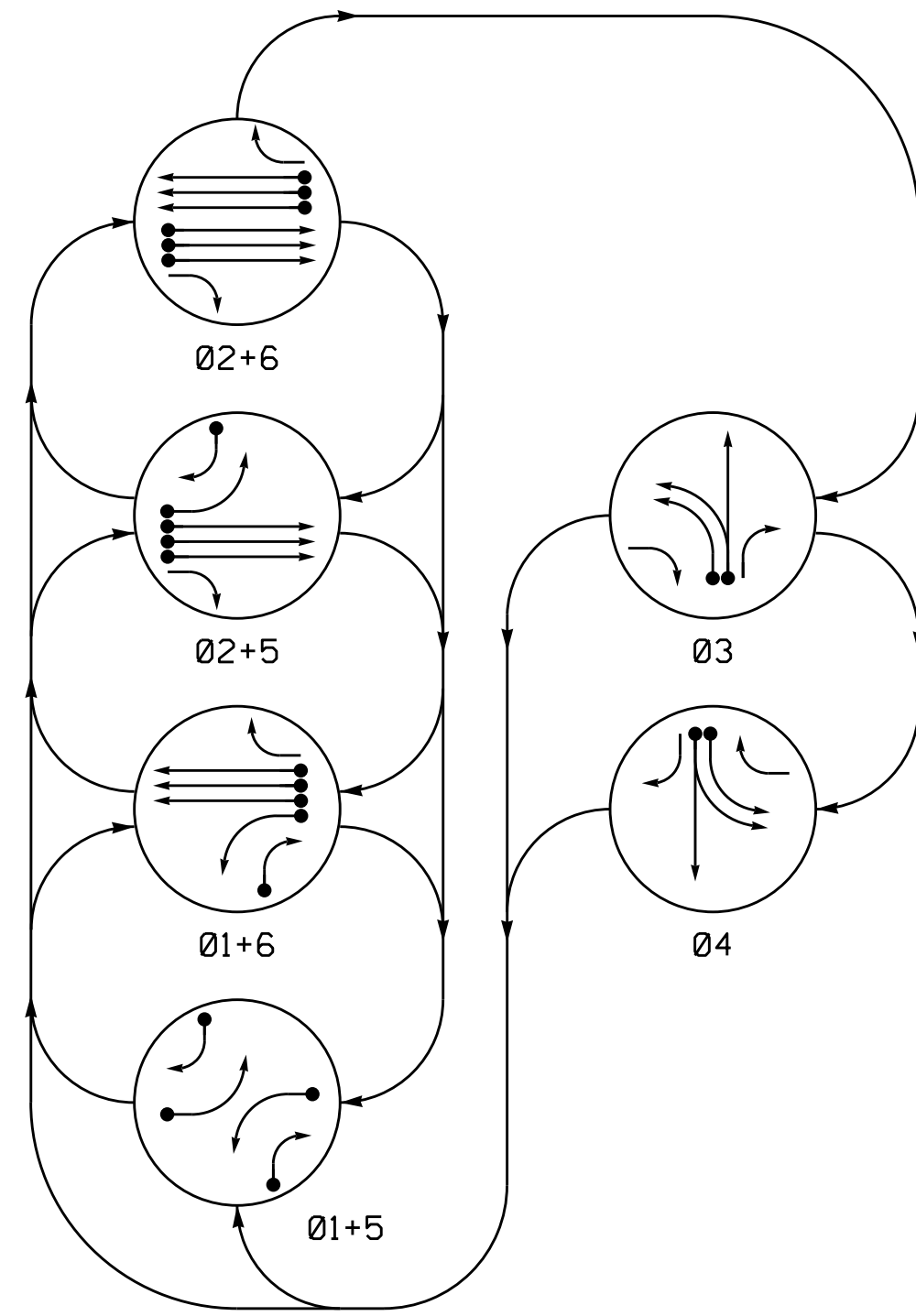


PHASING DIAGRAM



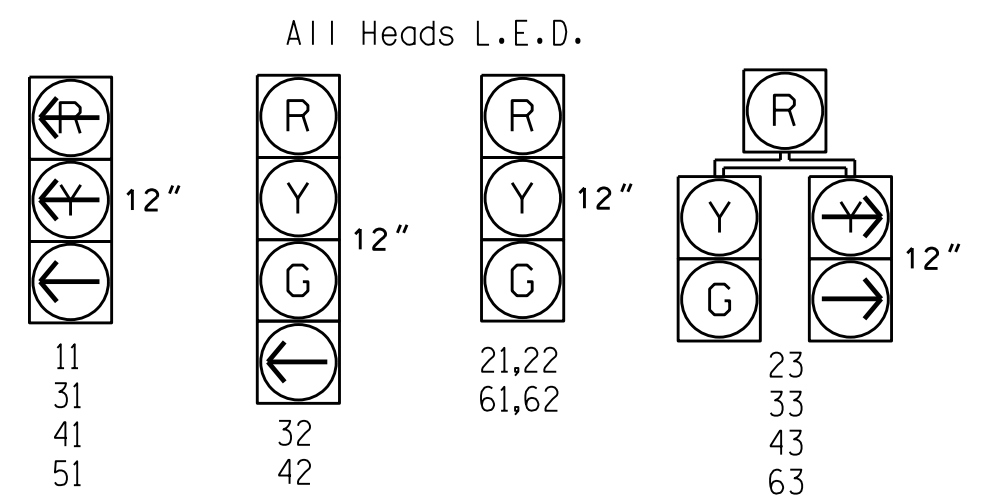
PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE						
	01+5	02+5	03	04	05	06	07
11	←	←	←	←	←	←	←
21,22	R	R	G	G	R	R	Y
23	R	R	G	G	R	R	Y
31	←	←	←	←	←	←	←
32	R	R	R	R	G	R	R
33	R	R	R	R	G	R	R
41	←	←	←	←	←	←	←
42	R	R	R	R	G	R	R
43	R	R	R	R	G	R	R
51	←	←	←	←	←	←	←
61,62	R	G	R	G	R	R	Y
63	R	G	R	G	R	R	Y

SIGNAL FACE I.D.



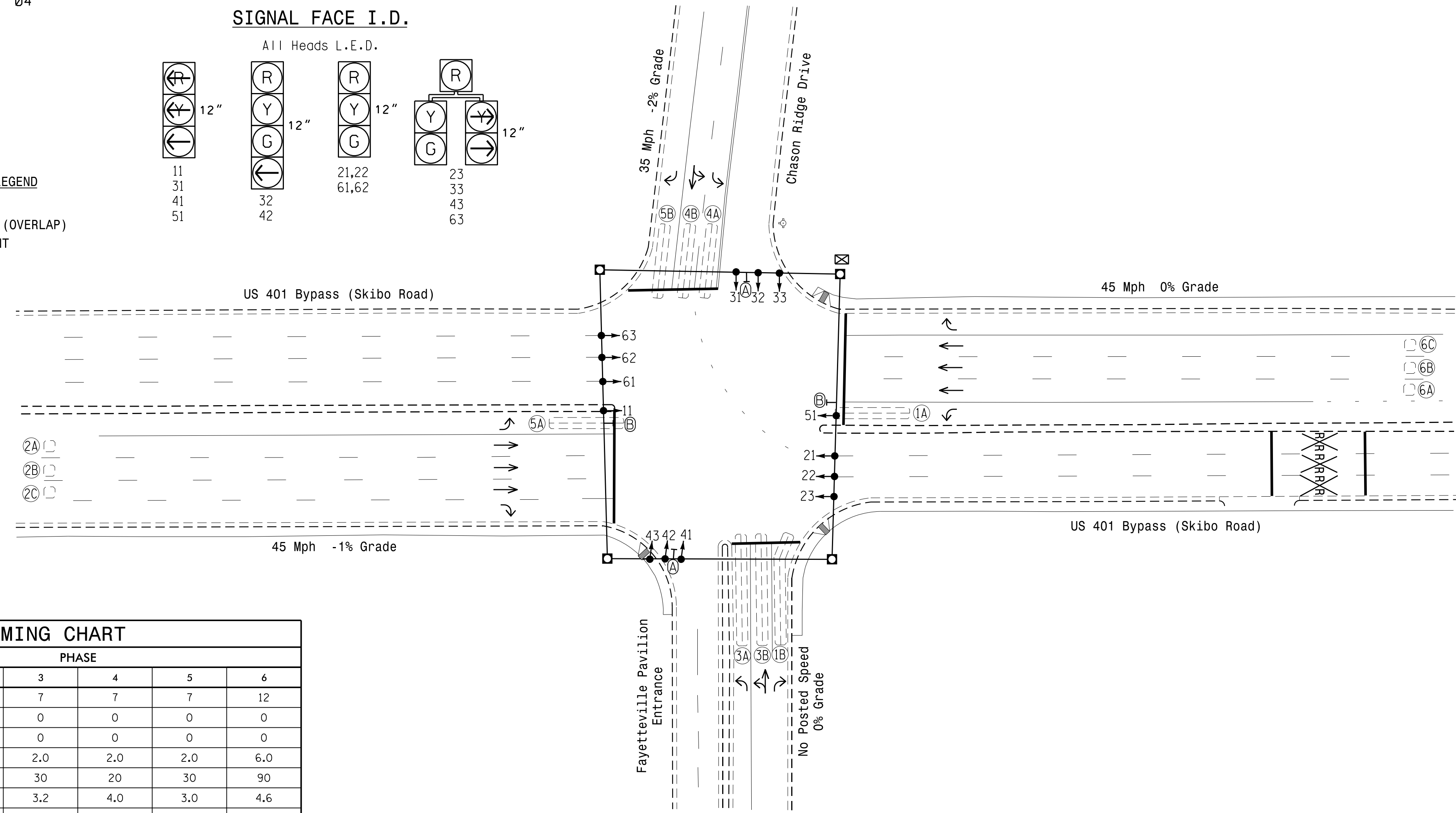
ASC/3 DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING						
					PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	+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
2C	6X6	300	4	-	2	Yes	-	-	N	-	X
3A	6X60	+5	2-4-2	-	3	Yes	-	-	S	-	X
3B	6X60	+5	2-4-2	-	3	Yes	-	-	S	-	X
4A	6X40	+5	2-4-2	-	4	Yes	-	3	S	-	X
4B	6X40	+5	2-4-2	-	4	Yes	-	-	S	-	X
5A	6X40	+5	2-4-2	-	5	Yes	-	-	S	-	X
5B	6X40	+5	2-4-2	-	5	Yes	-	20	S	-	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

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.
- 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
Min Green *	7	12	7	7	7	12
Walk *	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0
Veh. Extension *	2.0	6.0	2.0	2.0	2.0	6.0
Max 1 *	15	90	30	20	30	90
Yellow	3.0	4.6	3.2	4.0	3.0	4.6
Red Clear	3.2	1.8	3.3	2.5	3.1	1.8
Actuations B4 Add *	-	0	-	-	-	0
Seconds / Actuation *	-	1.2	-	-	-	1.2
Max Initial *	-	34	-	-	-	34
Time Before Reduction *	-	15	-	-	-	15
Time To Reduce *	-	45	-	-	-	45
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

\* 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   | ⊥ Sign   |
| ⊥ Pedestrian Signal Head With Push Button & Sign | ⊥ Sign   |
| ⊥ Signal Pole with Guy                           | ⊥ Sign   |
| ⊥ Signal Pole with Sidewalk Guy                  | ⊥ Sign   |
| □ Inductive Loop Detector                        | □ Inductive Loop Detector                      |
| ⊠ Controller & Cabinet                           | ⊠ Junction Box                                 |
| □ Junction Box                                   | □ Junction Box                                 |
| --- 2-in Underground Conduit                     | --- 2-in Underground Conduit                   |
| N/A Right of Way                                 | --- Right of Way                               |
| → Directional Arrow                              | → Directional Arrow                            |
| N/A Fire Hydrant                                 | ⊕ Fire Hydrant                                 |
| N/A Wheelchair Ramp                              | ⊕ Wheelchair Ramp                              |
| ⊕ Combined Through and Left Arrow Sign (R3-6L)   | ⊕ Combined Through and Left Arrow Sign (R3-6L) |
| ⊕ "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)     | ⊕ "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)   |

Signal Upgrade

Prepared In the Offices of:

US 401 Byp (Skibo Road) at Chason Ridge Drive / Fayetteville Pavillion Ent.

Division 6 Cumberland County Fayetteville

PLAN DATE: November 2015 REVIEWED BY: JPG

PREPARED BY: Jeff Spence REVIEWED BY:

REVISIONS: INIT. DATE

SCALE: 1" = 40'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL: JASON P. GALLAGHER, PROFESSIONAL ENGINEER, No. 029904

DocuSigned by: Jason P. Gallaghy 2/23/2016

SIG. INVENTORY NO. 06-0979

06-FEB-2016 08:36  
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