51	←	←	←	←	←	←
61,62	R	G	R	G	R	Y
81	R	R	R	R	G	R
82	R	R	R	R	G	R

SIGNAL FACE I.D.

All Heads L.E.D.



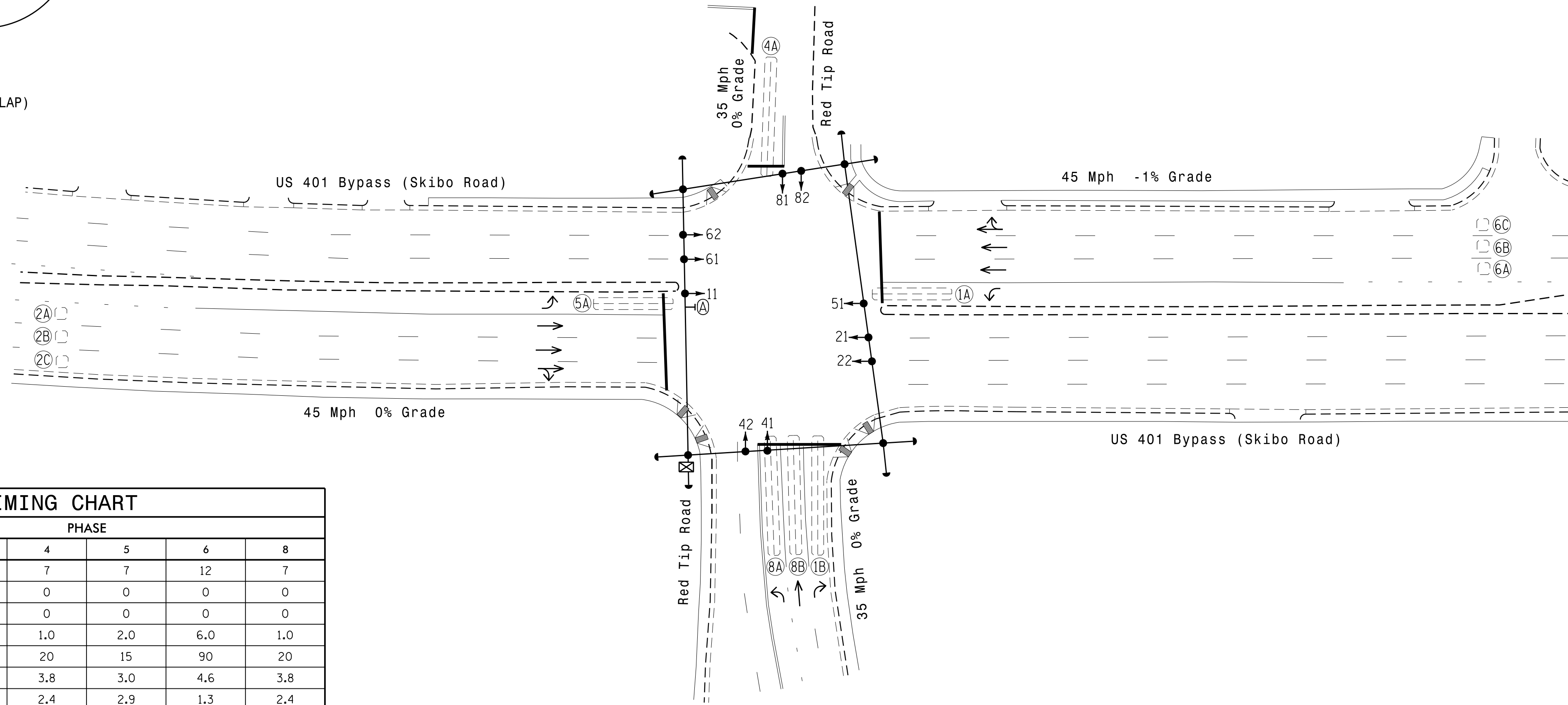
ASC/3 DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING					SYSTEM LOOP	NEW CARD
					PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE		
1A	6X40	+5	2-4-2	-	1	Yes	-	-	S	-	X
1B	6X60	+5	2-4-2	-	1	Yes	-	20	S	-	X
2A	6X6	300	4	-	2	Yes	-	-	N	-	X
2B	6X6	300	4	-	2	Yes	-	-	N	X	X
2C	6X6	300	4	-	2	Yes	-	-	N	X	X
4A	6X60	+5	2-4-2	-	4	Yes	-	10	S	X	X
5A	6X40	+5	2-4-2	-	5	Yes	-	-	S	X	X
6A	6X6	300	4	-	6	Yes	-	-	N	-	X
6B	6X6	300	4	-	6	Yes	-	-	N	-	X
6C	6X6	300	4	-	6	Yes	-	-	N	-	X
8A	6X60	+5	2-4-2	-	8	Yes	-	2	S	-	X
8B	6X60	+5	2-4-2	-	8	Yes	-	-	S	-	X

5 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.
- 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	4	5	6	8
Min Green *	7	12	7	7	12	7
Walk *	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0
Veh. Extension *	2.0	6.0	1.0	2.0	6.0	1.0
Max 1 *	15	90	20	15	90	20
Yellow	3.0	4.6	3.8	3.0	4.6	3.8
Red Clear	2.9	1.3	2.4	2.9	1.3	2.4
Actuations B4 Add *	-	0	-	-	0	-
Seconds / Actuation *	-	1.2	-	-	1.2	-
Max Initial *	-	34	-	-	34	-
Time Before Reduction *	-	20	-	-	20	-
Time To Reduce *	-	40	-	-	40	-
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.

LEGEND

- | | | | |
|-----|--|-----|----------|
| ○→ | Traffic Signal Head | ●→ | EXISTING |
| ○→ | Modified Signal Head | N/A | |
| ⊥ | Sign | ⊥ | |
| ⊥ | Pedestrian Signal Head With Push Button & Sign | ⊥ | |
| ⊥ | Signal Pole with Guy | ⊥ | |
| ⊥ | Signal Pole with Sidewalk Guy | ⊥ | |
| ⊥ | Inductive Loop Detector | ⊥ | |
| ⊥ | Controller & Cabinet | ⊥ | |
| ⊥ | Junction Box | ⊥ | |
| ⊥ | 2-in Underground Conduit | ⊥ | |
| N/A | Right of Way | --- | |
| → | Directional Arrow | → | |
| N/A | Wheelchair Ramp | ▲ | |
| ⊙ | "U-TURN YIELD TO RIGHT TURN" Sign (R10-16) | ⊙ | |

Signal Upgrade

750 N. Greenfield Pkwy, Garner, NC 27529

US 401 Bypass (Skibo Road) at Red Tip Road

Division 6 Cumberland County Fayetteville

PLAN DATE: November 2015 REVIEWED BY: JPG

PREPARED BY: Jeff Spence REVIEWED BY:

SEAL

JASON P. GALLOWAY

PROFESSORIAL ENGINEER

SEAL 029904

4/25/2016

SCALE 0 40

1"=40'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SIG. INVENTORY NO. 06-1169

05-APR-2016 09:56
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 J. Spence