PROJECT REFERENCE NO.	SHEET NO.
W-5706Q	Sig. 7

DEFAULT PHASING DIAGRAM

ALTERNATE PHASING DIAGRAM

DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	PHASE 01+6	PHASE 02+5	PHASE 02+6	PHASE 04+8	FLASH
11	←	←	~~F~~	~~F~~	~~R~~	~~Y~~
21, 22, 23	R	R	G	G	R	Y
41	R	R	R	R	G	R
42	R	R	R	R	G	R
51	←	~~F~~	←	~~F~~	~~R~~	~~Y~~
61, 62, 63	R	G	R	G	R	Y
81, 82	R	R	R	R	G	R
P21, P22	DW	DW	W	W	DW	DRK
P41, P42	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DRK
P81, P82	DW	DW	DW	DW	W	DRK

W - Walk
DW - Don't Walk
DRK - Dark

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	PHASE 01+6	PHASE 02+5	PHASE 02+6	PHASE 04+8	FLASH
11	←	←	~~R~~	~~R~~	~~R~~	~~Y~~
21, 22, 23	R	R	G	G	R	Y
41	R	R	R	R	G	R
42	R	R	R	R	G	R
51	←	~~R~~	←	~~R~~	~~R~~	~~Y~~
61, 62, 63	R	G	R	G	R	Y
81, 82	R	R	R	R	G	R
P21, P22	DW	DW	W	W	DW	DRK
P41, P42	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DRK
P81, P82	DW	DW	DW	DW	W	DRK

5 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. Set all detector units to presence mode.
5. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
6. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
7. Pavement markings are existing unless otherwise shown.
8. The Division (City) Traffic Engineer will determine the hours of use for each phasing plan.
9. 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

SIGNAL FACE I.D.

All Heads L.E.D.

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	
	Metal Strain Pole	
N/A	Fence	
N/A	Curb Ramp	
	Type II Signal Pedestal	
	"U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	

SE-PAC 2070 TIMING CHART

FEATURE	PHASE 1	PHASE 2	PHASE 4	PHASE 5	PHASE 6	PHASE 8
Min Green *	7	14	7	7	14	7
Passage Gap *	2.0	6.0	2.0	2.0	6.0	2.0
Maximum Green *	15	90	30	15	90	30
Yellow Change	3.0	5.2	3.8	0.0	5.2	3.8
Red Clear	3.1	1.5	2.5	0.0	1.5	2.5
Walk *	-	7	4	-	7	4
Pedestrian Clear	-	9	25	-	10	24
Added Initial *	-	1.0	-	-	1.0	-
Maximum Initial *	-	40	-	-	40	-
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	LOCK	NON-LOCK
Dual Entry	-	-	ON	-	-	ON
Simultaneous Gap	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.

SE-PAC 2070 LOOP & DETECTOR UNIT INSTALLATION CHART

INDUCTIVE LOOPS						DETECTOR PROGRAMMING																	
							TIMING		OPERATION MODE											STATUS	
LOOP NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW	EXISTING	ASSIGNED PHASE	DELAY	EXTEND (STRETCH)	0 VEHICLE	1 PEDESTRIAN	2 E CALL	3 STOP A	4 STOP B	5 PROTECTED LEFT	6 PROTECTED PERMISSIVE	7 AND	SWITCH	LOCK TRAFFIC	LOCK CALLS	NEW	EXISTING
1A	6X40	2-4-2	0	-	X	1	5 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	X
2A	6X6	5	355	-	X	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	X
2B	6X6	5	355	-	X	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	X
2C	6X6	5	355	-	X	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	X
4A	6X40	2-4-2	0	-	X	4	3 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	X
5A	6X40	2-4-2	0	-	X	5	5 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	X
5B	6X40	2-4-2	0	-	X	5	15 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	X
6A	6X6	5	355	-	X	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	X
6B	6X6	5	355	-	X	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	X
6C	6X6	5	355	-	X	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	X
8A	6X40	2-4-2	0	-	X	8	10 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	-	X

Signal Upgrade - Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

US 401 (Louisburg Road) at Fox Road [South Intersection]

Division 5 Wake County Raleigh

PLAN DATE: March 2019
PREPARED BY: C.E. Carter
REVIEWED BY:
REVIEWED BY:

SCALE 0 50 1"=50'

REVISIONS | INIT. | DATE

SEAL
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

SIGNATURE DATE

STA. INVENTORY NO. 05-0791

19-MAR-2019 10:57
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