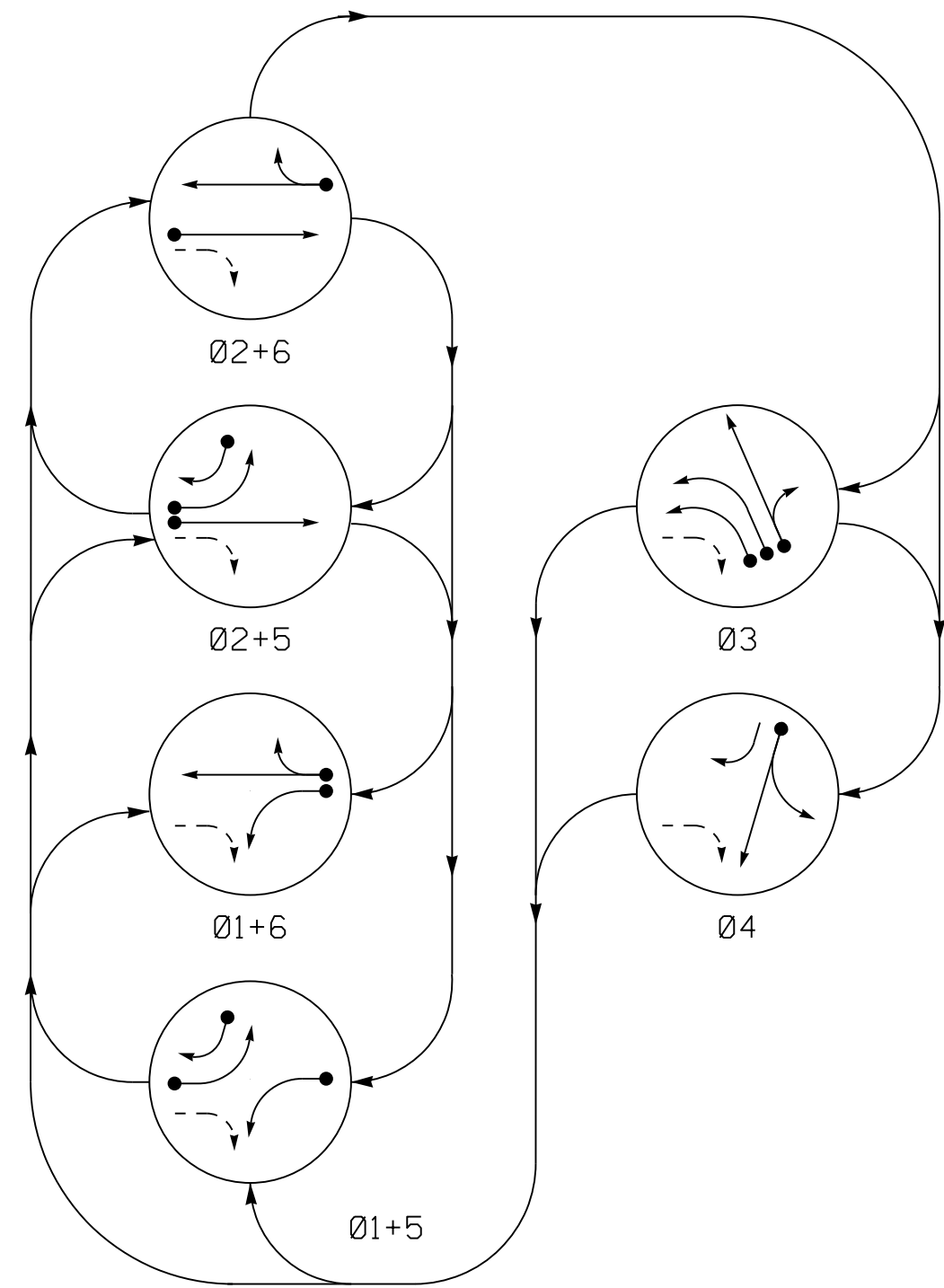


PHASING DIAGRAM

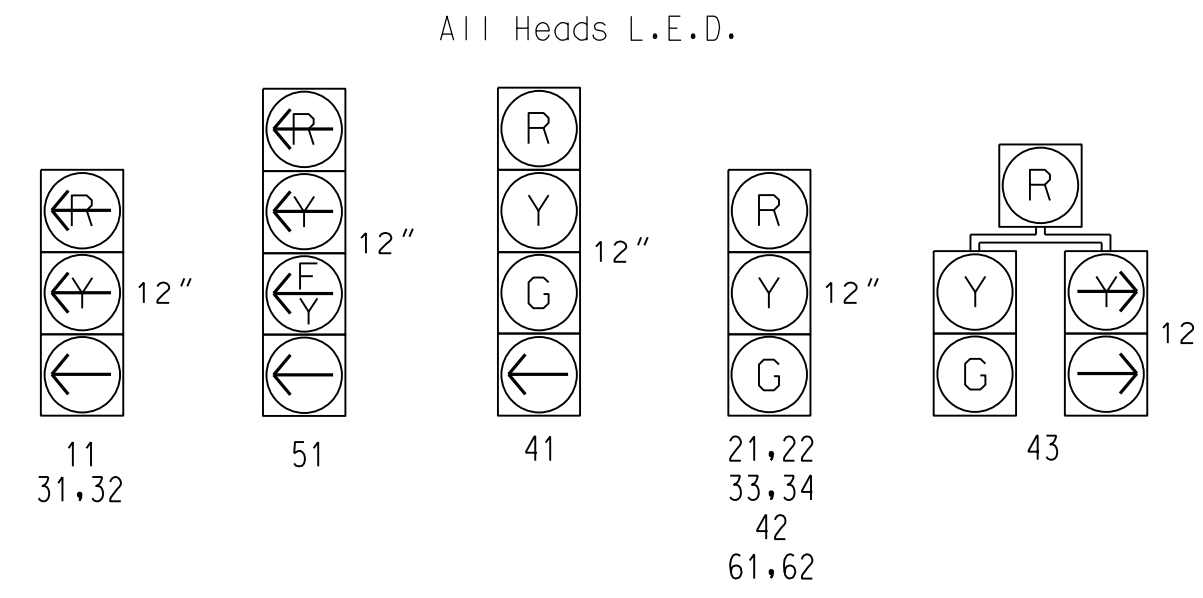


PHASING DIAGRAM DETECTION LEGEND

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

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

SIGNAL FACE I.D.



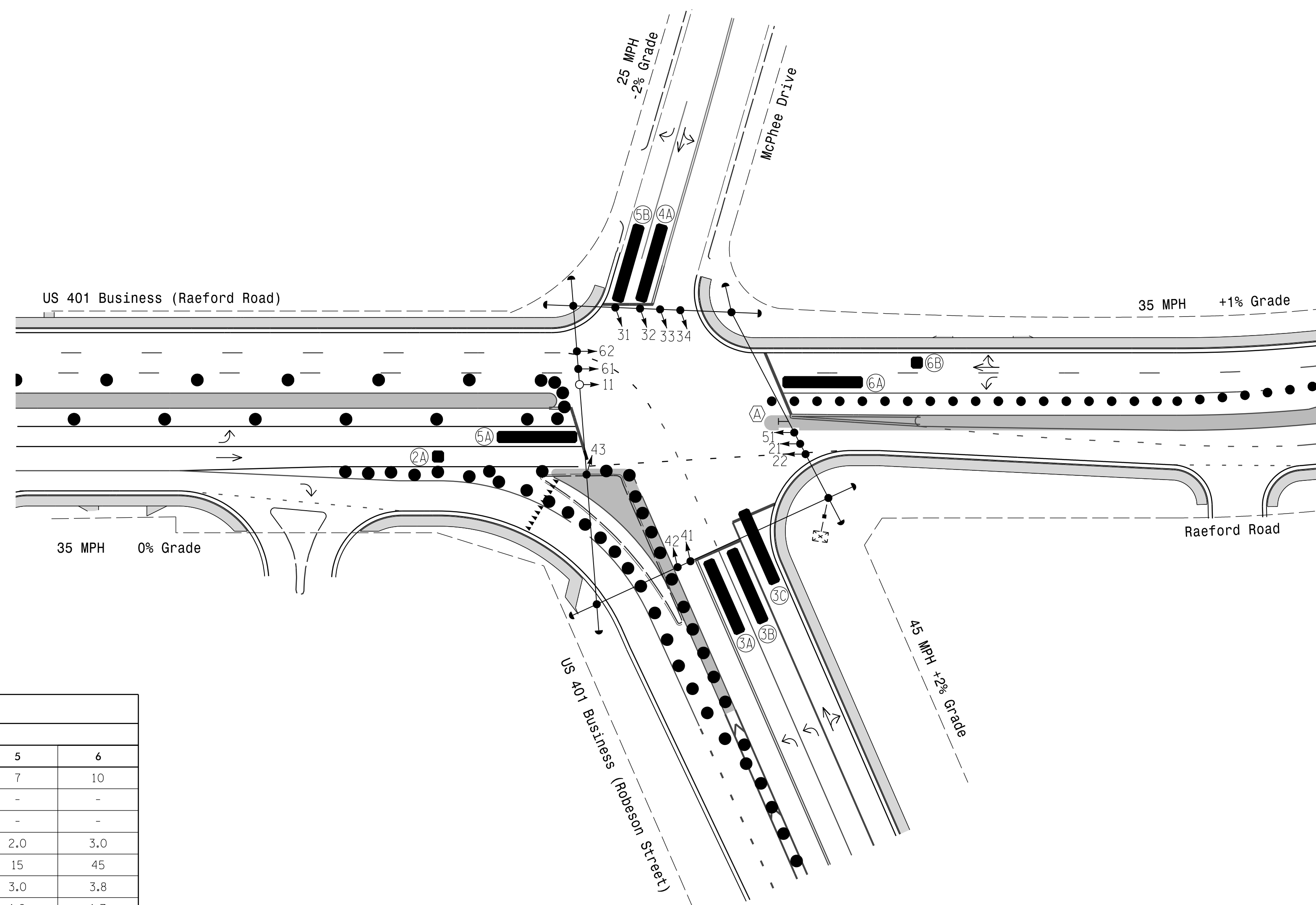
ASC/3 DETECTOR INSTALLATION CHART											
DETECTOR				PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	SYSTEM LOOP	NEW CARD
2A	6X6	10	*	-	2	Yes	-	-	-	S	-
3A	6X40	0	*	-	3	Yes	-	3	-	S	-
3B	6X40	0	*	-	3	Yes	-	-	-	S	-
3C	6X40	0	*	-	3	Yes	-	10	-	S	-
4A	6X40	0	*	-	4	Yes	-	3	-	S	-
5A	6X40	0	*	-	5	Yes	-	-	-	S	-
5B	6X40	0	*	-	5	Yes	-	15	-	S	-
6A	6X40	0	*	-	6	Yes	-	-	-	S	-
6B	6X6	70	*	-	6	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.

6 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 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Reposition existing signal heads numbered 11,21,22,61, 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.



FEATURE	PHASE					
	1	2	3	4	5	6
Min Green *	7	10	7	7	7	10
Walk *	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-
Veh. Extension *	2.0	3.0	2.0	2.0	2.0	3.0
Max 1 *	15	45	25	20	15	45
Yellow	3.0	3.8	4.3	3.3	3.0	3.8
Red Clear	2.8	1.7	2.3	2.5	1.9	1.7
Red Revert	-	-	-	-	-	-
Actuations B4 Add *	-	-	-	-	-	-
Seconds / Actuation *	-	-	-	-	-	-
Max Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
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.

LEGEND

- | 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  |
| N/A Right of Way                                 | --- N/A  |
| → Directional Arrow                              | → N/A    |
| ▬ Video Detection Area                           | ▬ N/A    |
| ▬ Construction Zone                              | ▬ N/A    |
| ● Drums  | ● N/A    |
| Ⓐ "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)     | Ⓐ N/A    |

Signal Upgrade Temporary Design 3 - TMP Phase III

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Prepared for the Offices of:  
 Transportation Mobility and Safety Division  
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
 Signal Design Section  
 750 N. Greenfield Pkwy, Garner, NC 27526  
 SCALE: 0 40  
 1" = 40'

US 401 Bus./SR 1414 (Raeford Road) at US 401 Bus. (Robeson Street) /McPhee Drive  
 Division 6 Cumberland County Fayetteville  
 PLAN DATE: March 2018 REVIEWED BY: E D Harris  
 PREPARED BY: G B Spell REVIEWED BY: B L Watson

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED  
 NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 29449  
 Betsy L. Watson  
 DATE: 3/29/2018  
 SIG. INVENTORY NO. 06-000213