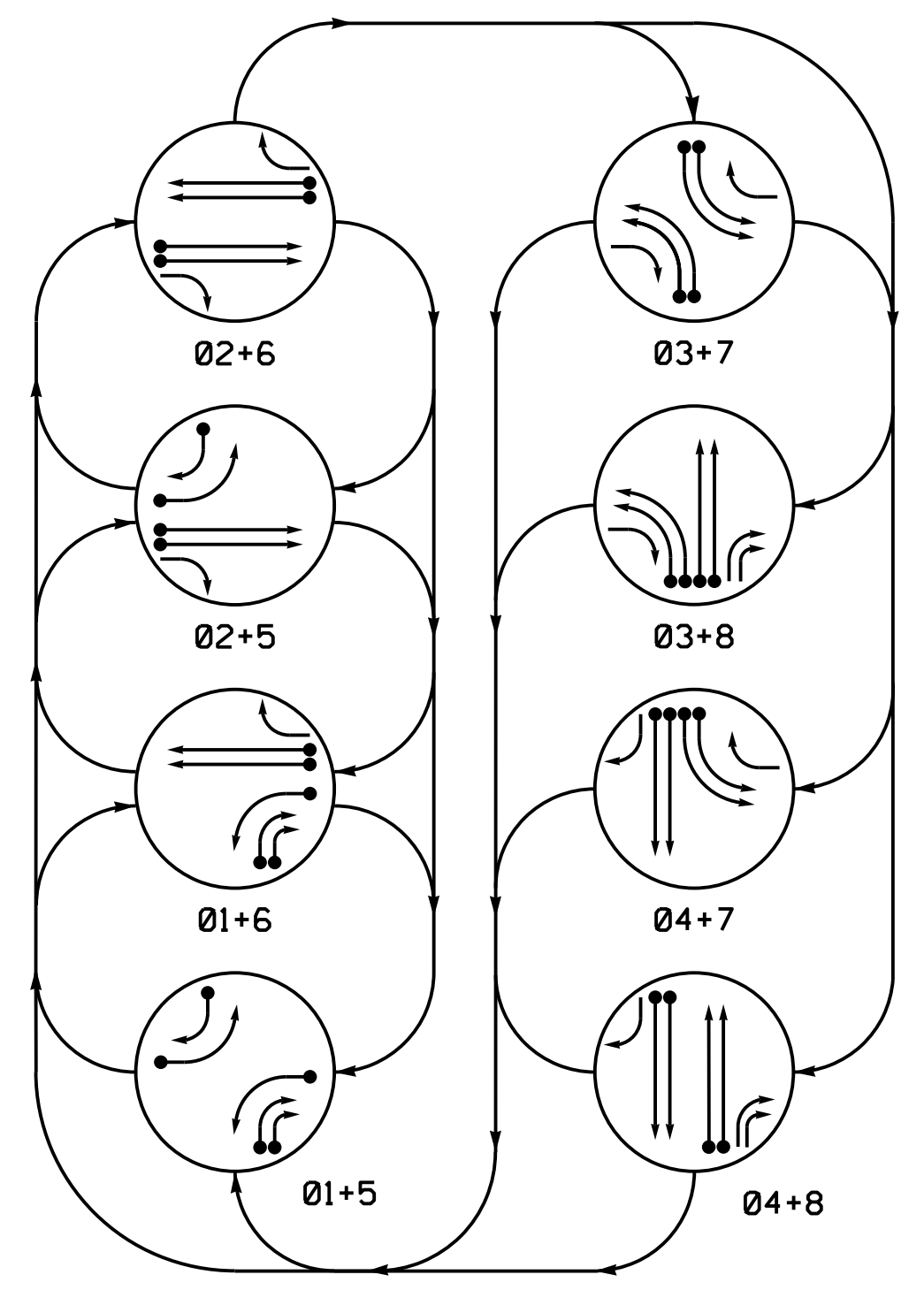


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

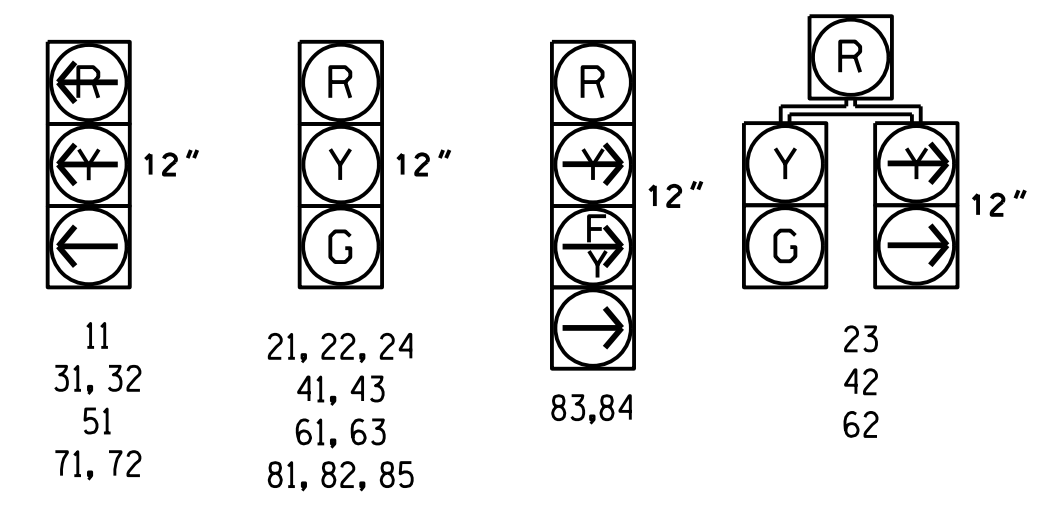
- ← ● → DETECTED MOVEMENT
- ← ○ → UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- ← - - - → PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8
11								
21, 22, 24	R	R	G	G	R	R	R	R
23	R	R	G	G	R	R	R	R
31, 32	R	R	R	R				
41, 43	R	R	R	R	R	R	G	G
42	R	R	R	R	R	R	G	G
51								
61, 63	R	G	R	G	R	R	R	R
62	R	G	R	G	R	R	R	R
71, 72	R	R	R	R	R	R	R	R
81, 82, 85	R	R	R	R	R	G	R	R
83, 84								

SIGNAL FACE I.D.

All Heads L.E.D.



ASC/3 DETECTOR INSTALLATION CHART

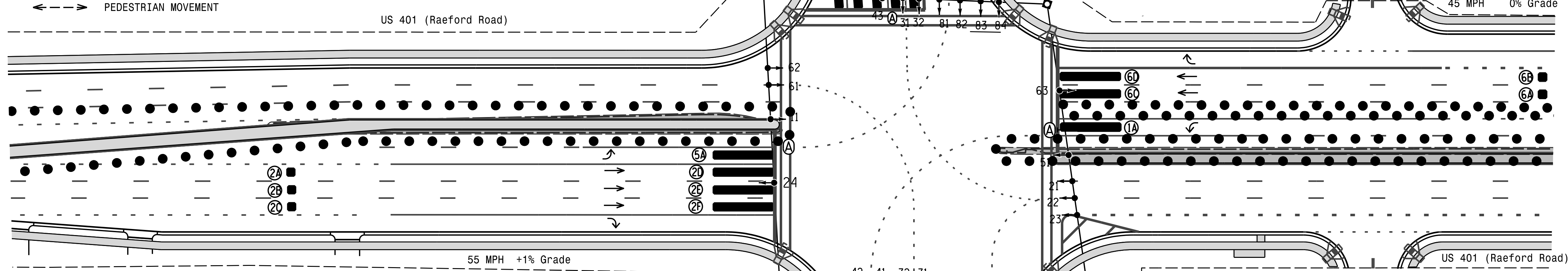
LOOP	DETECTOR			PROGRAMMING								
	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	0	*	-	1	Yes	-	-	-	S	-	-
1B	6X40	0	*	-	1	Yes	-	15	-	S	-	-
1C	6X40	0	*	-	1	Yes	-	15	-	S	-	-
2A	6X6	300	*	-	2	Yes	-	-	-	N	-	-
2B	6X6	300	*	-	2	Yes	-	-	-	N	-	-
2C	6X6	300	*	-	2	Yes	-	-	-	N	-	-
2D	6X40	0	*	-	2	Yes	2.0	5	-	G	-	-
2E	6X40	0	*	-	2	Yes	2.0	5	-	G	-	-
2F	6X40	0	*	-	2	Yes	2.0	5	-	G	-	-
3A	6X40	0	*	-	3	Yes	-	-	-	S	-	-
3B	6X40	0	*	-	3	Yes	-	-	-	S	-	-
4A	6X6	250	*	-	4	No	-	-	-	N	-	-
4B	6X6	250	*	-	4	No	-	-	-	N	-	-
4C	6X40	0	*	-	4	Yes	2.0	5	-	G	-	-
4D	6X40	0	*	-	4	Yes	2.0	5	-	G	-	-
5A	6X40	0	*	-	5	Yes	-	-	-	S	-	-
5B	6X40	0	*	-	5	Yes	-	15	-	S	-	-
6A	6X6	300	*	-	6	Yes	-	-	-	N	-	-
6B	6X6	300	*	-	6	Yes	-	-	-	N	-	-
6C	6X40	0	*	-	6	Yes	2.0	5	-	G	-	-
6D	6X40	0	*	-	6	Yes	2.0	5	-	G	-	-
7A	6X40	0	*	-	7	Yes	-	-	-	S	-	-
7B	6X40	0	*	-	7	Yes	-	-	-	S	-	-

*Video Detection Area. Camera locations should be confirmed in the field by the contractor in order to provide detection of the areas indicated.

8 Phase Fully Actuated Fayetteville Signal System

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Phase 3 and/or phase 7 may be lagged.
- Reposition existing signal heads numbered #11, 21, 22, 23, 51, 61, and 62.
- Set all detector units to presence mode.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



DETECTOR INSTALLATION CHART CONTINUED BELOW

ASC/3 DETECTOR INSTALLATION CHART

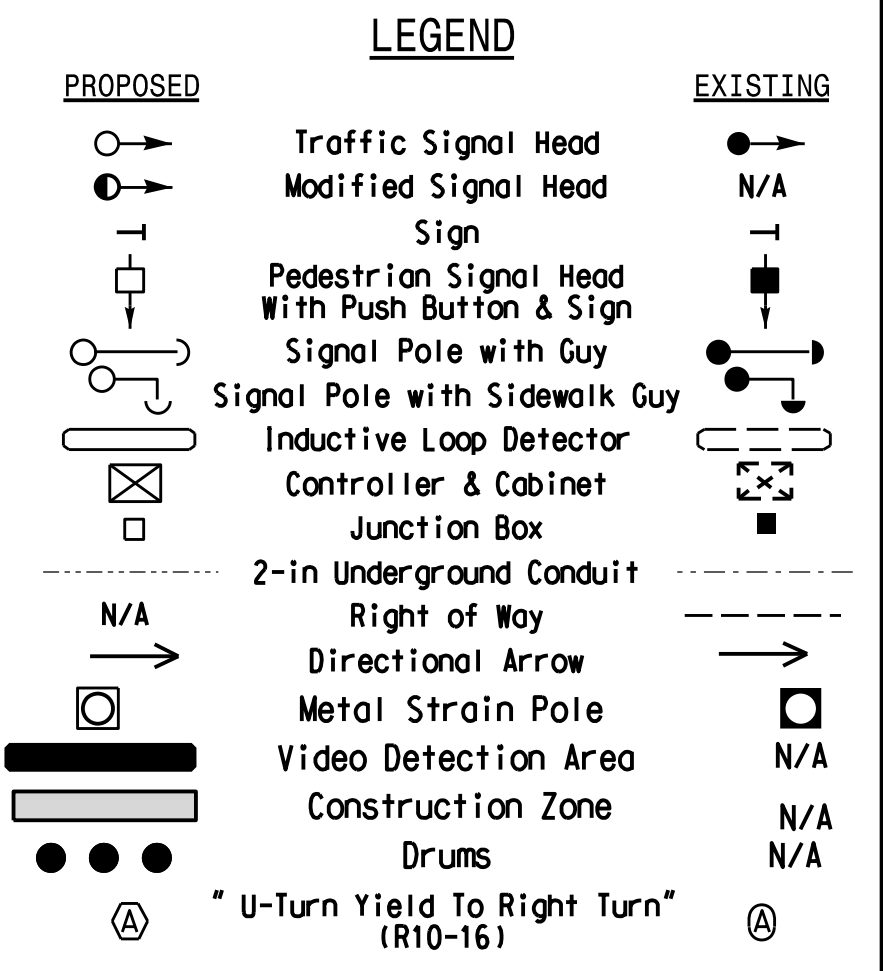
LOOP	DETECTOR			PROGRAMMING								
	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
8A	6X6	300	*	-	8	No	-	-	-	N	-	-
8B	6X6	300	*	-	8	No	-	-	-	N	-	-
8C	6X40	0	*	-	8	Yes	2.0	5	-	G	-	-
8D	6X40	0	*	-	8	Yes	2.0	5	-	G	-	-

*Video Detection Area. Camera locations should be confirmed in the field by the contractor in order to provide detection of the areas indicated.

ASC/3 TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green *	7	12	7	7	7	12	7	7
Walk *	-	-	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-	-	-
Veh. Extension *	2.0	6.0	2.0	6.0	2.0	6.0	2.0	6.0
Max 1 *	20	60	30	40	20	60	30	40
Yellow	3.0	4.4	3.0	4.2	3.0	4.5	3.0	4.4
Red Clear	4.5	2.7	4.6	3.1	4.0	2.7	4.6	2.8
Red Revert	-	-	-	-	-	-	-	-
Actuations B4 Add *	-	-	-	-	-	-	-	-
Seconds / Actuation *	-	-	-	-	-	-	-	-
Max Initial *	-	-	-	-	-	-	-	-
Time Before Reduction *	-	15	-	5	-	15	-	5
Time To Reduce *	-	30	-	20	-	30	-	20
Minimum Gap	-	3.0	-	3.0	-	3.0	-	3.0
Locking Detector	-	-	-	-	-	-	-	-
Recall Position	-	VEH. RECALL	-	-	-	VEH. RECALL	-	-
Dual Entry	-	-	-	-	-	-	-	-
Simultaneous Gap	X	X	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 Temporary Signal Design 3 - TMP Phase III

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Prepared for the Offices of:
 Transportation Mobility and Safety Division
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 STATE OF NORTH CAROLINA
 Signal Design Section
 750 N. Greenfield Pkwy, Garner, NC 27525

US 401 (Raeford Road)
 at
 NC 162 (Bunce Road) /
 SR 1411 (Bunce Road)
 Division 6 Cumberland County Fayetteville
 PLAN DATE: June 2019 REVIEWED BY: E D Harris
 PREPARED BY: R M Muncey REVIEWED BY: B L Watson

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Professional Engineer Seal: P. L. Watson, No. 29449

Signature: P. L. Watson, Date: 6/5/2019

Scale: 1" = 40'

Inventory No. 06-027413

6/5/2019 10:45 AM
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 User: jhambr, lph