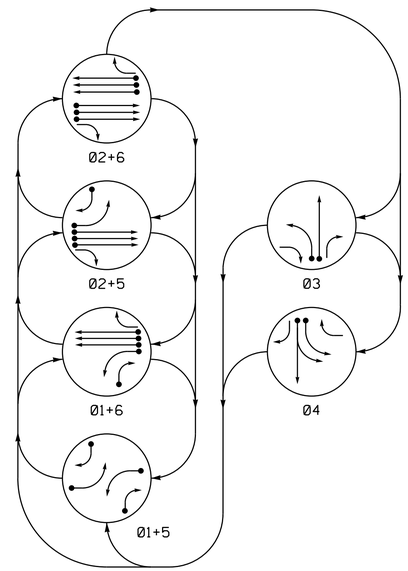
PROJECT REFERENCE NO.	SHEET NO.
U-5742	Sig. 83.0

6 Phase
Fully Actuated
Fayetteville Signal System

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

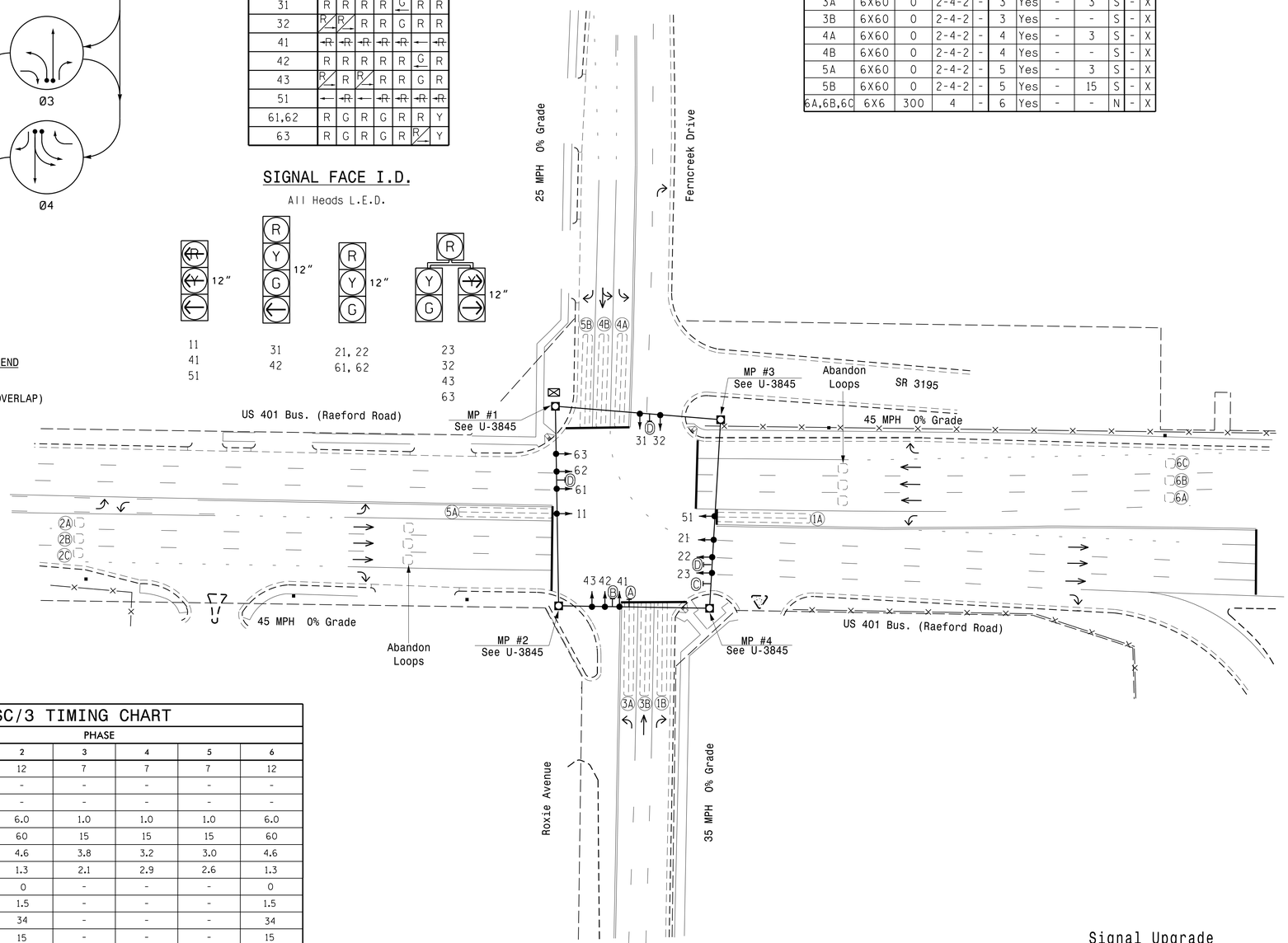
SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03	04	FLASH
11	↚	↚	R̸	R̸	R̸	R̸	R̸
21,22	R	R	G	G	R	R	Y
23	R	R	G	G	R/	R	Y
31	R	R	R	R	G ←	R	R
32	R/	R/	R	R	G	R	R
41	R̸	R̸	R̸	R̸	R̸	↚	R̸
42	R	R	R	R	R	G ←	R
43	R/	R	R/	R	R	G	R
51	↚	R̸	↚	R̸	R̸	R̸	R̸
61,62	R	G	R	G	R	R	Y
63	R	G	R	G	R	R/	Y

SIGNAL FACE I.D.

All Heads L.E.D.

ASC/3 DETECTOR INSTALLATION CHART

DETECTOR					PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	SYSTEM LOOP	NEW CARD
1A	6X60	0	2-4-2	-	1	Yes	-	3	S	-	X
1B	6X60	0	2-4-2	-	1	Yes	-	15	S	-	X
2A,2B,2C	6X6	300	4	-	2	Yes	-	-	N	-	X
3A	6X60	0	2-4-2	-	3	Yes	-	3	S	-	X
3B	6X60	0	2-4-2	-	3	Yes	-	-	S	-	X
4A	6X60	0	2-4-2	-	4	Yes	-	3	S	-	X
4B	6X60	0	2-4-2	-	4	Yes	-	-	S	-	X
5A	6X60	0	2-4-2	-	5	Yes	-	3	S	-	X
5B	6X60	0	2-4-2	-	5	Yes	-	15	S	-	X
6A,6B,6C	6X6	300	4	-	6	Yes	-	-	N	-	X



NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 3 and/or phase 7 may be lagged.
4. The order of phase 3 and phase 4 may be reversed.
5. Abandon existing loops 2D, 2E, 2F, 6D, 6E and 6F.
6. Set all detector units to presence mode.
7. In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
8. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
9. Pavement markings are existing.
10. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Metal Strain Pole	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
N/A	Fence	
N/A	Wheel Chair Ramp	
Ⓐ	Left Arrow "ONLY" Sign (R3-5L)	Ⓐ
Ⓑ	Combined Through and Left Arrow Sign (R3-6L)	Ⓑ
Ⓒ	Right Arrow "ONLY" Sign (R3-5R)	Ⓒ
Ⓓ	Street Name Sign	Ⓓ

ASC/3 TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6
Min Green *	7	12	7	7	7	12
Walk *	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-
Veh. Extension *	1.0	6.0	1.0	1.0	1.0	6.0
Max 1 *	15	60	15	15	15	60
Yellow	3.0	4.6	3.8	3.2	3.0	4.6
Red Clear	2.9	1.3	2.1	2.9	2.6	1.3
Actuations B4 Add *	-	0	-	-	-	0
Seconds /Actuation *	-	1.5	-	-	-	1.5
Max Initial *	-	34	-	-	-	34
Time Before Reduction *	-	15	-	-	-	15
Time To Reduce *	-	30	-	-	-	30
Minimum Gap	-	3.0	-	-	-	3.0
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.

Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SCALE 0 40 1"=40'

US 401 Bus. (Raeford Road) at Ferncreek Drive / Roxie Avenue

Division 6 Cumberland County Fayetteville

PLAN DATE:	January 2016	REVIEWED BY:	JPG
PREPARED BY:	EM Minshew	REVIEWED BY:	

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 029904 ENGINEER JASON P. GALLOWAY

DocuSigned by: Jason P. Galloway 7/25/2016
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DATE

SIG. INVENTORY NO. 06-0327

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emminshew