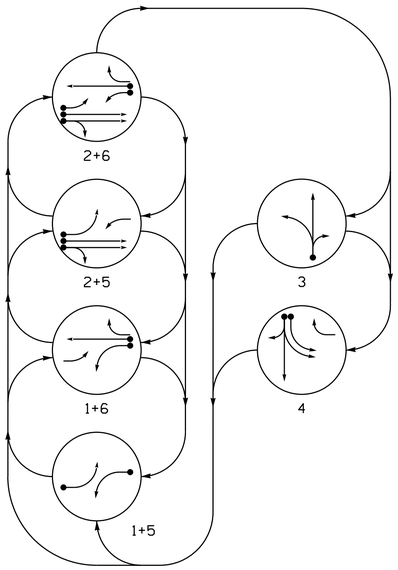
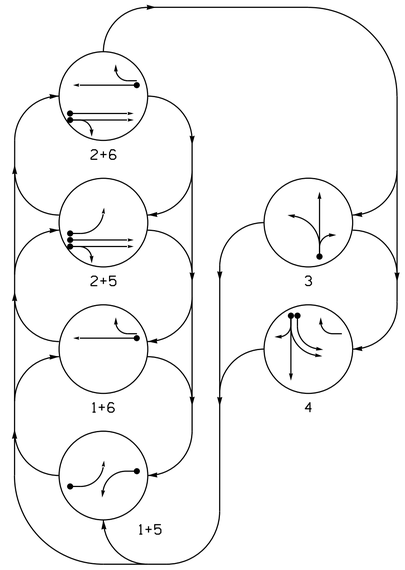
PROJECT REFERENCE NO.	SHEET NO.
HL-0008I	Sig. 4.0

DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 1+5	1+6	2+5	2+6	3	4	FLASH
11	←	←	F Y	F Y	~~R~~	~~R~~	~~R~~
21, 22	R	R	G	G	R	R	R
31	R	R	R	R	R G ←		R
32	R	R	R	R	R	R	R
41	~~R~~	~~R~~	~~R~~	~~R~~	←	~~R~~	~~R~~
42	R	R	R	R	G ←	R	R
43	R	R	R	R	G	R	R
51	←	F Y	←	F Y	~~R~~	~~R~~	~~R~~
61, 62	R	G	R	G	R	R	R
63	R	F Y	R	F Y	R	→	R

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
31	R	R	R	R	R G ←		R
32	R	R	R	R	R	R	R
41	~~R~~	~~R~~	~~R~~	~~R~~	←	~~R~~	~~R~~
42	R	R	R	R	G ←	R	R
43	R	R	R	R	G	R	R
51	←	~~R~~	←	~~R~~	~~R~~	~~R~~	~~R~~
61, 62	R	G	R	G	R	R	R
63	R	→	R	→	R	→	R

MAXTIME DETECTOR INSTALLATION CHART

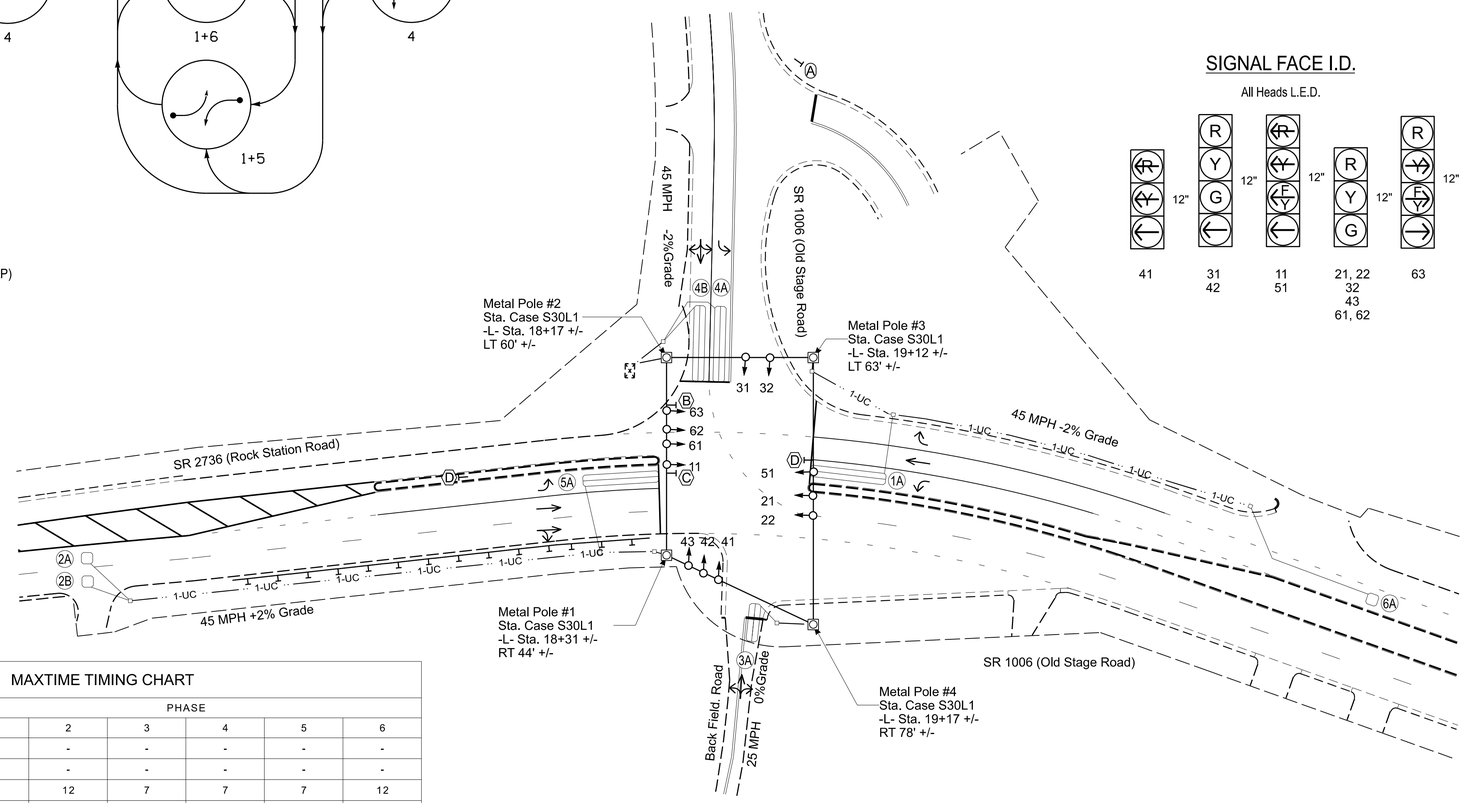
DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOP LINE (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A	6X40	0	2-4-2	X	1	15.0**	-	X	-	X	-	X
					6#	3.0	-	X	-	X	X	X
2A	6X6	300	4	X	2	-	-	X	X	X	-	X
2B	6X6	300	4	X	2	-	-	X	X	X	-	X
3A	6X20	+8	2-4-2	X	3	5.0	-	X	-	X	-	X
4A	6X40	0	2-4-2	X	4	3.0	-	X	-	X	-	X
4B	6X40	0	2-4-2	X	4	5.0	-	X	-	X	-	X
5A	6X40	0	2-4-2	X	5	15.0**	-	X	-	X	-	X
					2#	3.0	-	X	-	X	X	X
6A	6X6	300	5	X	6	-	-	X	X	X	-	X

** Disable Delay During Alternate Phasing Operation.
# Disable Phase Call for Loop during Alternate Phasing Operation.

6 Phase
Fully Actuated
SR 1006 (Old Stage Road) @ 540
Signal System #: D05-17_Fuquay-Varina

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "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 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. Pavement markings are existing unless otherwise shown/noted.
7. The Division Traffic Engineer will determine the hours of use for each phasing plan.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



SIGNAL FACE I.D.

All Heads L.E.D.

LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
X-UC	2-in Underground Conduit	UC
N/A	Right of Way	
	Directional Arrow	
	Metal Strain Pole	
N/A	Guardrail	
A	"STOP" Sign (R1-1)	A
B	Right Arrow "ONLY" Sign (R3-5R)	B
C	Combined U-Turn and Left Arrow Sign (R3-6a)	C
D	No U-Turn Sign (R3-4)	D

MAXTIME TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6
Walk *	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-
Min Green *	7	12	7	7	7	12
Passage *	2.0	6.0	3.0	2.0	2.0	6.0
Max 1 *	20	100	15	30	15	100
Yellow Change	3.0	4.7	3.2	4.7	3.0	4.7
Red Clear	2.8	1.3	3.3	1.7	1.8	1.3
Red Revert	2.0	5.0	2.0	2.0	2.0	2.0
Added Initial *	-	1.5	-	-	-	1.5
Maximum Initial *	-	34	-	-	-	34
Time Before Reduction *	-	15	-	-	-	15
Time To Reduce *	-	30	-	-	-	30
Minimum Gap	-	3.0	-	-	-	3.0
Advance Walk	-	-	-	-	-	-
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 Upgrade - Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N. Greenfield Pkwy, Garner, NC 27529

SR 1006 (Old Stage Road)
at
SR 2736 (Rock Service Station Road)
and Back Field Road

Division 5 | Wake County | Fuquay-Varina

PLAN DATE: May 2025 | REVIEWED BY:
PREPARED BY: I.O. Umozurike | REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 026486 ENGINEER ROBERT J. ZIEMBA
DocuSigned by: 189B4B6627A4494
07/15/2025
DATE
SIG. INVENTORY NO. 05-1663

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