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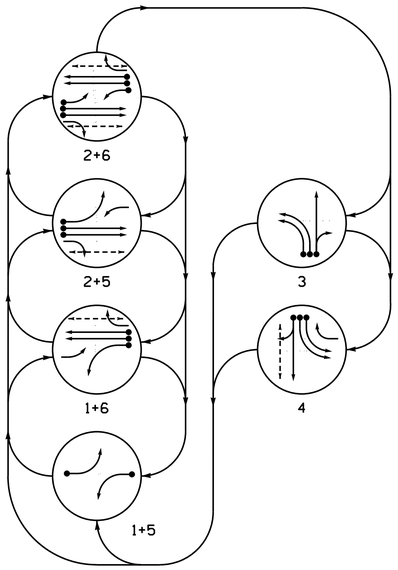
PROJECT REFERENCE NO.	SHEET NO.
U-5798B	Sig. 6.0

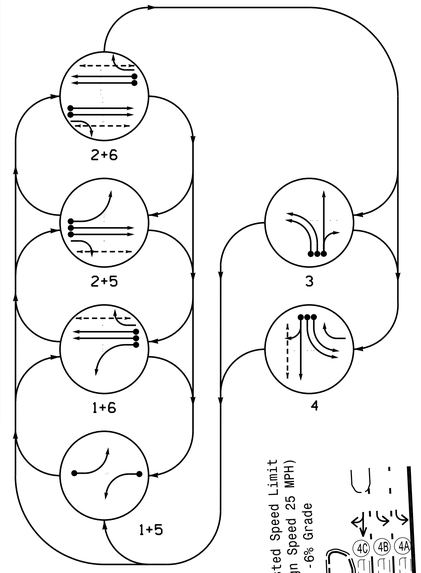
DEFAULT PHASING DIAGRAM



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 1+5	1+6	2+5	2+6	3	4	FLASH
11	—	—	FY	FY	~~R~~	~~R~~	~~R~~
21, 22	R	R	G	G	R	R	R
23	R	R	FY	FY	R	R	R
31, 32	~~R~~	~~R~~	~~R~~	~~R~~	—	~~R~~	~~R~~
33, 34	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	—	FY	—	FY	~~R~~	~~R~~	~~R~~
61, 62	R	G	R	G	R	R	R
63	R	FY	R	FY	R	—	R
P21, P22	DW	DW	W	W	DW	DW	DRK
P41, P42	DW	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DW	DRK

ALTERNATE PHASING DIAGRAM



ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 1+5	1+6	2+5	2+6	3	4	FLASH
11	—	—	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
21, 22	R	R	G	G	R	R	R
23	R	R	FY	FY	R	R	R
31, 32	~~R~~	~~R~~	~~R~~	~~R~~	—	~~R~~	~~R~~
33, 34	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	—	~~R~~	—	~~R~~	~~R~~	~~R~~	~~R~~
61, 62	R	G	R	G	R	R	R
63	R	FY	R	FY	R	—	R
P21, P22	DW	DW	W	W	DW	DW	DRK
P41, P42	DW	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DW	DRK

MAXTIME DETECTOR INSTALLATION CHART

DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL CALL	DELAY DURING GREEN	NEW CARD
1A	6X40	0	2-4-2	X	1	15 +	-	X	-	X	-	-
					6 @	3	-	X	-	X	X	-
2A	6X6	300	6	X	2	-	-	X	X	X	-	-
2B	6X6	300	6	X	2	-	-	X	X	X	-	-
3A	6X40	+5	2-4-2	X	3	3	-	X	-	X	-	-
3B	6X40	+5	2-4-2	X	3	-	-	X	-	X	-	-
3C	6X40	+5	2-4-2	X	3	10	-	X	-	X	-	-
4A	6X40	0	2-4-2	X	4	3	-	X	-	X	-	-
4B	6X40	0	2-4-2	X	4	-	-	X	-	X	-	-
4C	6X40	0	2-4-2	X	4	10	-	X	-	X	-	-
5A	6X40	0	2-4-2	X	5	15 +	-	X	-	X	-	-
					2 @	3	-	X	-	X	X	-
6A	6X6	300	6	X	6	-	-	X	X	X	-	-
6B	6X6	300	6	X	6	-	-	X	X	X	-	-
S2A	6X6	+125	4	X	-	-	-	-	-	-	-	-
S2B	6X6	+125	4	X	-	-	-	-	-	-	-	-

+ Disable delay during Alternate Phasing Operation
@ Disable call during Alternate Phasing Operation

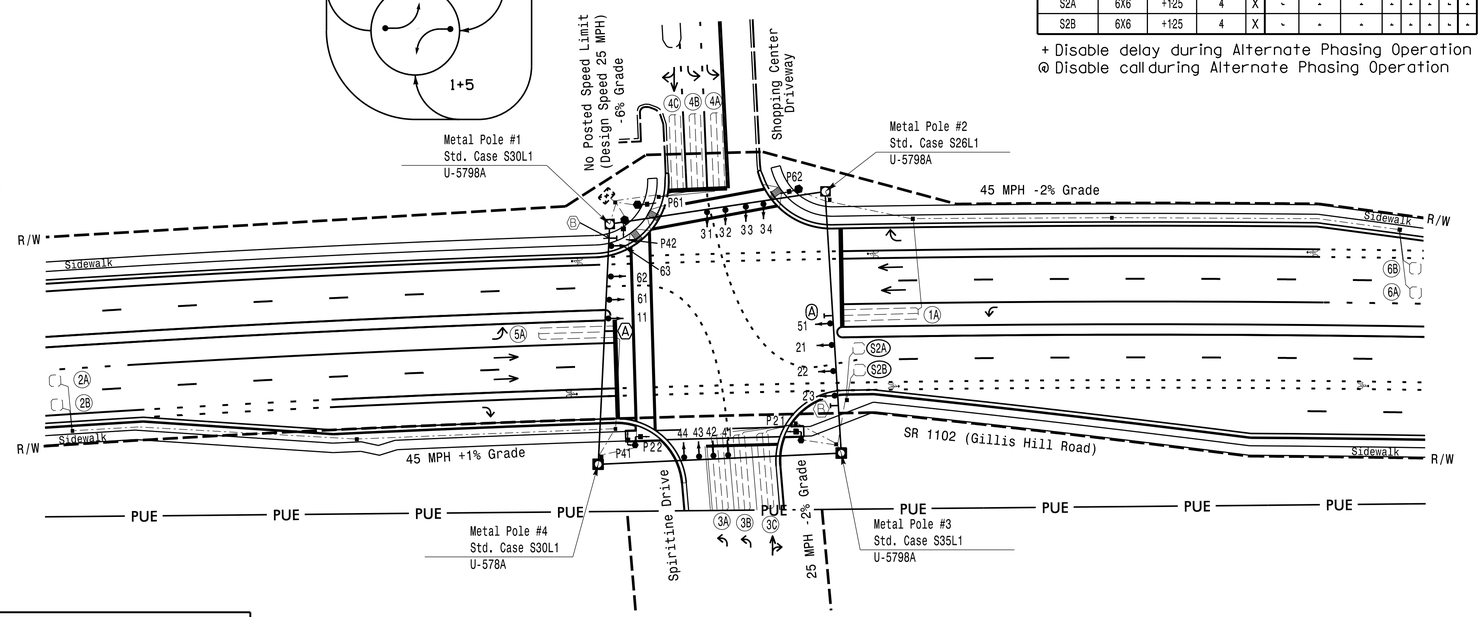
6 Phase
Fully Actuated
Fayetteville Signal System

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024, "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or 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. Install new controller in existing cabinet.
7. Pavement markings are existing.
8. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
9. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
10. To provide a leading pedestrian interval on phase 2, program FYA head 11 and 23 to delay for 7 seconds after the start of the phase 2 walk interval. To provide a leading pedestrian interval on phase 6, program FYA head 51 and 63 to delay for 7 seconds after the start of the phase 6 walk interval. See Electrical Details for programming.
11. The Division (City) Traffic Engineer will determine the hours of use for each phasing plan.
12. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

PHASING DIAGRAM DETECTION LEGEND

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



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Type II Signal Pedestal	
	Metal Strain Pole	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
N/A	Permanent Maintenance Easement	PUE
	Directional Arrow	
N/A	Curb Ramp	
Ⓐ	"TURNING TRAFFIC MUST YIELD TO PEDESTRIANS" Sign (R10-15L)	Ⓐ
Ⓑ	"RIGHT TURN SIGNAL" Sign (R10-10R)	Ⓑ
	Type II Signal Pedestal	

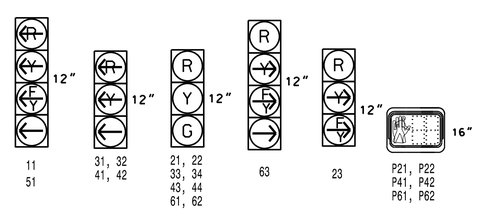
MAXTIME TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6
Walk *	–	14	–	14	–	14
Ped Clear	–	15	–	25	–	14
Min Green *	7	12	7	7	7	12
Passage *	2.0	6.0	2.0	2.0	2.0	6.0
Max 1 *	20	50	30	30	20	50
Yellow Change	3.0	4.7	3.3	3.5	3.0	4.7
Red Clear	3.3	1.8	3.3	3.3	3.2	1.8
Added Initial *	–	1.8	–	–	–	1.8
Maximum Initial *	–	34	–	–	–	34
Time Before Reduction *	–	15	–	–	–	15
Time To Reduce *	–	30	–	–	–	30
Minimum Gap	–	3.0	–	–	–	3.0
Advance Walk	–	–	–	7	–	–
Non Lock Detector	X	–	X	X	X	–
Vehicle Recall	–	MIN RECALL	–	–	–	MIN RECALL
Dual Entry	–	–	–	–	–	–

* These values may be field adjusted. Do not adjust Min Green and Passage 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 FACE I.D.

All Heads L.E.D.



$$$$$$SYSTEMNAME$$$$
$$$$$$SYSTIMESTAMP$$$$
$$$$$$USERNAME$$$$

RS&H
NC FIRM LICENSE No: F-0493
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
(919) 926-4100

Signal Upgrade

Prepared for the Offices of:
Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SCALE 0 40 1"=40'

SR 1102 (Gillis Hill Road)
at
Shopping Center Driveway and
Spiritine Drive

Division 6 Cumberland County Fayetteville

PLAN DATE: June 2025	REVIEWED BY: S. G. Haynie
PREPARED BY: G. M. Moreau	REVIEWED BY:

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 029531 ENGINEER STEVEN G. HAYNIE

DocuSigned by:
Steven G. Haynie 6/12/2025
SIGNATURE DATE

SIG. INVENTORY NO. 06-1243