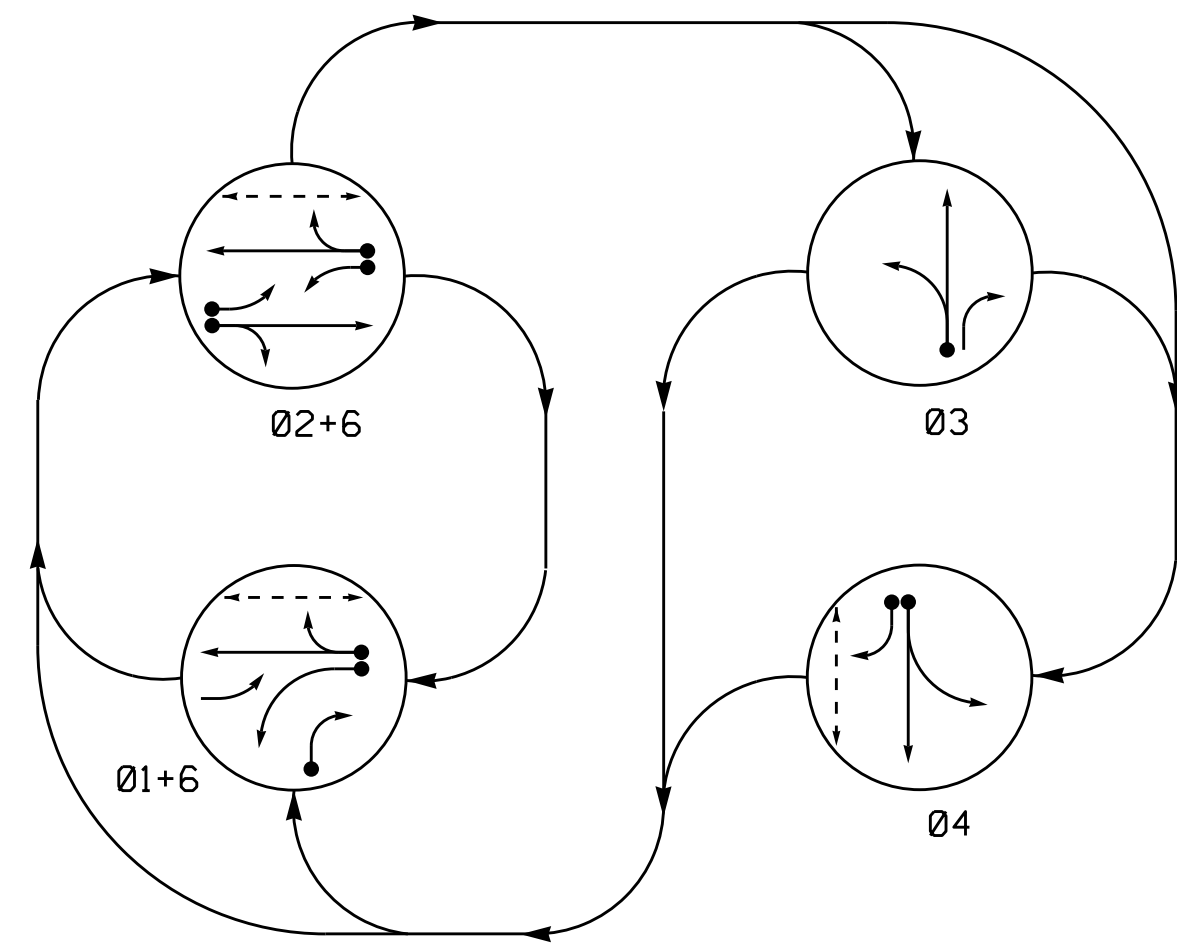


PHASING DIAGRAM

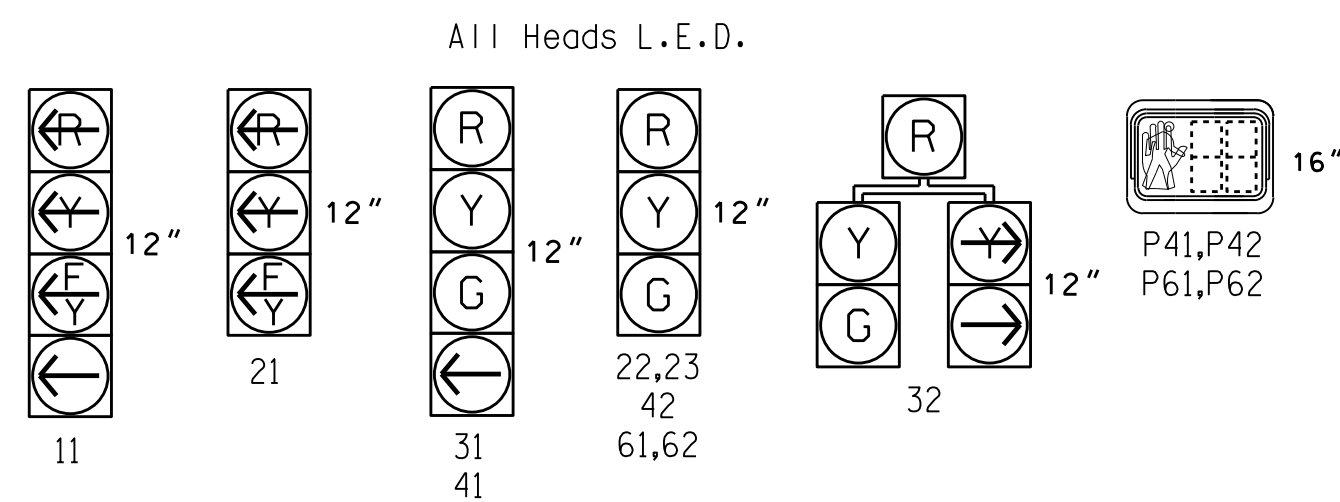


PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE				
	Ø 1 + 6	Ø 2 + 6	Ø 3	Ø 4	F L O O T
11	←	←	←	←	←
21	←	←	←	←	←
22,23	R	G	R	R	Y
31	R	R	G	R	R
32	R	R	G	R	R
41	R	R	R	G	R
42	R	R	R	G	R
61,62	G	G	R	R	Y
P41,P42	DW	DW	DW	W	DRK
P61,P62	W	W	DW	DW	DRK

SIGNAL FACE I.D.

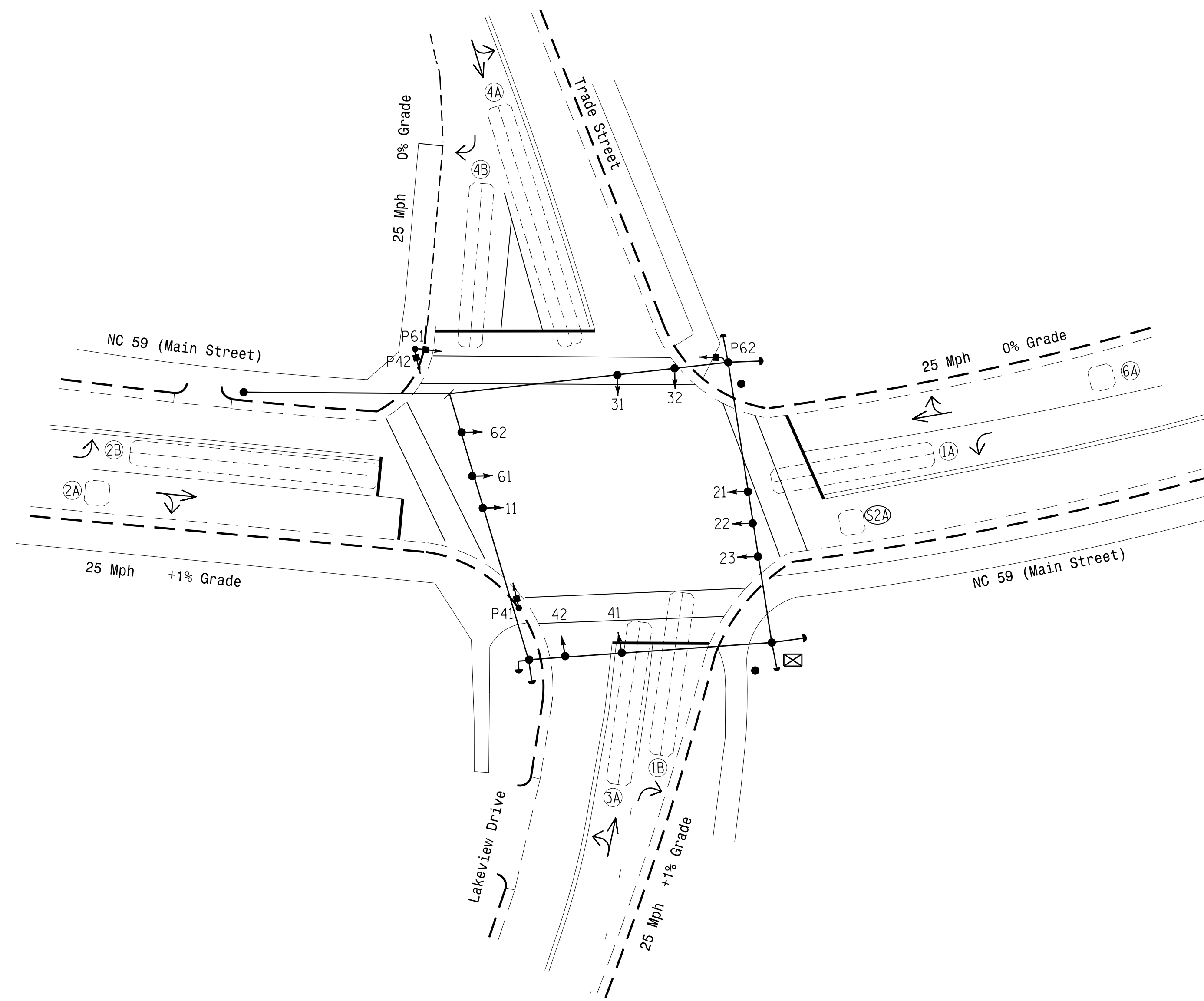


ASC/3 DETECTOR INSTALLATION CHART											
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING						
					PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	+5	2-4-2	-	1	Yes	-	15	S	-	X
1B	6X40	+13	2-4-2	-	6	Yes	-	-	S	-	X
2A	6X6	70	4	-	2	Yes	-	-	S	-	X
2B	6X60	0	2-4-2	-	2	Yes	-	-	S	-	X
3A	6X40	+6	2-4-2	-	3	Yes	-	3	S	-	X
4A	6X60	+3	2-4-2	-	4	Yes	-	3	S	-	X
4B	6X40	+3	2-4-2	-	4	Yes	-	15	S	-	X
6A	6X6	70	4	-	6	Yes	-	-	S	-	X
S2A	6X6	+107	4	-	-	No	-	-	N	X	X

4 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 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.



FEATURE	ASC/3 TIMING CHART				
	1	2	3	4	6
Min Green *	7	10	7	7	10
Walk *	0	0	0	7	7
Ped Clear	0	0	0	12	16
Veh. Extension *	1.0	3.0	1.0	1.0	3.0
Max 1 *	20	50	20	25	50
Yellow	3.0	3.2	3.1	3.1	3.2
Red Clear	1.8	2.5	2.3	2.2	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

* 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 | ● → Traffic Signal Head |
| ○ → Modified Signal Head | N/A |
| ○ → Sign | N/A |
| ○ → Pedestrian Signal Head With Push Button & Sign | ○ → Sign |
| ○ → Signal Pole with Guy | ○ → Signal Pole with Guy |
| ○ → Signal Pole with Sidewalk Guy | ○ → Signal Pole with Sidewalk Guy |
| ○ → Inductive Loop Detector | ○ → Inductive Loop Detector |
| ○ → Controller & Cabinet | ○ → Controller & Cabinet |
| ○ → Junction Box | ○ → Junction Box |
| ○ → 2-in Underground Conduit | ○ → 2-in Underground Conduit |
| N/A → Right of Way | ○ → Right of Way |
| ○ → Directional Arrow | ○ → Directional Arrow |
| ○ → Type II Signal Pedestal | ○ → Type II Signal Pedestal |
| N/A → Wheelchair Ramp | ○ → Wheelchair Ramp |

Signal Upgrade

750 N. Greenfield Pkwy, Garner, NC 27529

NC 59 (Hope Mills Road) at Lakeview Drive / Trade Street

Division 6 Cumberland County Hope Mills

PLAN DATE: June 2016 REVIEWED BY: JPG

PREPARED BY: Jeff Spence REVIEWED BY:

SEAL

DocuSigned by:
Jason P. Gallaway 6/8/2016

SIG. INVENTORY NO. 06-0069

SCALE 0 20

1"=20'

REVISIONS

NO.	DATE	INIT.	DATE

08-july-2016 09:50
 S:\ITS\ASU\ITS_Signal\Signal_Design\Section\Eastern_Region\01\U-5742_Fayetteville\11e_ASC3\06-0069\060069_01a_dsn_2016mmds.dgn
 J. Spence