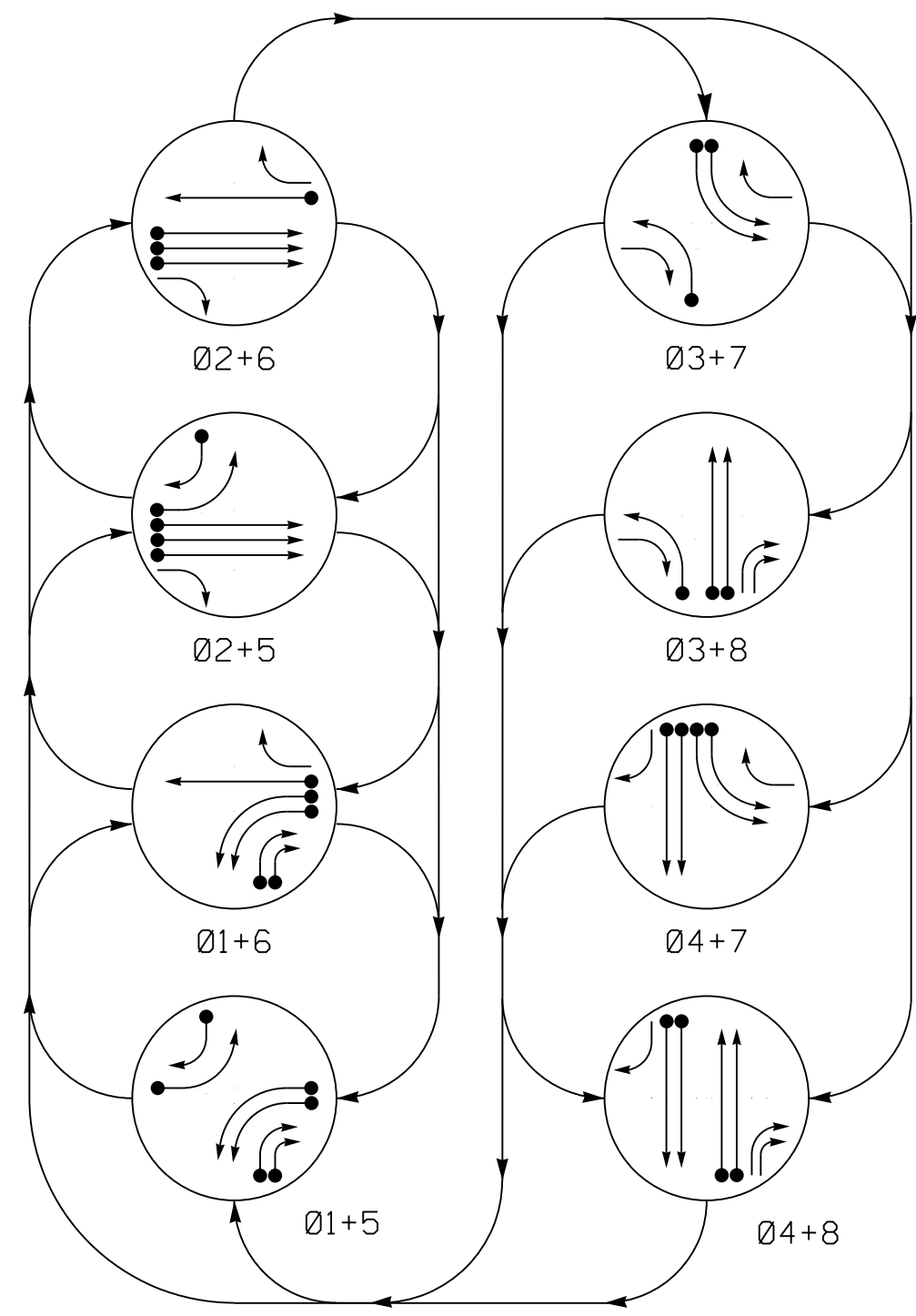


**PHASING DIAGRAM**



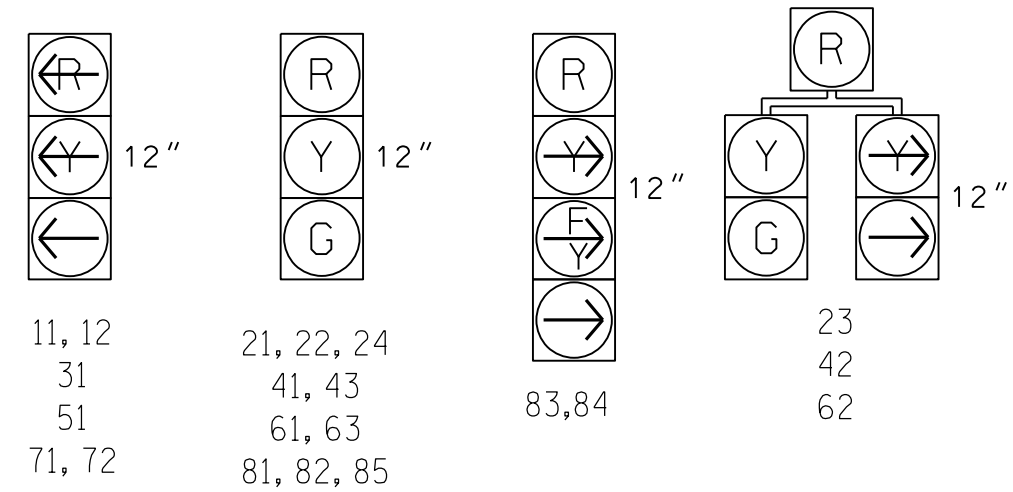
**PHASING DIAGRAM DETECTION LEGEND**

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

SIGNAL FACE	PHASE							
	Ø 1 + 5	Ø 1 + 6	Ø 2 + 5	Ø 2 + 6	Ø 3 + 7	Ø 3 + 8	Ø 4 + 7	Ø 4 + 8
11, 12	←	←	←	←	←	←	←	←
21, 22, 24	R	R	G	G	R	R	R	Y
23	R	R	G	G	R	R	R	Y
31	←	←	←	←	←	←	←	←
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	Y
62	R	G	R	G	R	R	R	Y
71, 72	←	←	←	←	←	←	←	←
81, 82, 85	R	R	R	R	R	G	R	G
83, 84	←	←	R	R	R	R	R	Y

**SIGNAL FACE I.D.**

All Heads L.E.D.



**ASC/3 DETECTOR INSTALLATION CHART**

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					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	-	-	-	S	-	-
1C	6X40	0	*	-	1	Yes	-	15	-	S	-	-
1D	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	-	-
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	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.

DETECTOR INSTALLATION CHART CONTINUED BELOW

**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 #21, 22, 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.

US 401 (Raeford Road)

45 MPH +1% Grade

US 401 (Raeford Road)

**ASC/3 DETECTOR INSTALLATION CHART**

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

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

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	4.2	2.4	3.9	2.7	3.6	2.2	4.0	2.3
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.

PROPOSED		EXISTING	
○	Traffic Signal Head	●	N/A
○	Modified Signal Head	○	N/A
○	Sign	○	N/A
○	Pedestrian Signal Head With Push Button & Sign	○	N/A
○	Signal Pole with Guy	○	N/A
○	Signal Pole with Sidewalk Guy	○	N/A
○	Inductive Loop Detector	○	N/A
○	Controller & Cabinet	○	N/A
○	Junction Box	○	N/A
○	2-in Underground Conduit	○	N/A
○	Right of Way	○	N/A
○	Directional Arrow	○	N/A
○	Metal Strain Pole	○	N/A
○	Video Detection Area	○	N/A
○	Construction Zone	○	N/A
○	Drums	○	N/A
○	"U-Turn Yield To Right Turn" (R10-16)	○	N/A

**Signal Upgrade Temporary Signal Design 2 - TMP Phase II**

US 401 (Raeford Road) at NC 162 (Bunce Road) / SR 1411 (Bunce Road)

Division 6 Cumberland County Fayetteville

PLAN DATE: March 2018 REVIEWED BY: E D Harris

PREPARED BY: K Williams REVIEWED BY: B L Watson

REVISIONS	INIT.	DATE

DATE: 3/29/2018

SIG. INVENTORY NO. 06-027412

3/29/2018 10:58:11 AM  
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