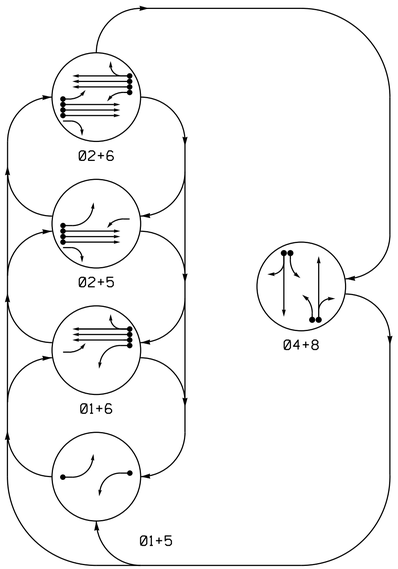
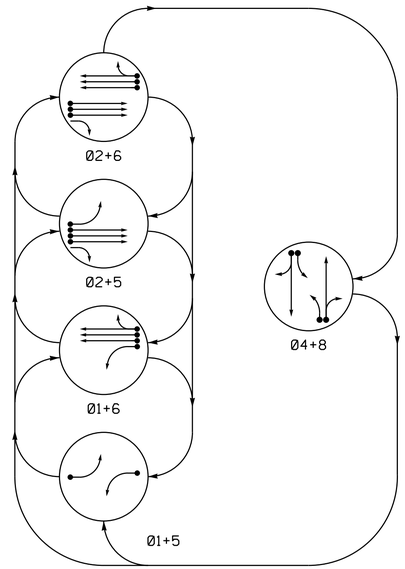
PROJECT REFERENCE NO.	SHEET NO.
U-5742	Sig. 84.0

DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

DEFAULT TABLE OF OPERATION

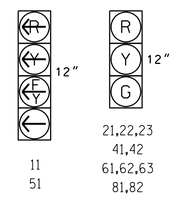
SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	04+8	FLASH
11	←—	←—	~~F Y~~	~~F Y~~	~~R~~	~~Y~~
21,22,23	R	R	G	G	R	Y
41,42	R	R	R	R	G	R
51	←—	~~F Y~~	←—	~~F Y~~	~~R~~	~~Y~~
61,62,63	R	G	R	G	R	Y
81,82	R	R	R	R	G	R

ALTERNATE TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	04+8	FLASH
11	←—	←—	~~R~~	~~R~~	~~R~~	~~Y~~
21,22,23	R	R	G	G	R	Y
41,42	R	R	R	R	G	R
51	←—	~~R~~	←—	~~R~~	~~R~~	~~Y~~
61,62,63	R	G	R	G	R	Y
81,82	R	R	R	R	G	R

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	6X50	0	2	-	1	Yes	-	* 15	S	-	X
					6**	Yes	-	3	G	-	X
2A	6X6	300	5	-	2	Yes	-	-	N	-	X
2B	6X6	300	5	-	2	Yes	-	-	N	-	X
2C	6X6	300	5	-	2	Yes	-	-	N	-	X
4A	6X60	+5	2-4-2	-	4	Yes	-	3	S	-	X
4B	6X60	+5	2-4-2	-	4	Yes	-	10	S	-	X
5A	6X40	0	2-4-2	-	5	Yes	-	* 15	S	-	X
					2**	Yes	-	3	G	-	X
6A	6X6	300	5	-	6	Yes	-	-	N	-	X
6B	6X6	300	5	-	6	Yes	-	-	N	-	X
6C	6X6	300	5	-	6	Yes	-	-	N	-	X
8A	6X60	0	***	-	8	Yes	-	3	S	-	X
8B	6X60	+10	***	-	8	Yes	-	10	S	-	X

* Reduce Delay to 3 Seconds During Alternate Phasing Operation

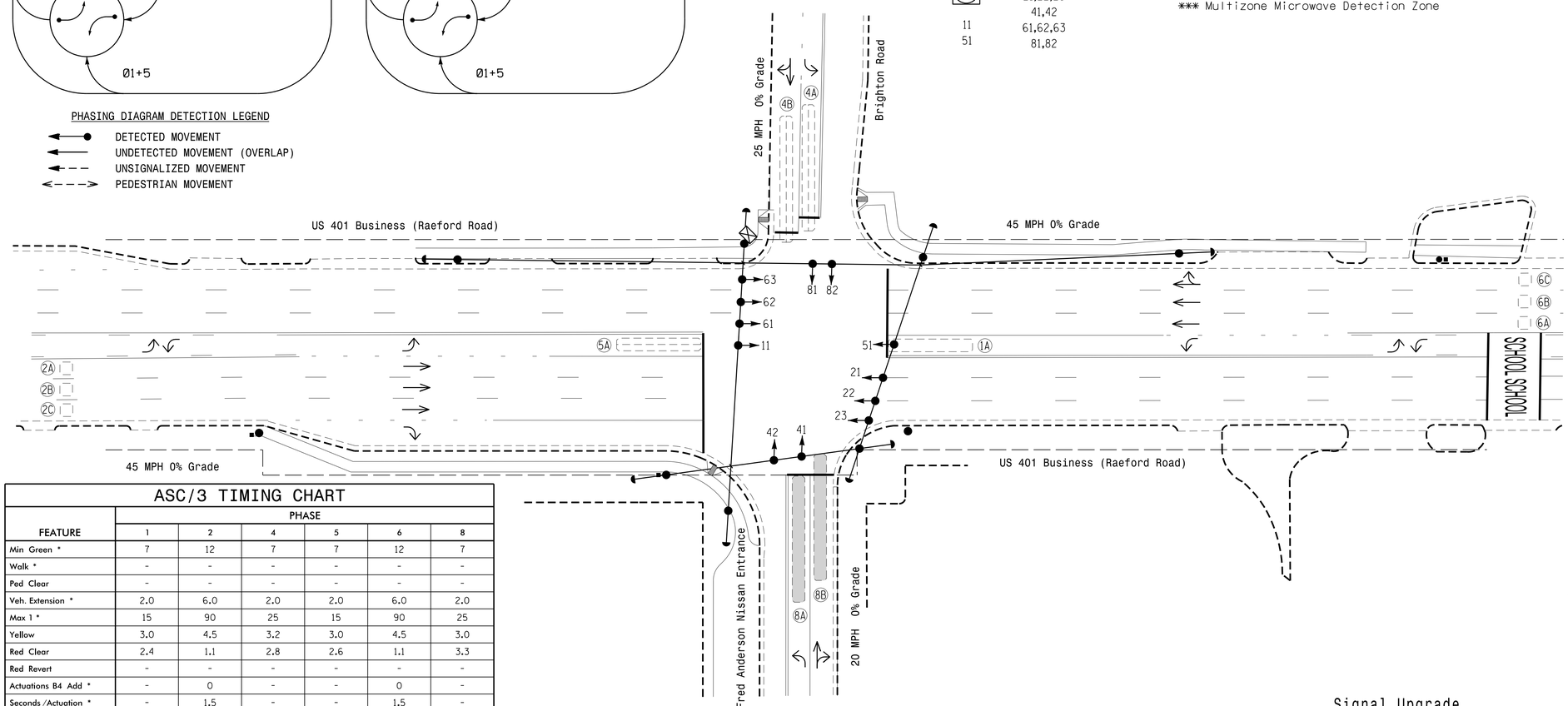
** Disable Phase 2/6 Call For Loops 1A and 5A During Alternate Phasing Operation

*** Multizone Microwave Detection Zone

5 Phase Fully Actuated Fayetteville Signal System

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 1 and/or phase 5 may be lagged.
4. Set all detector units to presence mode.
5. 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.
6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
7. Pavement markings are existing.
8. The Division (City) Traffic Engineer will determine the hours of use for each phasing plan.
9. 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	
	Inductive Loop Detector	
	Multizone Microwave Detection	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
N/A	Wheelchair Ramp	

ASC/3 TIMING CHART

FEATURE	PHASE 1	2	4	5	6	8
Min Green *	7	12	7	7	12	7
Walk *	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-
Veh. Extension *	2.0	6.0	2.0	2.0	6.0	2.0
Max 1 *	15	90	25	15	90	25
Yellow	3.0	4.5	3.2	3.0	4.5	3.0
Red Clear	2.4	1.1	2.8	2.6	1.1	3.3
Red Revert	-	-	-	-	-	-
Actuations B4 Add *	-	0	-	-	0	-
Seconds /Actuation *	-	1.5	-	-	1.5	-
Max Initial *	-	34	-	-	34	-
Time Before Reduction *	-	15	-	-	15	-
Time To Reduce *	-	45	-	-	45	-
Minimum Gap	-	3.0	-	-	3.0	-
Locking Detector	-	X	-	-	X	-
Recall Position	-	VEH. RECALL	-	-	VEH. RECALL	-
Dual Entry	-	-	X	-	-	X
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, NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
750 N.Greenfield Pkwy,Garner,NC 27529

US 401 Business (Raeford Rd) at Brighton Road/ Fred Anderson Nissan Entrance

Division 6 Cumberland County Fayetteville

PLAN DATE:	January 2016	REVIEWED BY:	PLA
PREPARED BY:	Devin Smith	REVIEWED BY:	

SCALE 0 30 1"=30'

REVISIONS	INIT.	DATE

SEAL: NORTH CAROLINA PROFESSIONAL SEAL 029904 ENGINEER JASON P. GALLOWAY

DocuSigned by: Jason P. Galloway F700EA704B1841D 6/15/2016 DATE

SIG. INVENTORY NO. 06-0328

15-JUN-2016 13:51
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