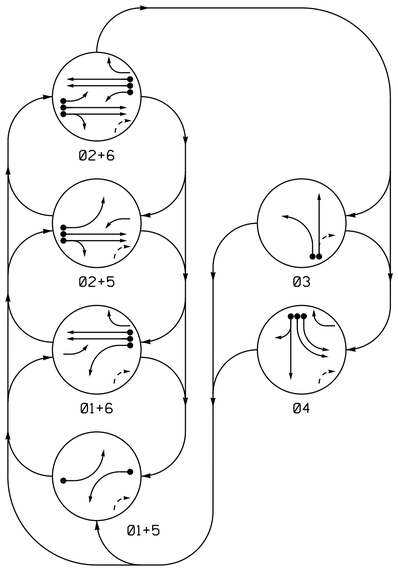
PROJECT REFERENCE NO.	SHEET NO.
U-5742	Sig. 31.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.

All Heads L.E.D.

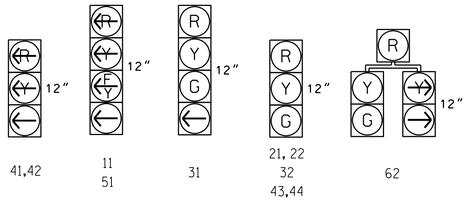


TABLE OF OPERATION

SIGNAL FACE	PHASE						
	Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø3	Ø4	FLASH
11	←	←	F/Y	F/Y	~~R~~	~~R~~	~~Y~~
21,22	R	R	G	G	R	R	Y
31	R	R	R	R	G	R	R
32	R	R	R	R	G	R	R
41,42	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	←	~~R~~
43,44	R	R	R	R	R	G	R
51	←	F/Y	←	F/Y	~~R~~	~~R~~	~~Y~~
61	R	G	R	G	R	R	Y
62	R	G	R	G	R	R/→	Y

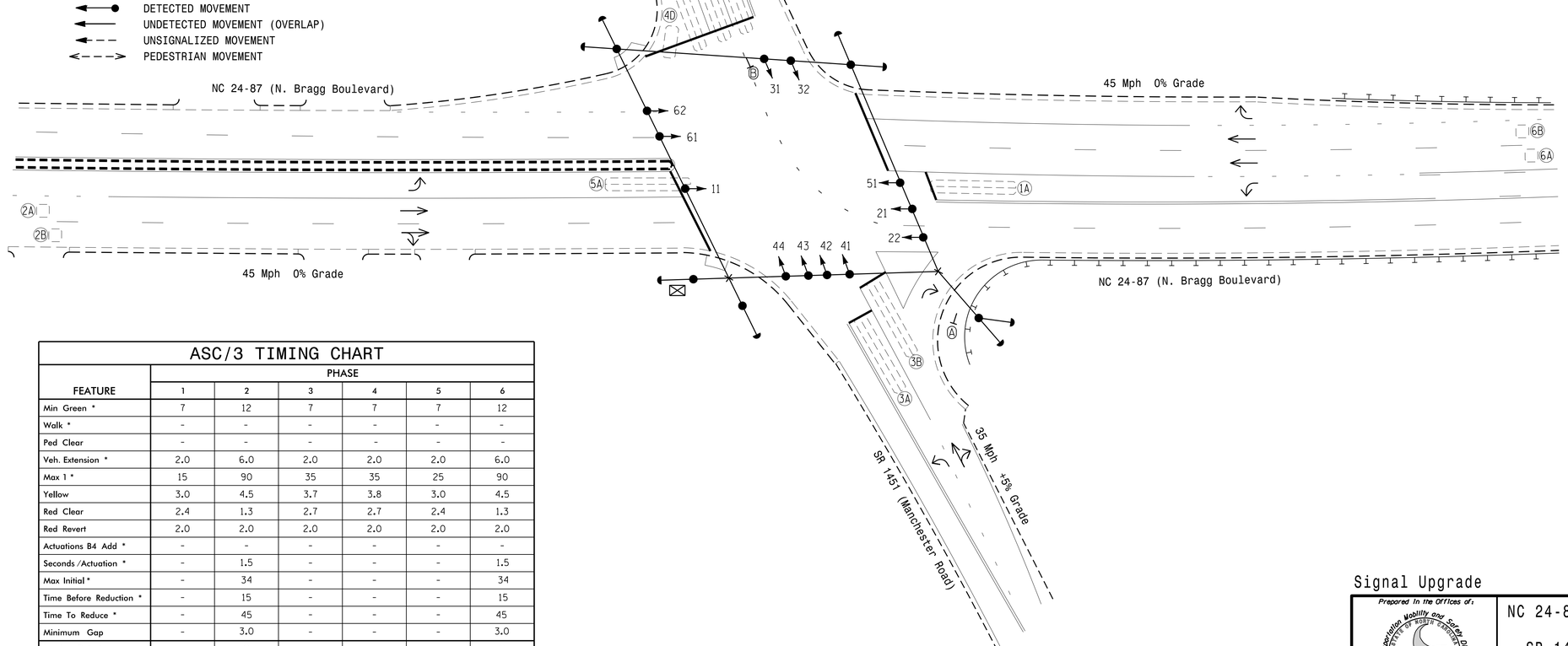
ASC/3 DETECTOR INSTALLATION CHART

DETECTOR					PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	-	1	Yes	-	15	S	-	X
					6	Yes	-	3	G	-	X
2A	6X6	300	4	-	2	Yes	-	-	N	-	X
2B	6X6	300	4	-	2	Yes	-	-	N	-	X
3A	6X40	0	2-4-2	-	3	Yes	-	3	S	-	X
3B	6X40	0	2-4-2	-	3	Yes	-	5	S	-	X
4A	6X40	+5	2-4-2	-	4	Yes	-	3	S	-	X
4B	6X40	+5	2-4-2	-	4	Yes	-	-	S	-	X
4C	6X40	+5	2-4-2	-	4	Yes	-	5	S	-	X
4D	6X15	+5	3	-	4	Yes	-	10	S	-	X
5A	6X40	+5	2-4-2	-	5	Yes	-	15	S	-	X
					2	Yes	-	3	G	-	X
6A	6X6	300	4	-	6	Yes	-	-	N	-	X
6B	6X6	300	4	-	6	Yes	-	-	N	-	X

6 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. The order of phase 3 and phase 4 may be reversed.
5. Set all detector units to presence mode.
6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
7. Pavement markings are existing.
8. 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	▭
⊠	Controller & Cabinet	▣
□	Junction Box	■
·-·-·	2-in Underground Conduit	·-·-·
N/A	Right of Way	— — —
→	Directional Arrow	→
N/A	Guard Rail	⊥⊥⊥
Ⓐ	"YIELD" Sign (R1-2)	Ⓐ
Ⓑ	Left Arrow "ONLY" Sign (R3-5L)	Ⓑ

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 *	2.0	6.0	2.0	2.0	2.0	6.0
Max 1 *	15	90	35	35	25	90
Yellow	3.0	4.5	3.7	3.8	3.0	4.5
Red Clear	2.4	1.3	2.7	2.7	2.4	1.3
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Actuations B4 Add *	-	-	-	-	-	-
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	-	-	-	-	-	-
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
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy.Garner,NC 27529

NC 24-87 (N. Bragg Boulevard)
at
SR 1451 (Manchester Road)

Division 6 Cumberland County Spring Lake

PLAN DATE:	February 2016	REVIEWED BY:	JPG, PE
PREPARED BY:	EMM/JPG	REVIEWED BY:	PLA

SCALE 0 30 1"=30'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA
PROFESSIONAL
SEAL 029904
ENGINEER
JASON P. GALLOWAY

DocuSigned by: Jason P. Galloway F7D0EA7D4815841D... 3/8/2016 DATE

SIG. INVENTORY NO. 06-0073

07-MAR-2016 08:37
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jgalloway