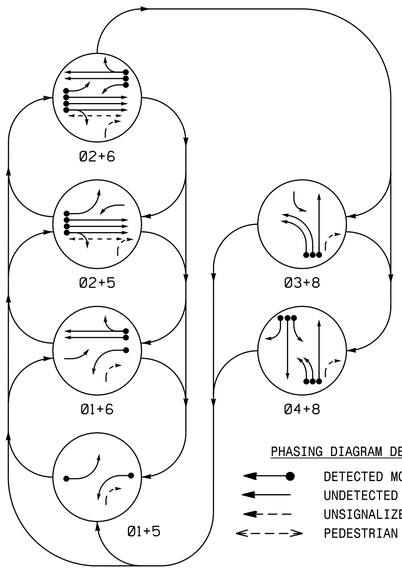
PROJECT REFERENCE NO.	SHEET NO.
U-5826	Sig 8.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

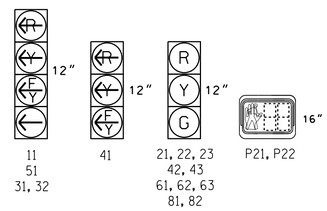
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03+8	04+8	FLASH
11	←-	←-	F Y	F Y	R	R	Y
21, 22, 23	R	R	G	G	R	R	Y
31, 32	R	R	R	R	←-	F Y	R
41	R	R	R	R	F Y	F Y	R
42, 43	R	R	R	R	R	G	R
51	←-	F Y	←-	F Y	R	R	Y
61, 62, 63	R	G	R	G	R	R	Y
81, 82	R	R	R	R	G	G	R
P21, P22	DW	DW	W	W	DW	DW	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



SE-PAC 2070 LOOP & DETECTOR UNIT INSTALLATION CHART

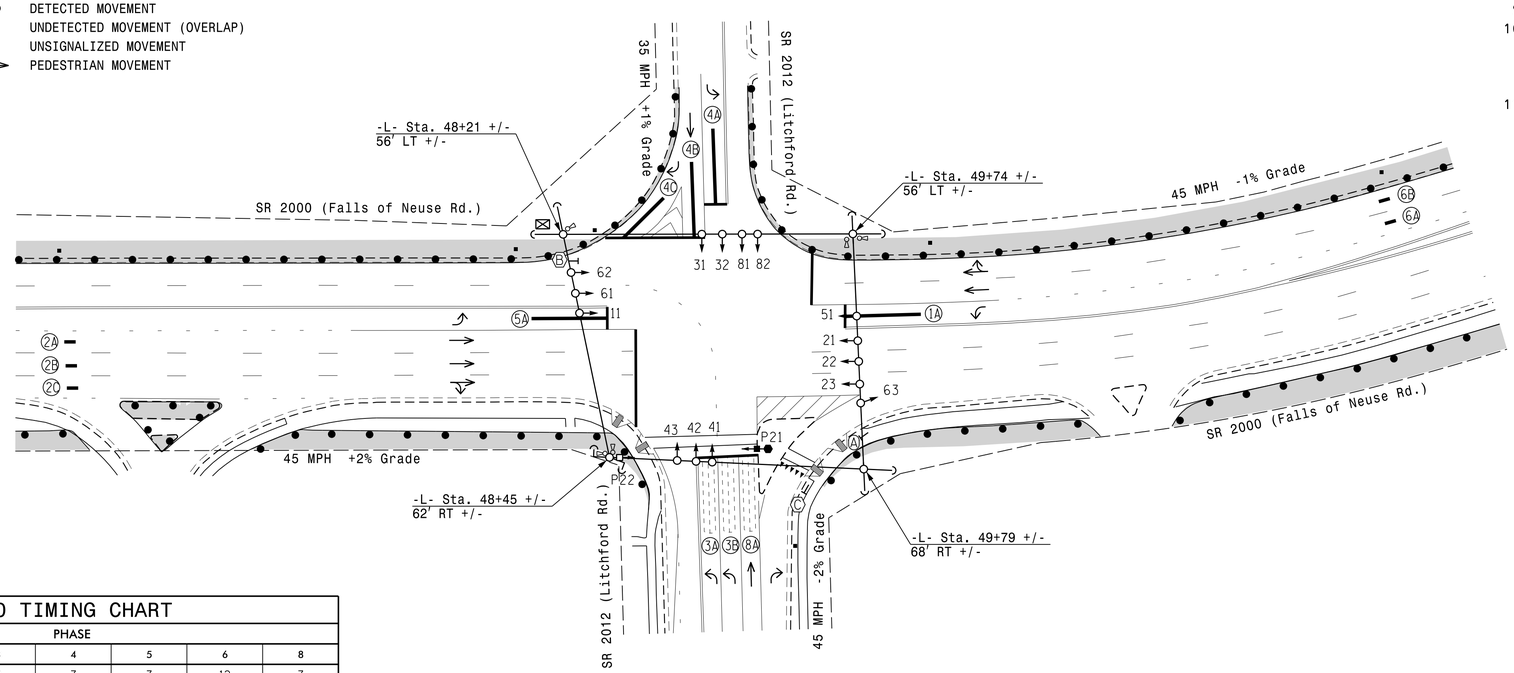
INDUCTIVE LOOPS						DETECTOR PROGRAMMING															
							TIMING		OPERATION MODE										STATUS	
LOOP / ZONE NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW	EXISTING	ASSIGNED PHASE	DELAY	EXTEND (STRETCH)	0 VEHICLE	1 PEDESTRIAN	2 I CALL	3 STOP A	4 STOP B	5 PROTPERM PROTPERM	6 PROTPERM THROUGH	7 AND	SWITCH	SYSTEM LOOPS	NEW	EXISTING
1A*	6X40	*	0	X	-	1	15 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
						6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
2A*	6X6	*	300	X	-	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
2B*	6X6	*	300	X	-	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
2C*	6X6	*	300	X	-	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
3A	6X40	2-4-2	0	-	X	3	15 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-
						8	3 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-
3B	6X40	2-4-2	0	-	X	3	15 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-
						8	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-
4A*	6X40	*	0	X	-	4	3 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
4B*	6X40	*	0	X	-	4	10 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
4C*	6X30	*	0	X	-	4	15 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
5A*	6X40	*	0	X	-	5	15 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
						2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
6A*	6X6	*	300	X	-	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
6B*	6X6	*	300	X	-	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
8A	6X40	2-4-2	0	-	X	8	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-

* Video detection zone.

6 Phase
Fully Actuated
(Raleigh 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 3 may be lagged.
5. Set all detector units to presence mode.
6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
7. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
8. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
9. Pavement markings are existing.
10. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
11. This intersection features a video detection system. Shown locations of detectors are conceptual only. Refer to the manufacturer's guidelines for optimal detector placement.



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	
N/A	Curb Ramp	
	Type II Signal Pedestal	
	Construction Zone Drums	
	Construction Zone	
	Out of Pavement Detector	
	Video Detection Area	
Ⓐ	"YIELD" Sign (R1-2)	Ⓐ
Ⓑ	"Do Not Block Intersection" (R10-7)	Ⓑ
Ⓒ	Pedestrian Crossing Sign (W11-2) w/ Diagonal Arrow (W16-7p)	Ⓒ

SE-PAC 2070 TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6	8
Min Green *	7	12	7	7	7	12	7
Passage Gap *	2.0	6.0	2.0	2.0	2.0	6.0	2.0
Maximum Green *	15	90	40	20	20	90	30
Yellow Change	3.0	4.6	3.0	4.7	3.0	4.6	4.7
Red Clear	3.3	1.7	3.5	2.1	2.6	1.7	2.1
Walk *	-	4	-	-	-	-	-
Pedestrian Clear	-	13	-	-	-	-	-
Added Initial *	-	1.0	-	-	-	1.5	-
Maximum Initial *	-	34	-	-	-	34	-
Time Before Reduction *	-	15	-	-	-	15	-
Time To Reduce *	-	30	-	-	-	30	-
Minimum Gap	-	3.0	-	-	-	3.0	-
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL	-
Vehicle Call Memory	NON-LOCK	LOCK	NON-LOCK	NON-LOCK	NON-LOCK	LOCK	NON-LOCK
Dual Entry	-	-	-	ON	-	-	ON
Simultaneous Gap	ON	ON	ON	ON	ON	ON	ON

* 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 I)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared In 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

SR 2000 (Falls of Neuse Rd.)
at
SR 2012 (Litchford Rd.)

Division 5 Wake County Raleigh

PLAN DATE: July 2019 REVIEWED BY:
PREPARED BY: J.A. Lohr REVIEWED BY:

REVISIONS	INIT.	DATE

SCALE 0 40 1"=40'

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 026486 ENGINEER ROBERT J. ZIEMBA

DocuSigned by: Robert J. Ziemba
1B9B4F6D27A4494...
8/29/2019
DATE

SIG. INVENTORY NO. 05-1156T1

05-OCT-2021 13:03
wmcnair SRootUtilProjStore@UtilProj@Division05@U5826@Traffic@Signals@Design@Signals@05-1156@05115611_sig_dsn_20190829.dgn
Z1emba