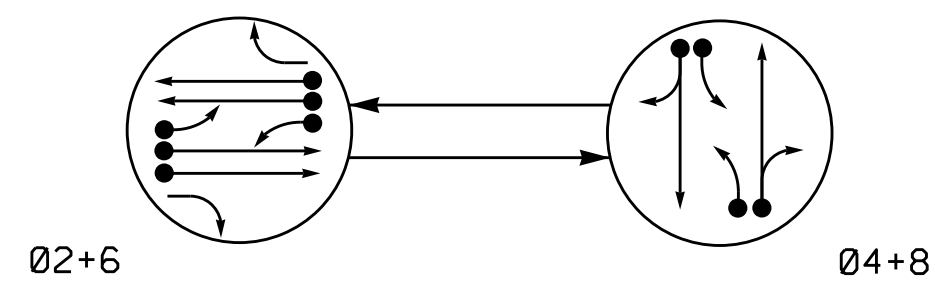


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

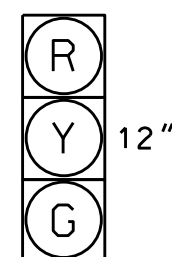
- ←●→ DETECTED MOVEMENT
- ←→ UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- ←---→ PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE		
	Ø 2+6	Ø 4+8	FLIGHT
21, 22, 23	G	R	Y
41, 42	R	G	R
61, 62, 63	G	R	Y
81, 82	R	G	R

SIGNAL FACE I.D.

All Heads L.E.D.



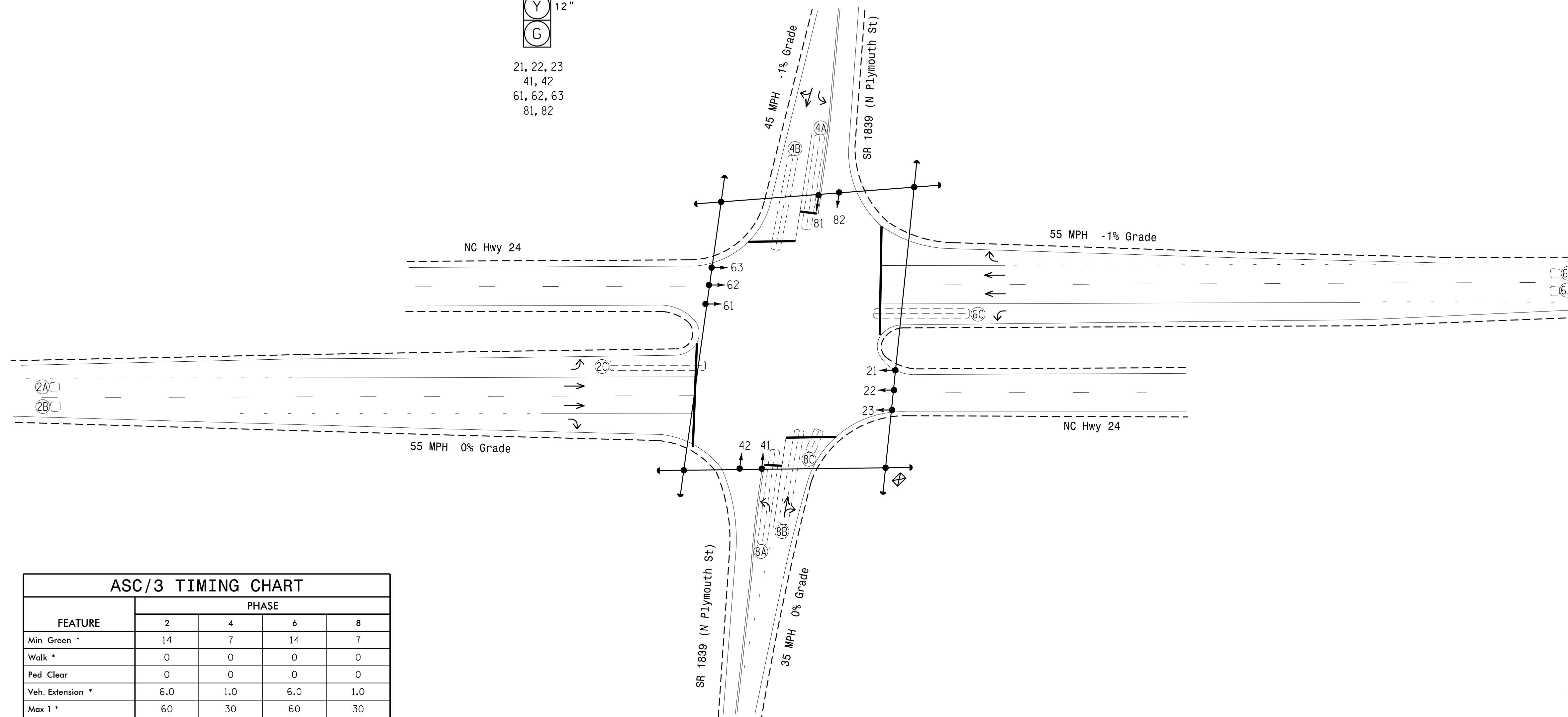
21, 22, 23  
41, 42  
61, 62, 63  
81, 82

ASC/3 DETECTOR INSTALLATION CHART											
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING						
					PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	LOOP SYSTEM	NEW CARD
2A	6X6	420	6	-	2	Yes	-	-	S	-	X
2B	6X6	420	6	-	2	Yes	-	-	S	-	X
2C	6X60	+5	2-4-2	-	2	Yes	-	5	G	-	X
4A	6X60	+10	2-4-2	-	4	Yes	-	3	S	-	X
4B	6X60	+5	2-4-2	-	4	Yes	-	10	S	-	X
6A	6X6	420	6	-	6	Yes	-	-	S	-	X
6B	6X6	420	6	-	6	Yes	-	-	S	-	X
6C	6X60	+5	2-4-2	-	6	Yes	-	5	G	-	X
8A	6X60	+10	2-4-2	-	8	Yes	-	3	S	-	X
8B	6X60	+5	2-4-2	-	8	Yes	-	10	S	-	X
8C	6X15	+5	2-4-2	-	8	Yes	-	15	S	-	X

2 Phase Fully Actuated Fayetteville City System

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Set all detector units to presence mode.
- 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.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- The cabinet should be designed to include an Auxiliary Output file for future use.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



FEATURE	PHASE			
	2	4	6	8
Min Green *	14	7	14	7
Walk *	0	0	0	0
Ped Clear	0	0	0	0
Veh. Extension *	6.0	1.0	6.0	1.0
Max 1 *	60	30	60	30
Yellow	5.3	4.6	5.3	4.6
Red Clear	1.3	2.5	1.3	2.5
Actuations B4 Add *	-	-	-	-
Seconds /Actuation *	1.5	-	1.5	-
Max Initial *	46	-	46	-
Time Before Reduction *	15	-	15	-
Time To Reduce *	30	-	30	-
Minimum Gap	3.4	-	3.4	-
Locking Detector	X	-	X	-
Recall Position	VEH. RECALL	-	VEH. RECALL	-
Dual Entry	-	X	-	X
Simultaneous Gap	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           | ●→       |
| ●→ 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              | →        |

Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

	<p>NC Hwy 24 at SR 1839 (N. Plymouth St)</p>		
	<p>Division 6 Cumberland County Fayetteville</p> <p>PLAN DATE: June 2016 REVIEWED BY: JPG, PE</p> <p>PREPARED BY: EM Minshew REVIEWED BY:</p>	<p>REVISIONS</p> <p>INIT. DATE</p>	