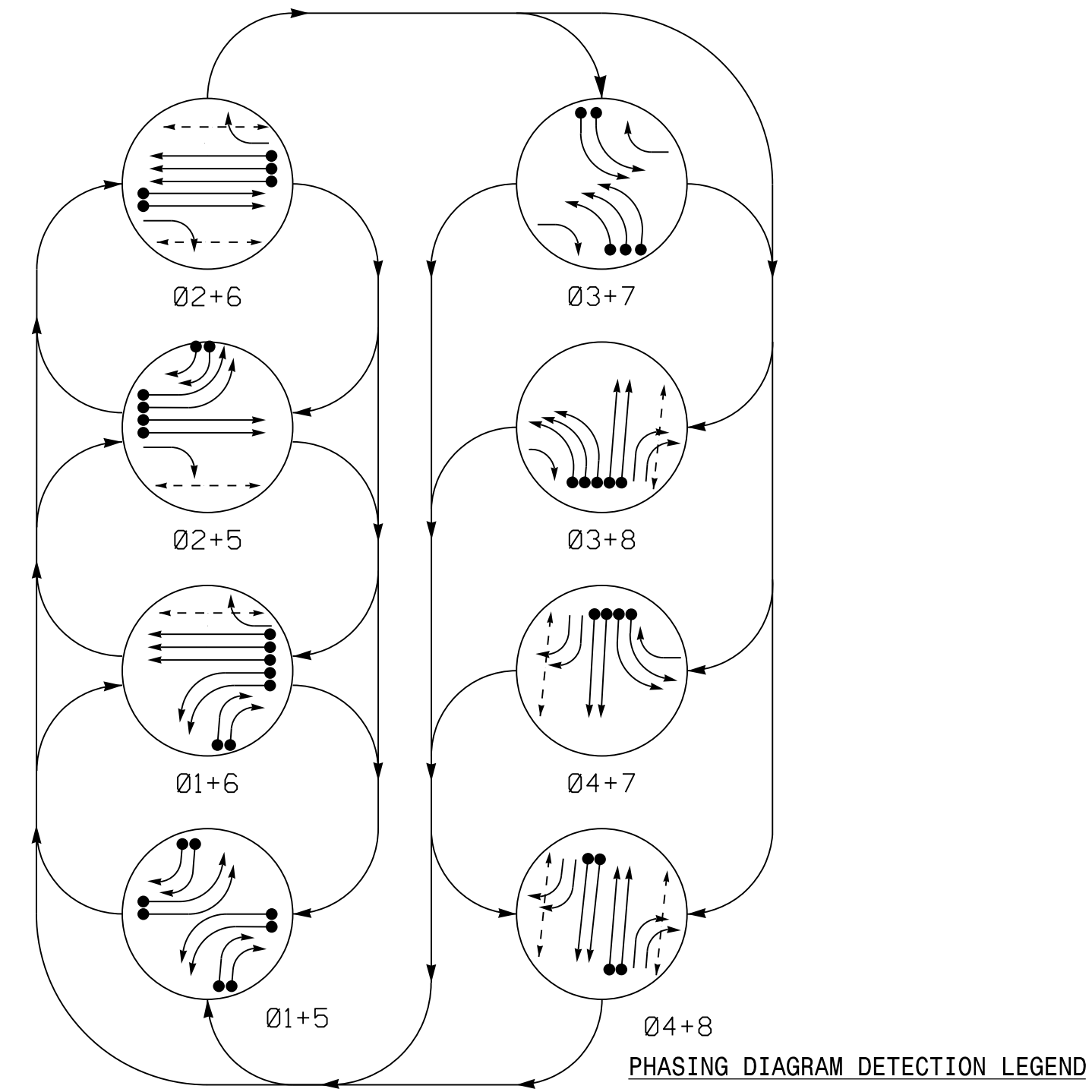


PHASING DIAGRAM

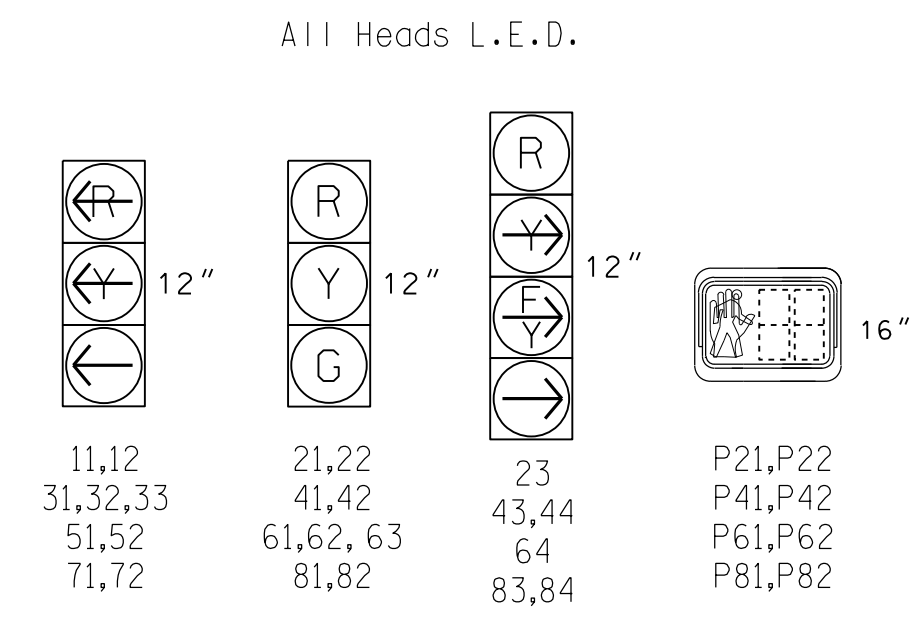


PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8
11,12	←	→	←	→	←	→	←	→
21,22	R	R	G	G	R	R	R	Y
23	R	R	F	F	R	R	R	Y
31,32,33	←	→	←	→	←	→	←	→
41,42	R	R	R	R	R	R	G	G
43,44	←	→	←	→	←	→	F	F
51,52	←	→	←	→	←	→	←	→
61,62,63	R	G	R	G	R	R	R	Y
64	R	F	F	F	R	R	R	Y
71,72	←	→	←	→	←	→	←	→
81,82	R	R	R	R	R	G	R	G
83,84	←	→	←	→	←	→	F	F
P21,P22	DW	DW	W	W	DW	DW	DW	DRK
P41,P42	DW	DW	DW	DW	DW	DW	W	DRK
P61,P62	DW	W	DW	DW	DW	DW	DW	DRK
P81,P82	DW	DW	DW	DW	W	DW	W	DRK

SIGNAL FACE I.D.



ASC/3 DETECTOR INSTALLATION CHART												
DETECTOR				PROGRAMMING								
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	LOOP SYSTEM	
1A	6X40	0	*	-	1	Yes	-	-	-	S	-	X
1B	6X40	0	*	-	1	Yes	-	-	-	S	-	X
1C	6X40	0	*	-	1	Yes	-	15	-	S	-	X
1D	6X40	0	*	-	1	Yes	-	15	-	S	-	X
2A	6X6	300	*	-	2	Yes	-	-	-	N	-	X
2B	6X6	300	*	-	2	Yes	-	-	-	N	-	X
2C	6X40	0	*	-	2	Yes	2.0	5	-	G	-	X
2D	6X40	0	*	-	2	Yes	2.0	5	-	G	-	X
3A	6X40	0	*	-	3	Yes	-	3	-	S	-	X
3B	6X40	0	*	-	3	Yes	-	-	-	S	-	X
3C	6X40	0	*	-	3	Yes	-	-	-	S	-	X
4A	6X40	0	*	-	4	Yes	-	-	-	S	-	X
4B	6X40	0	*	-	4	Yes	-	-	-	S	-	X
5A	6X40	0	*	-	5	Yes	-	-	-	S	-	X
5B	6X40	0	*	-	5	Yes	-	-	-	S	-	X
5C	6X40	0	*	-	5	Yes	-	15	-	S	-	X
5D	6X40	0	*	-	5	Yes	-	15	-	S	-	X
6A	6X6	300	*	-	6	Yes	-	-	-	N	-	X
6B	6X6	300	*	-	6	Yes	-	-	-	N	-	X
6C	6X6	300	*	-	6	Yes	-	-	-	N	-	X

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

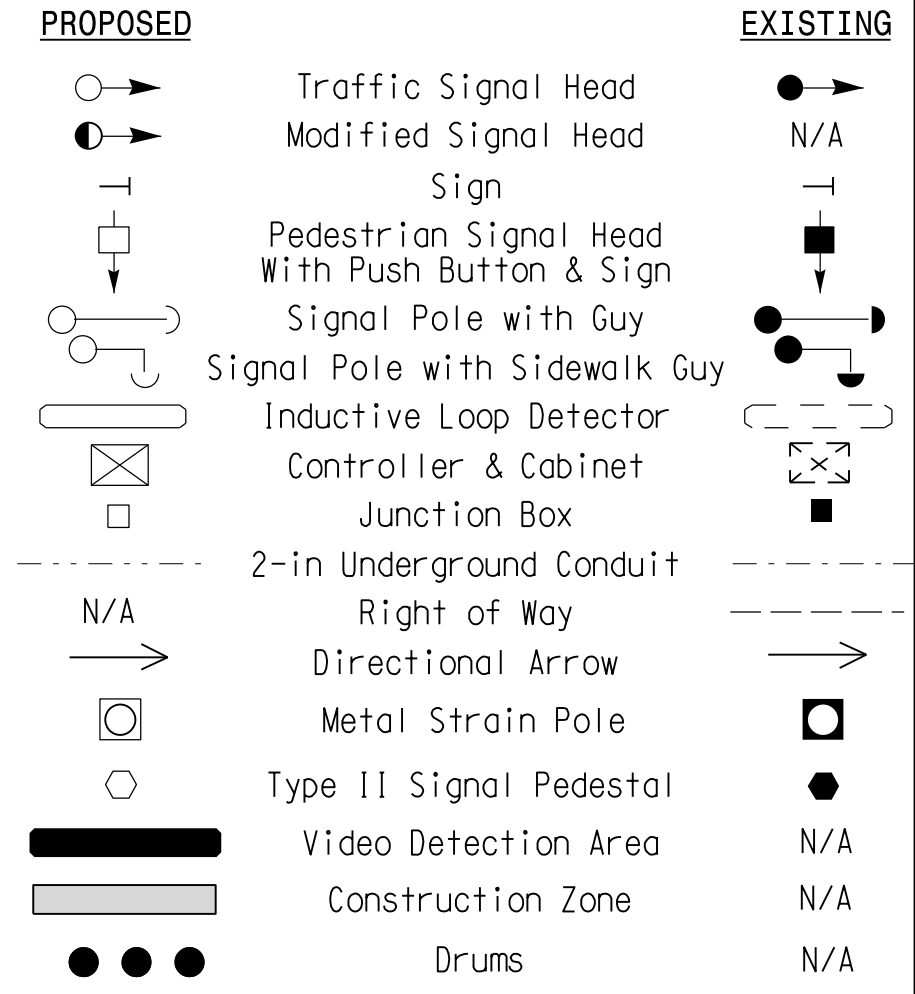
DETECTOR INSTALLATION CHART CONTINUED BELOW

8 Phase Fully Actuated Fayetteville Signal System

NOTES

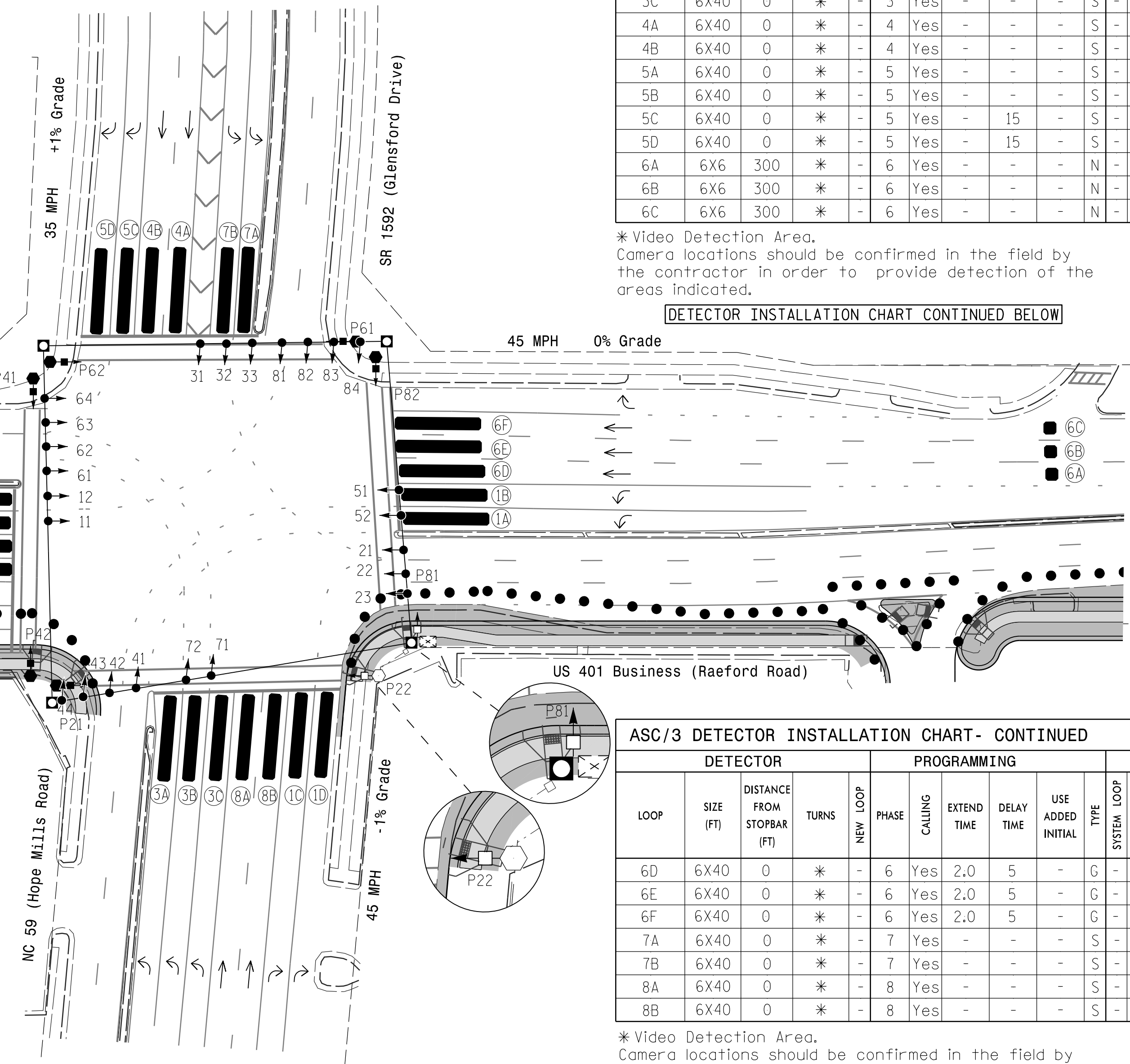
- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Phase 3 and/or phase 7 may be lagged.
- Reposition existing signal heads 23 and 24.
- Set all detector units to presence mode.
- Locate new cabinet foundation so as not to obstruct sight distance of vehicles turning right on red. Relocate existing cabinet and controller onto new foundation.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Pedestrian pedestals are conceptual and shown for reference only. See 2018 NCDOT Roadway Standard Drawings 1705.04 Sheets 1-3 for push button location details.

LEGEND



FEATURE	ASC/3 TIMING CHART PHASE							
	1	2	3	4	5	6	7	8
Min Green *	7	12	7	7	7	12	7	7
Walk *	-	7	-	7	-	7	-	7
Ped Clear	-	30	-	30	-	30	-	26
Veh. Extension *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max I *	20	90	20	40	20	90	40	20
Yellow	3.0	4.5	3.0	3.8	3.0	4.5	3.0	4.6
Red Clear	4.2	2.6	4.1	3.1	4.2	2.5	3.8	2.4
Red Revert	-	-	-	-	-	-	-	-
Actuations B4 Add *	-	-	-	-	-	-	-	-
Seconds /Actuation *	-	-	-	-	-	-	-	-
Max Initial *	-	-	-	-	-	-	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduce *	-	30	-	-	-	30	-	-
Minimum Gap	-	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.



ASC/3 DETECTOR INSTALLATION CHART- CONTINUED												
DETECTOR				PROGRAMMING								
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	LOOP SYSTEM	
6D	6X40	0	*	-	6	Yes	2.0	5	-	G	-	X
6E	6X40	0	*	-	6	Yes	2.0	5	-	G	-	X
6F	6X40	0	*	-	6	Yes	2.0	5	-	G	-	X
7A	6X40	0	*	-	7	Yes	-	-	-	S	-	X
7B	6X40	0	*	-	7	Yes	-	-	-	S	-	X
8A	6X40	0	*	-	8	Yes	-	-	-	S	-	X
8B	6X40	0	*	-	8	Yes	-	-	-	S	-	X

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

Signal Upgrade Temporary Design 1 - TMP Phase I

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Prepared for the Offices of:
Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA
Signal Design Section
750 N. Greenfield Pkwy, Garner, NC 27526

US 401 Business (Raeford Road) at NC 59 (Hope Mills Road) / SR 1592 (Glensford Drive)
Division 6 Cumberland County Fayetteville
PLAN DATE: March 2018 REVIEWED BY: E D Harris
PREPARED BY: B L Watson REVIEWED BY: B L Watson

PROFESSIONAL SEAL 29449
ENGINEER
BENJAMIN L. WATSON
DATE: 3/29/2018
SIG. INVENTORY NO. 06-015511

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