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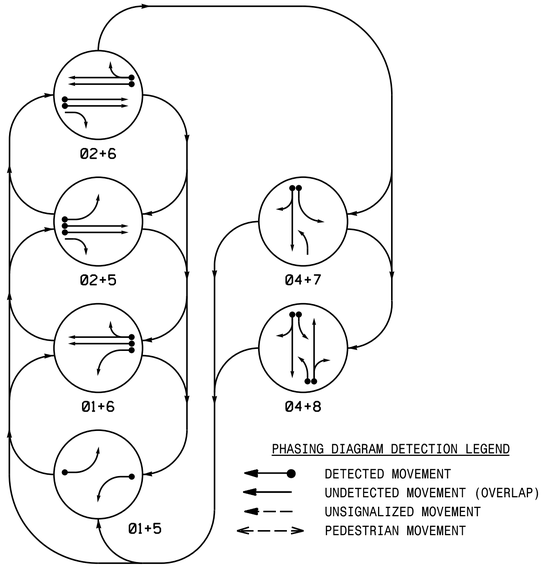
PROJECT REFERENCE NO.	SHEET NO.
U-4405A	SIG-4.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

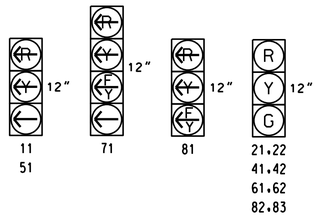
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	04+7	04+8	FLASH
11	—	—	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
21, 22	R	R	G	G	R	R	Y
41, 42	R	R	R	R	G	G	R
51	—	~~R~~	—	~~R~~	~~R~~	~~R~~	~~R~~
61, 62	R	G	R	G	R	R	Y
71	~~R~~	~~R~~	~~R~~	~~R~~	—	~~F Y~~	~~R~~
81	~~R~~	~~R~~	~~R~~	~~R~~	~~F Y~~	~~F Y~~	~~R~~
82,83	R	R	R	R	R	G	R

SIGNAL FACE I.D.

All Heads L.E.D.



ASC/3 DETECTOR INSTALLATION CHART

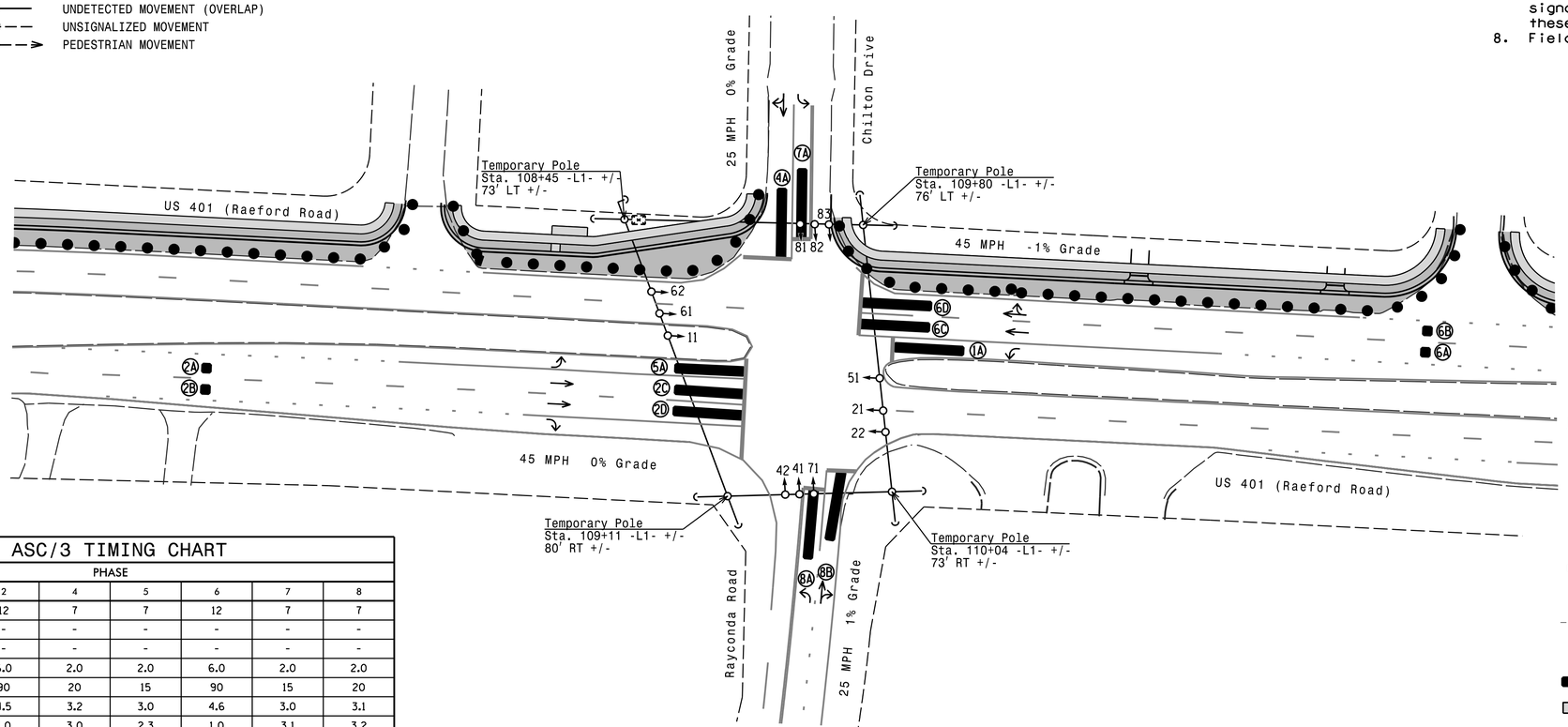
DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	0	✳	-	1	Yes	-	-	-	S	-	X
2A	6X6	300	✳	-	2	Yes	-	-	-	N	-	X
2B	6X6	300	✳	-	2	Yes	-	-	-	N	-	X
2C	6X40	0	✳	-	2	Yes	2.0	5	-	G	-	X
2D	6X40	0	✳	-	2	Yes	2.0	5	-	G	-	X
4A	6X40	0	✳	-	4	Yes	-	10	-	S	-	X
5A	6X40	0	✳	-	5	Yes	-	-	-	S	-	X
6A	6X6	300	✳	-	6	Yes	-	-	-	N	-	X
6B	6X6	300	✳	-	6	Yes	-	-	-	N	-	X
6C	6X40	0	✳	-	6	Yes	2.0	5	-	G	-	X
6D	6X40	0	✳	-	6	Yes	2.0	5	-	G	-	X
7A	6X40	0	✳	-	7	Yes	-	15	-	S	-	X
					4	Yes	-	3	-	S	-	X
8A	6X40	0	✳	-	8	Yes	-	3	-	S	-	X
8B	6X40	0	✳	-	8	Yes	-	10	-	S	-	X

✳ 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

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
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. Phase 7 may be lagged.
5. Set all detector units to presence mode.
6. Locate new cabinet foundation so as not to obstruct sight distance of vehicles turning right on red. Relocate existing cabinet and controller onto new foundation.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
8. Field adjust temporary poles as needed.



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	→
▬	Video Detection Area	N/A
▭	Construction Zone	N/A
●●●	Drums	N/A

ASC/3 TIMING CHART

FEATURE	PHASE 1	2	4	5	6	7	8
Min Green *	7	12	7	7	12	7	7
Walk *	-	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-	-
Veh. Extension *	2.0	6.0	2.0	2.0	6.0	2.0	2.0
Max 1 *	15	90	20	15	90	15	20
Yellow	3.0	4.5	3.2	3.0	4.6	3.0	3.1
Red Clear	2.8	1.0	3.0	2.3	1.0	3.1	3.2
Red Revert	-	-	-	-	-	-	-
Actuations B4 Add *	-	-	-	-	-	-	-
Seconds /Actuation *	-	-	-	-	-	-	-
Max Initial *	-	-	-	-	-	-	-
Time Before Reduction *	-	15	-	-	15	-	-
Time To Reduce *	-	30	-	-	30	-	-
Minimum Gap	-	3.0	-	-	3.0	-	-
Locking Detector	-	-	-	-	-	-	-
Recall Position	-	VEH. RECALL	-	-	VEH. RECALL	-	-
Dual Entry	-	-	X	-	-	-	X
Simultaneous Gap	X	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
Temporary Design 1 - TMP Phase II

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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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 27529

SCALE 0 40 1"=40'

US 401 (Raeford Rd.)
at
Chilton Dr / Rayconda Rd

Division 6 Cumberland County Fayetteville

PLAN DATE:	June 2019	REVIEWED BY:	E D Harris
PREPARED BY:	R M Muncey	REVIEWED BY:	B L Watson

REVISIONS	INIT.	DATE

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L WATSON

DocuSigned by: Betsy L. Watson 6/5/2019
SIGNATURE DATE

SIG. INVENTORY NO. 06-0767TI

6/5/2019
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