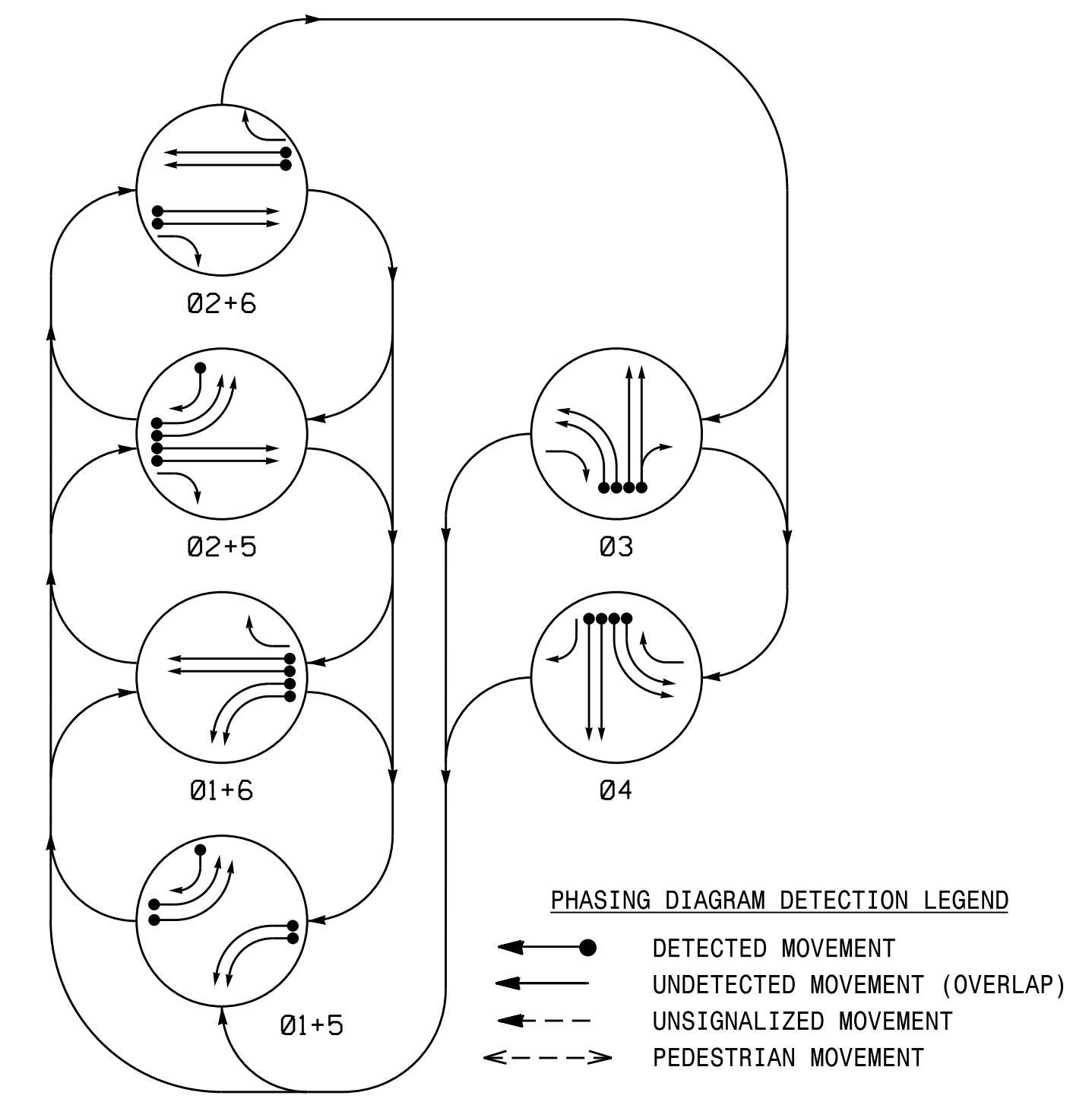


6 Phase Fully Actuated Fayetteville Signal System

PHASING DIAGRAM

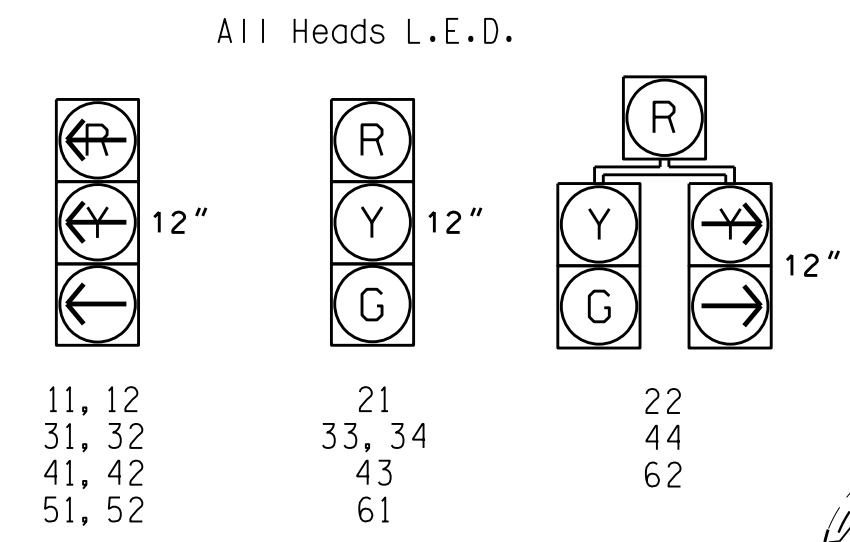


PHASING DIAGRAM DETECTION LEGEND  
 ● DETECTED MOVEMENT  
 ○ UNDETECTED MOVEMENT (OVERLAP)  
 - - - UNSIGNALIZED MOVEMENT  
 - - - PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE					
	01+5	01+6	02+5	02+6	03	04
11, 12	←	←	←	←	←	←
21	R	R	G	G	R	R
22	R	R	G	G	R	Y
31, 32	←	←	←	←	←	←
33, 34	R	R	R	R	G	R
41, 42	←	←	←	←	←	←
43	R	R	R	R	G	R
44	R	R	R	R	G	R
51, 52	←	←	←	←	←	←
61	R	G	R	G	R	Y
62	R	G	R	G	R	Y

SIGNAL FACE I.D.

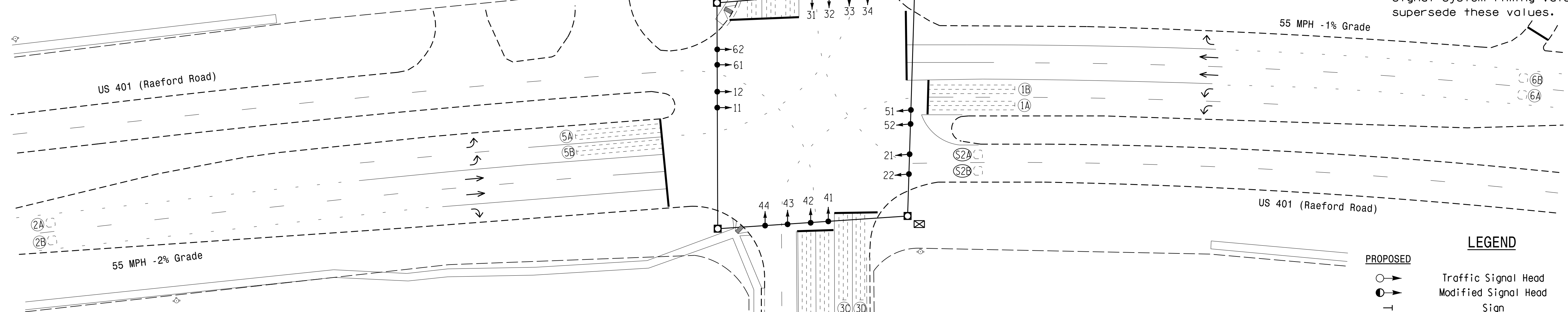


ASC/3 DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING						
					PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	SYSTEM LOOP	
1A	6X60	0	2-4-2	-	1	Yes	-	-	S	-	X
1B	6X60	0	2-4-2	-	1	Yes	-	-	S	-	X
2A	6X6	425	5	-	2	Yes	-	-	N	-	X
2B	6X6	425	5	-	2	Yes	-	-	N	-	X
3A	6X60	0	2-4-2	-	3	Yes	-	-	S	-	X
3B	6X60	0	2-4-2	-	3	Yes	-	15	S	-	X
3C	6X60	0	2-4-2	-	3	Yes	-	-	S	-	X
3D	6X60	0	2-4-2	-	3	Yes	-	-	S	-	X
4A	6X60	0	2-4-2	-	4	Yes	-	-	S	-	X
4B	6X60	0	2-4-2	-	4	Yes	-	-	S	-	X
4C	6X60	0	2-4-2	-	4	Yes	-	-	S	-	X
4D	6X60	0	2-4-2	-	4	Yes	-	-	S	-	X
5A	6X60	0	2-4-2	-	5	Yes	-	-	S	-	X
5B	6X60	0	2-4-2	-	5	Yes	-	20	S	-	X
5C	6X60	0	2-4-2	-	5	Yes	-	-	S	-	X
6A	6X6	425	5	-	6	Yes	-	-	N	-	X
6B	6X6	425	5	-	6	Yes	-	-	N	-	X
S2A	6X6	+215	3	-	-	No	-	-	N	X	X
S2B	6X6	+215	3	-	-	No	-	-	N	X	X
S3A	6X6	+215	3	-	-	No	-	-	N	X	X
S3B	6X6	+215	3	-	-	No	-	-	N	X	X

NOTES

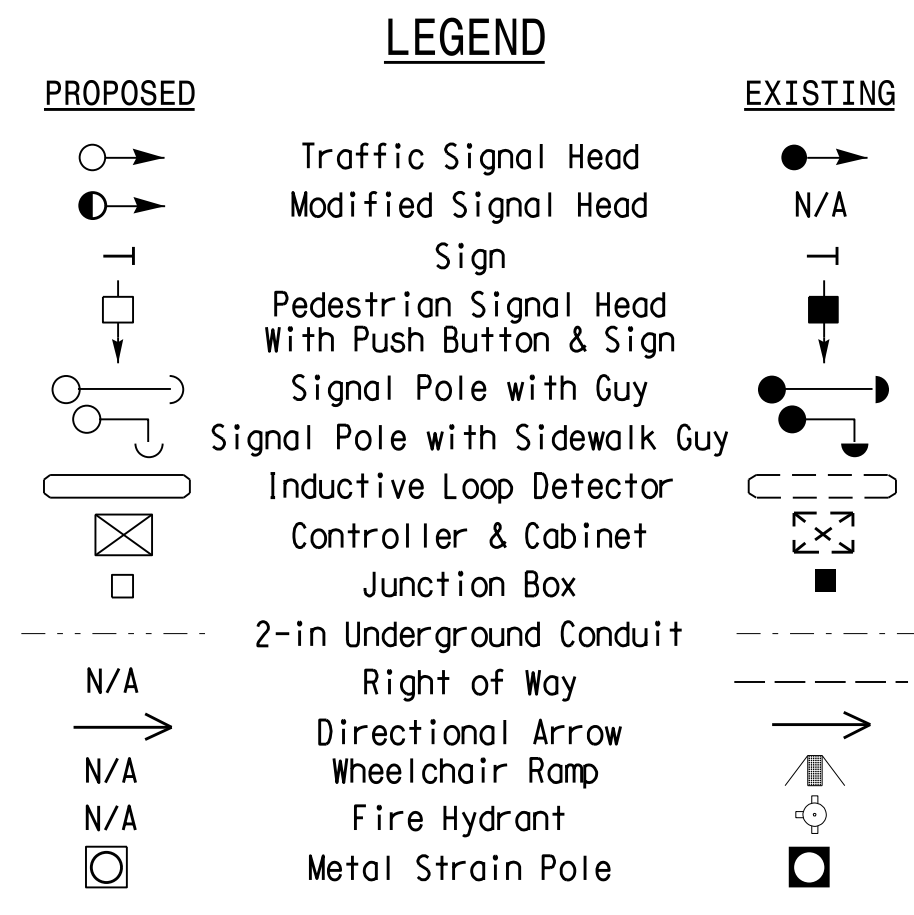
- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- The order of phase 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	14	7	7	14	7
Walk *	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-
Veh. Extension *	2.0	6.0	2.0	2.0	6.0	2.0
Max 1 *	15	140	20	20	15	140
Yellow	3.0	5.4	3.7	4.7	3.0	5.4
Red Clear	3.9	1.8	3.1	2.3	4.3	1.8
Red Revert	-	-	-	-	-	-
Actuations B4 Add *	-	-	-	-	-	-
Seconds / Actuation *	-	1.5	-	-	-	1.5
Max Initial *	-	46	-	-	-	46
Time Before Reduction *	-	20	-	-	-	20
Time To Reduce *	-	50	-	-	-	50
Minimum Gap	-	3.4	-	-	-	3.4
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.



Signal Upgrade

Prepared In the Offices of:  
 TRANSPORTATION MOBILITY AND SAFETY DIVISION  
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
 Signal Design Section  
 750 N. Greenfield Pkwy, Garner, NC 27529

US 401 (Raeford Road) at SR 1400 (Cliffdale Road)

Division 6 Cumberland County Fayetteville  
 PLAN DATE: November 2015 REVIEWED BY: JPG  
 PREPARED BY: Devin Smith REVIEWED BY:

SCALE 1"=40'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 SEAL 029904  
 JASON P. GALLOWAY  
 4/26/2016

SIG. INVENTORY NO. 06-0691

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