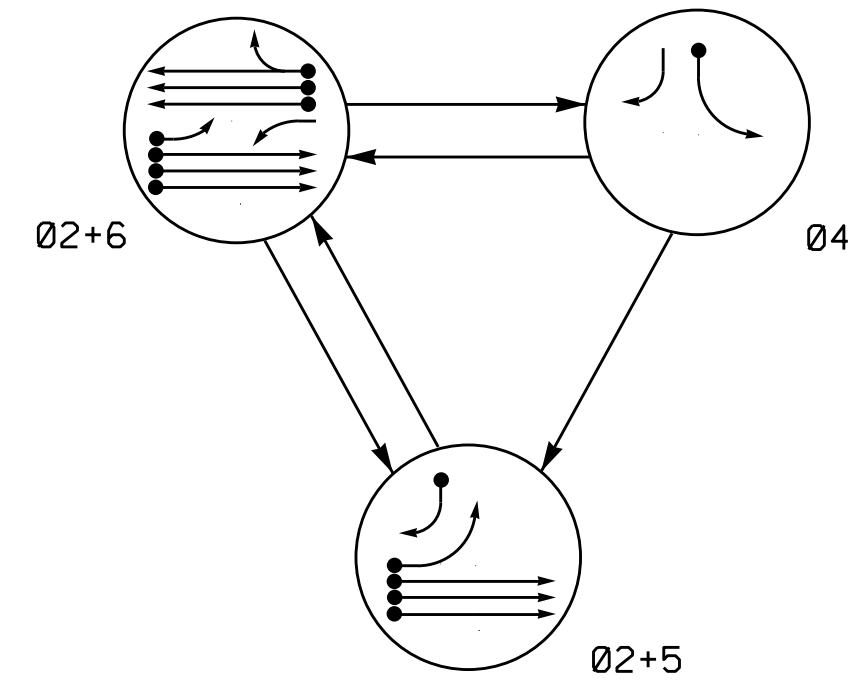


DEFAULT PHASING DIAGRAM



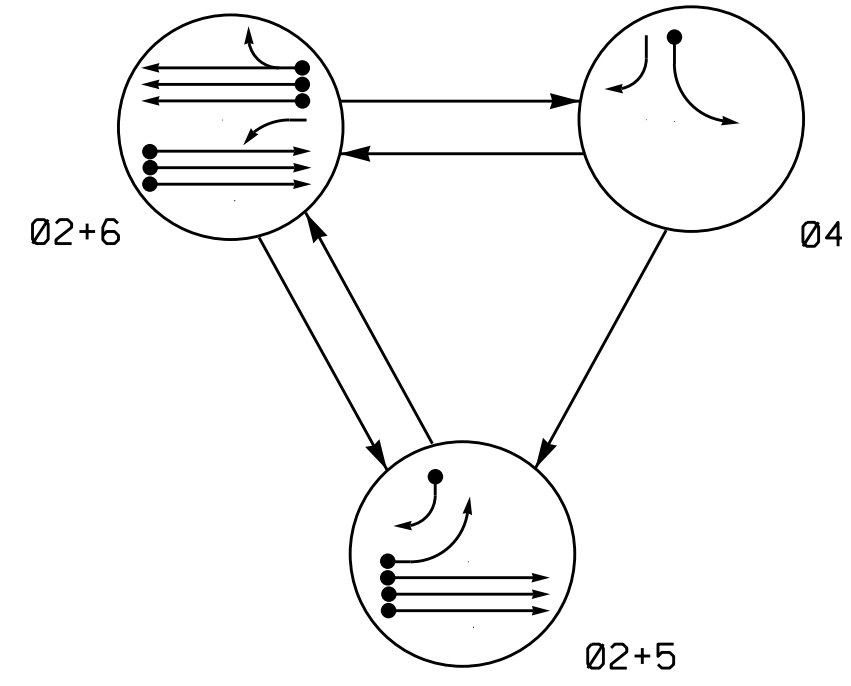
DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE			
	Ø 2+5	Ø 2+6	Ø 4	FLASH
21,22	G	G	R	Y
41	R	R	G	R
42	R	R	G	R
51	←	←	←	←
61,62	R	G	R	Y

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE			
	Ø 2+5	Ø 2+6	Ø 4	FLASH
21,22	G	G	R	Y
41	R	R	G	R
42	R	R	G	R
51	←	←	←	←
61,62	R	G	R	Y

ALTERNATE PHASING DIAGRAM



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
2A,2B,2C	6X6	300	5	-	2	Yes	-	-	N	-	X
4A	6X60	+5	2-4-2	-	4	Yes	-	5	S	-	X
5A	6X60	+5	Existing	-	5	Yes	-	*15	S	-	X
5B	6X60	+5	2-4-2	-	5	Yes	-	15	S	-	X
6A,6B,6C	6X6	300	5	-	6	Yes	-	-	N	-	X

- Disable Delay During Alternate Phasing Operation.
- Disable Phase 2 Call for Loop 5A During Alternate Phasing Operation.

3 Phase Fully Actuated Fayetteville Signal System

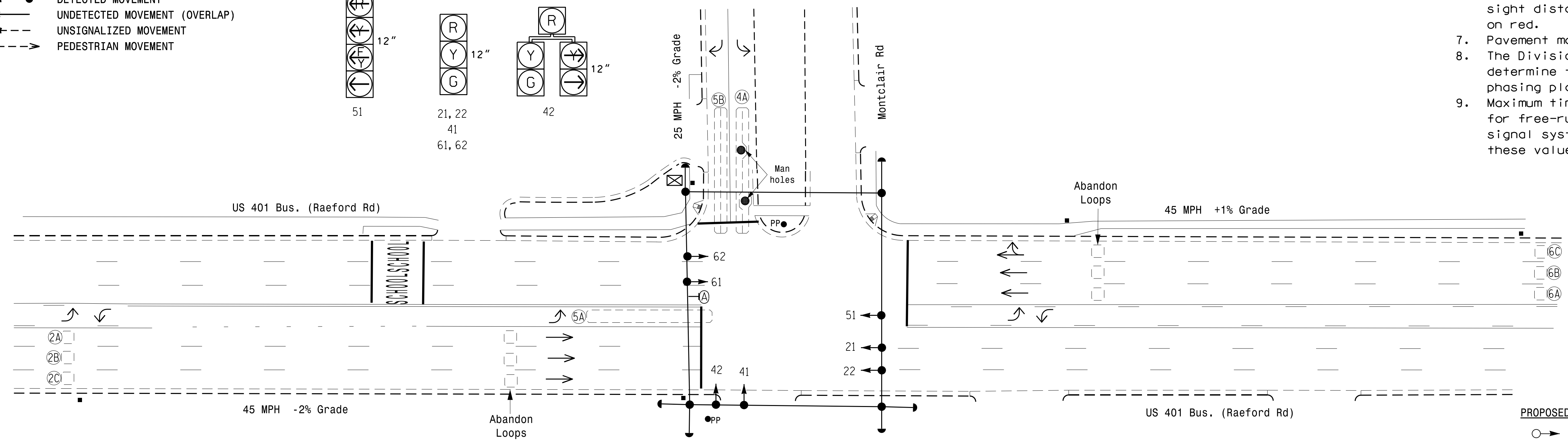
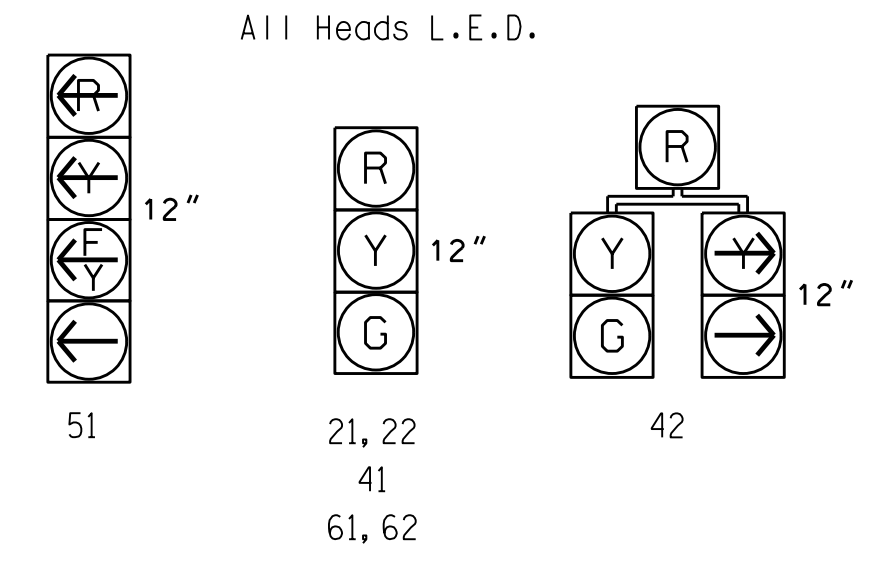
NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 5 may be lagged.
4. Set all detector units to presence mode.
5. 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.
6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
7. Pavement markings are existing.
8. The Division Traffic Engineer will determine the hours of use for each phasing plan.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.



ASC/3 TIMING CHART

FEATURE	PHASE			
	2	4	5	6
Min Green *	12	7	7	12
Walk *	0	0	0	0
Ped Clear	0	0	0	0
Veh. Extension *	6.0	1.0	1.0	6.0
Max 1 *	90	25	15	90
Yellow	4.7	3.3	3.0	4.7
Red Clear	1.6	2.4	2.4	1.6
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	-	-	-	-
Simultaneous Gap	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 | EXISTING Modified Signal Head |
| ⊥ | PROPOSED Sign | ⊥ | EXISTING Sign |
| ⊥ | PROPOSED Pedestrian Signal Head | ⊥ | EXISTING Pedestrian Signal Head |
| ⊥ | PROPOSED Sign With Push Button & Sign | ⊥ | EXISTING Sign With Push Button & Sign |
| ○→ | PROPOSED Signal Pole with Guy | ○→ | EXISTING Signal Pole with Guy |
| ○→ | PROPOSED Signal Pole with Sidewalk Guy | ○→ | EXISTING Signal Pole with Sidewalk Guy |
| ⊥ | PROPOSED Inductive Loop Detector | ⊥ | EXISTING Inductive Loop Detector |
| ⊥ | PROPOSED Controller & Cabinet | ⊥ | EXISTING Controller & Cabinet |
| ⊥ | PROPOSED Junction Box | ⊥ | EXISTING Junction Box |
| --- | PROPOSED 2-in Underground Conduit | --- | EXISTING 2-in Underground Conduit |
| N/A | PROPOSED Right of Way | --- | EXISTING Right of Way |
| → | PROPOSED Directional Arrow | → | EXISTING Directional Arrow |
| N/A | PROPOSED Wheel Chair Ramp | → | EXISTING Wheel Chair Ramp |

Ⓐ "ONCOMING TRAFFIC MAY HAVE EXTENDED GREEN" Sign (W25-2) Ⓐ

Signal Upgrade

Prepared In the Offices of:

US 401 Bus. (Raeford Road) at Montclair Road

Division 6 Cumberland County Fayetteville

PLAN DATE: January 2016 REVIEWED BY: PLA, PE

PREPARED BY: EM Winshaw REVIEWED BY:

REVISIONS: _____ INIT. DATE

SCALE: 1"=30'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL: PAMELA L. ALEXANDER, PROFESSIONAL ENGINEER, No. 023489

7/7/2016

SIG. INVENTORY NO. 06-0334

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