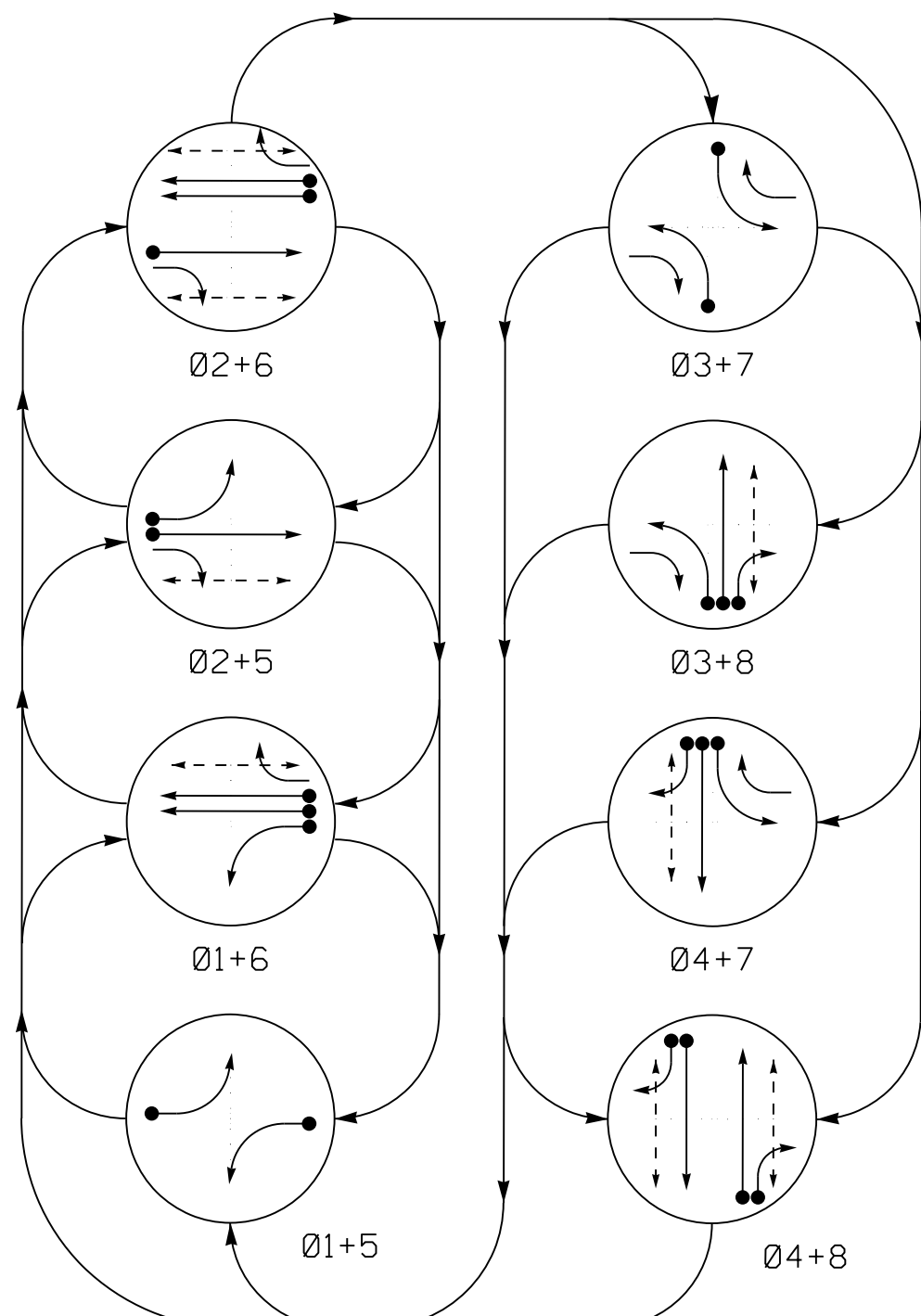


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

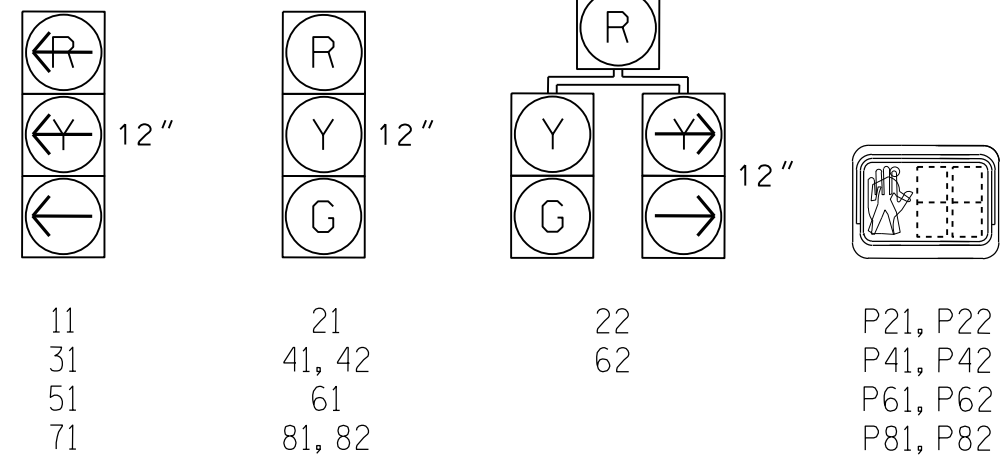
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- ◀ — ▶ PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8
11	←	←	←	←	←	←	←	←
21	R	R	G	G	R	R	R	Y
22	R	R	G	G	R	R	R	Y
31	←	←	←	←	←	←	←	←
41, 42	R	R	R	R	R	R	G	G
51	←	←	←	←	←	←	←	←
61	R	G	R	G	R	R	R	Y
62	R	G	R	G	R	R	R	Y
71	←	←	←	←	←	←	←	←
81, 82	R	R	R	R	R	R	G	G
P21, P22	DW	DW	W	W	DW	DW	DW	DRK
P41, P42	DW	DW	DW	DW	DW	W	W	DRK
P61, P62	DW	W	DW	W	DW	DW	DW	DRK
P81, P82	DW	DW	DW	DW	W	DW	W	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



ASC/3 DETECTOR INSTALLATION CHART

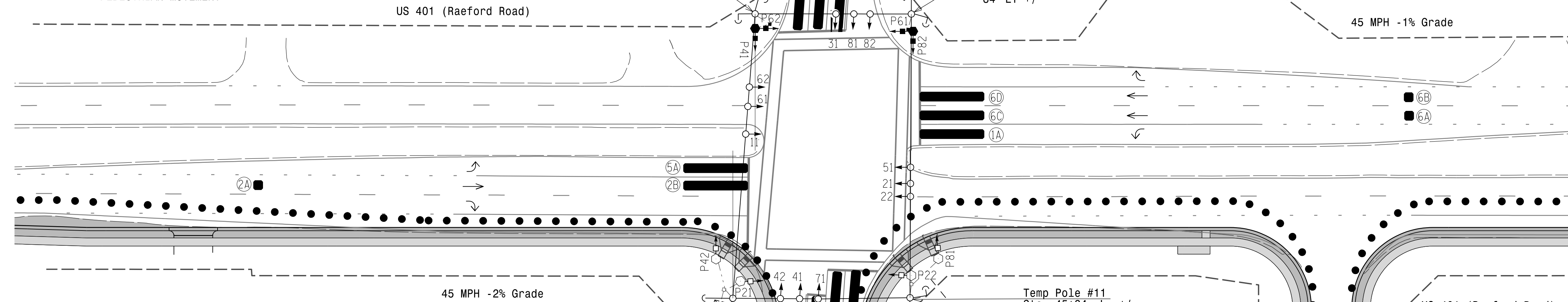
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	LOOP	NEW CARD
1A	6X40	0	*	-	1	Yes	-	-	-	S	-	X
2A	6X6	300	*	-	2	Yes	-	-	-	N	-	X
2B	6X40	0	*	-	2	Yes	2.0	5	-	G	-	X
3A	6X40	0	*	-	3	Yes	-	3	-	S	-	X
4A	6X40	0	*	-	4	Yes	-	-	-	S	-	X
4B	6X40	0	*	-	4	Yes	-	15	-	S	-	X
5A	6X40	0	*	-	5	Yes	-	-	-	S	-	X
6A	6X6	300	*	-	6	Yes	-	-	-	N	-	X
6B	6X6	300	*	-	6	Yes	-	-	-	N	-	X
6C	6X40	0	*	-	6	Yes	2.0	5	-	G	-	X
6D	6X40	0	*	-	6	Yes	2.0	5	-	G	-	X
7A	6X40	0	*	-	7	Yes	-	3	-	S	-	X
8A	6X40	0	*	-	8	Yes	-	-	-	S	-	X
8B	6X40	0	*	-	8	Yes	-	15	-	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.

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.
- 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.
- Pavement markings are existing.
- 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 are shown for reference only. See 2018 NCDOT Roadway Standard Drawings 1705.04 sheets 1-3 for push button details.
- Field adjust temporary poles as needed.



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 *	-	7	-	7	-	7	-	7
Ped Clear	-	20	-	36	-	17	-	30
Veh. Extension *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max I *	20	90	25	35	20	90	25	35
Yellow	3.0	4.7	3.0	4.6	3.0	4.6	3.0	4.3
Red Clear	3.6	1.5	3.5	2.2	3.4	1.4	3.3	2.2
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.

LEGEND

- | | | | |
|---|---|---|---|
| ○ | Proposed Traffic Signal Head | ● | Existing Traffic Signal Head |
| ○ | Proposed Modified Signal Head | ● | Existing Modified Signal Head |
| ○ | Proposed Pedestrian Signal Head With Push Button & Sign | ● | Existing Pedestrian Signal Head 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 |
| ○ | Proposed Right of Way | ● | Existing Right of Way |
| ○ | Proposed Directional Arrow | ● | Existing Directional Arrow |
| ○ | Proposed Video Detection Area | ● | Existing Video Detection Area |
| ○ | Proposed Construction Zone | ● | Existing Construction Zone |
| ○ | Proposed Drums | ● | Existing Drums |
| ○ | Proposed Type II Signal Pedestal | ● | Existing Type II Signal Pedestal |

Signal Upgrade Temporary Signal 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
SCALE
0 40
1"=40'

US 401 (Raeford Road) at
SR 1409 (71st School Road) /
SR 1105 (Graham Road)
Division 6 Cumberland County Fayetteville
PLAN DATE: March 2018 REVIEWED BY: E D Harris
PREPARED BY: M Wilson REVIEWED BY: B L Watson
REVISIONS
INIT. DATE

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED
NORTH CAROLINA
PROFESSIONAL
SEAL
29449
ENGINEER
Betsy L. Watson
3/29/2018
DATE
SIG. INVENTORY NO. 06-051611