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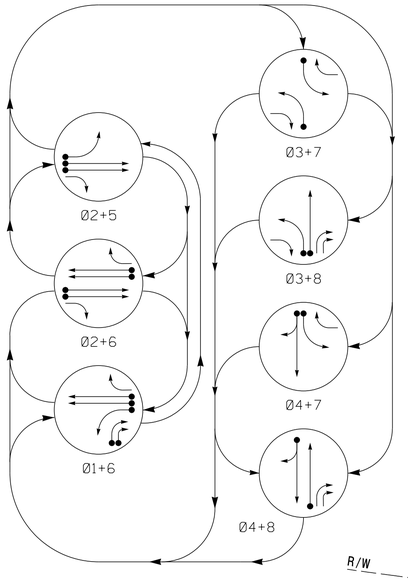
PROJECT REFERENCE NO.	SHEET NO.
U-5798A	Sig. 4.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

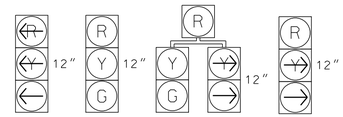
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 01+6	02+6	02+5	03+7	03+8	04+7	04+8	FLASH
11	↚	↚R	↚R	↚R	↚R	↚R	↚R	↚R
21	R	G	G	R	R	R	R	Y
22	R	G	G	R↗	R↗	R	R	Y
31	↚R	↚R	↚R	←	←	↚R	↚R	↚R
41, 42, 43	R	R	R	R	R	G	G	R
51	↚R	↚R	←	↚R	↚R	↚R	↚R	↚R
61	G	G	R	R	R	R	R	Y
62	G	G	R	R↗	R	R↗	R	Y
71	↚R	↚R	↚R	←	↚R	←	↚R	↚R
81, 82, 85	R	R	R	R	G	R	G	R
83, 84	→	R	R	R	→	R	→	R

SIGNAL FACE I.D.

All Heads L.E.D.



11
31
51
71

21
41, 42, 43
61
81, 82, 85

22
62

83, 84

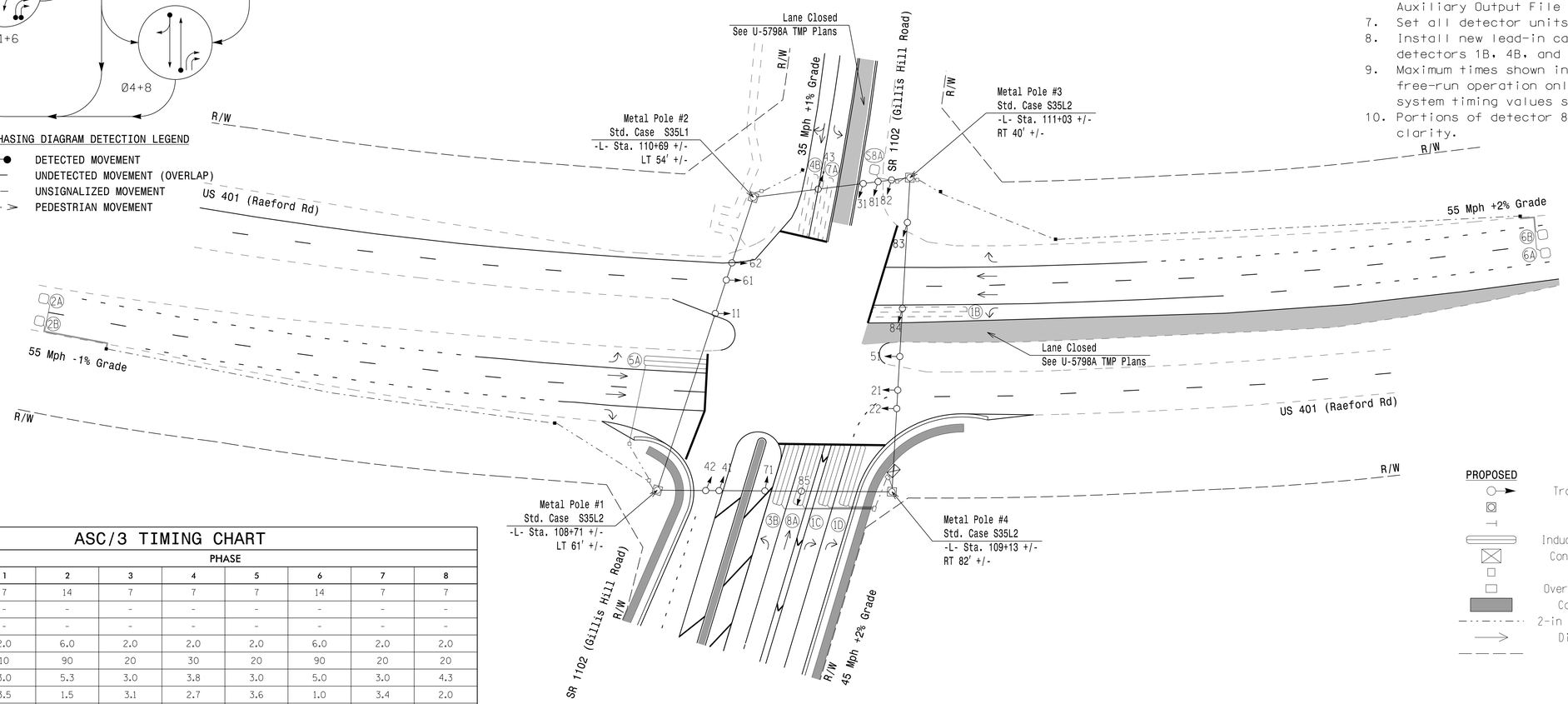
ASC/3 DETECTOR INSTALLATION CHART

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
1B	6X60	0	2-4-2	-	1	YES	-	-	-	N	-	X
1C	6X40	0	2-4-2	X	1	YES	-	15	-	N	-	X
1D	6X40	0	2-4-2	X	1	YES	-	15	-	N	-	X
2A	6X6	420	6	X	2	YES	-	-	X	N	-	X
2B	6X6	420	6	X	2	YES	-	-	X	N	-	X
3B	6X40	0	2-4-2	X	3	YES	-	-	-	N	-	X
4B	6X40	0	2-4-2	-	4	YES	-	10	-	N	-	X
5A	6X40	0	2-4-2	X	5	YES	-	-	-	N	-	X
6A	6X6	420	6	X	6	YES	-	-	X	N	-	X
6B	6X6	420	6	X	6	YES	-	-	X	N	-	X
7A	6X40	0	2-4-2	-	7	YES	-	-	-	N	-	X
8A	6X40	0	2-4-2	X	8	YES	-	-	-	N	-	X
S8A	6X6	+175	4	X	-	NO	-	-	-	N	X	X

7 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 3 and/or phase 7 may be lagged.
4. The order of phase 1 and phase 5 may be reversed, but phase 1 and phase 5 shall not operate concurrently.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. The cabinet should be designed to include an Auxiliary Output File for future use.
7. Set all detector units to presence mode.
8. Install new lead-in cable for existing detectors 1B, 4B, and 7A.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
10. Portions of detector 8A not shown for clarity.



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Strain Pole	
	Sign	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	Oversized Junction Box	
	Construction Zone	
	2-in Underground Conduit	
	Directional Arrow	
	Right of Way	

ASC/3 TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6	7	8
Min Green *	7	14	7	7	7	14	7	7
Walk *	-	-	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-	-	-
Veh. Extension *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max 1 *	10	90	20	30	20	90	20	20
Yellow	3.0	5.3	3.0	3.8	3.0	5.0	3.0	4.3
Red Clear	3.5	1.5	3.1	2.7	3.6	1.0	3.4	2.0
Actuations B4 Add *	-	0	-	-	-	0	-	-
Seconds /Actuation *	-	1.8	-	-	-	1.8	-	-
Max Initial *	-	46	-	-	-	46	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduce *	-	45	-	-	-	45	-	-
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	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.

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Temporary Signal 3 - TCP Phase IV

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:
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Signal Design Section
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RS&H
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RALEIGH, NC 27615
(919) 926-4100

US 401 (S Raeford Road)
at
SR 1102 (Gillis Hill Road)

Division 6 Cumberland County Fayetteville

PLAN DATE: January 2022	REVIEWED BY: S.G. Haynie		
PREPARED BY: S. N. Matthews	REVIEWED BY:		
REVISIONS		INIT.	DATE

SCALE 0 40 1"=40'

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 046989 ENGINEER NICK MATTHEWS

DocuSigned by:
S. Nick Matthews
1/5/2022
SIGNATURE DATE

SIG. INVENTORY NO. 06-0849T3