5 Phase Fully Actuated w/ EV Preemption (Cary 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. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on
- 6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- 7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- 8. Pavement markings are existing unless otherwise shown.
- 9. The Division (Town) Traffic Engineer will determine the hours of use for each phasing
- 10. This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
- 11. Optical detector 10 calls PRE 3; Optical detector 20 calls PRE 4.
- 12. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- 13. Cary signal system data: Fiber Chanel #: 1.

<u>PROPOSED</u>		EXISTING
$\bigcirc$	Traffic Signal Head	<b></b>
<b>O</b>	Modified Signal Head	N/A
$\dashv$	Sign	$\dashv$
$\downarrow$	Pedestrian Signal Head With Push Button & Sign	•
$\bigcirc$	Signal Pole with Guy	•
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
$\boxtimes$	Controller & Cabinet	~
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
$\longrightarrow$	Directional Arrow	$\longrightarrow$
₩	Type I Pushbutton Post	€
$\bigcirc$	Type II Signal Pedestal	
$\bigcirc$	Optical Detector	•
N/A	Curb Ramp	

**LEGEND** 

New	Installati
Transpo	repared in the Offices of:  Nobility and  No

750 N.Greenfield Pkwy.Garner.NC

ion - Sheet 1 of 2

SR 1300 (Kildaire Farm Road) Wake Tech Cary Campus Gentle Care Animal Hospital

	Gen	LTG O	alt	М	птшат	П	J 2
	Division	5	Wake	Cou	ınty		
	PLAN DATE:	April	L 2020		REVIEWED BY:		
27529	PREPARED BY:	J.A.	Lohr		REVIEWED BY:		
		REVISIONS					IN

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SIGNAL FACE I.D.

All Heads L.E.D.

21, 22

42, 43 61, 62

82, 83

P21, P22 P41, P42 P61, P62

P81, P82

\* Reduce Delay to 3 seconds during alternate phasing operation. # Disable phase call during alternate phasing operaion.

INDUCTIVE LOOPS

SIZE DIST. FROM

6X40

6X6

6X6

6X40

6X40

6X40

6X6

6X6

6X40

6X40

STOPBAR

300

300

300

5

0 2-4-2

0 2-4-2

0 2-4-2

0 | 2-4-2 | X | -

LOOP NO.

2A

2B

4Α

6B

LOOP & DETECTOR INSTALLATION CHART ASC/3-2070LXN2 CONTROLLER W/ TS-2 CABINET

NEMA | ≥

DETECTOR UNITS

10

TIMING

PHASE | Z | S | FEATURE | TIME

1 X - DELAY

6<sup>#</sup> X - DELAY

4 X - DELAY

5 X - DELAY

2# X - DELAY

8 X - DELAY

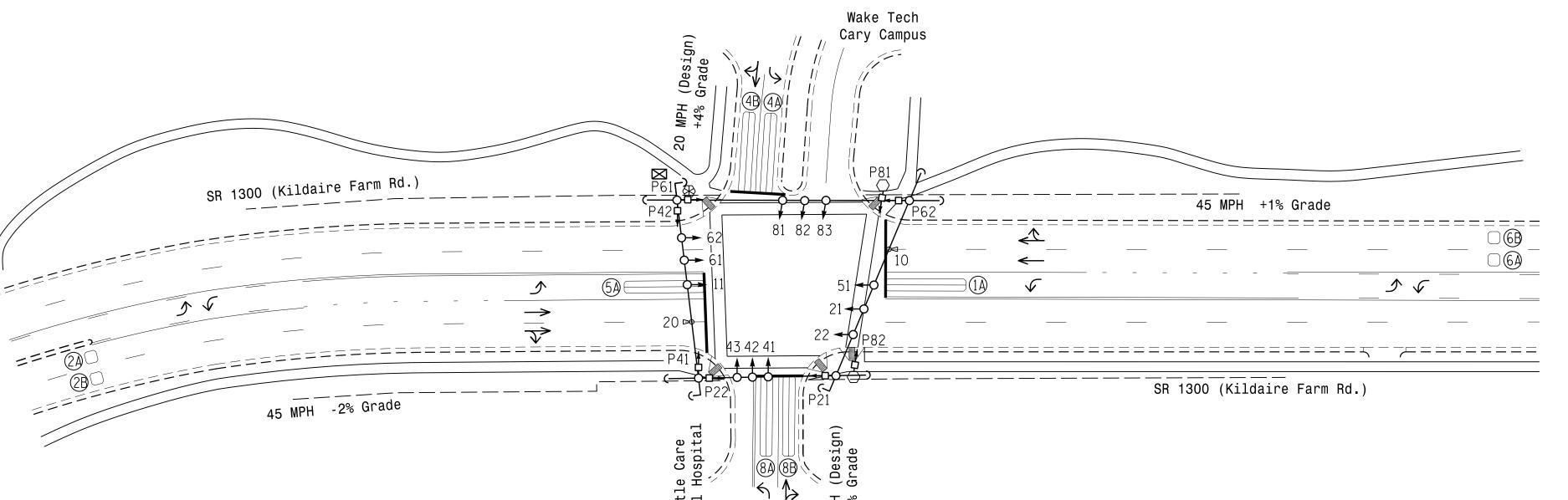
8 X - DELAY

USE ADDED INITIAL

DET. Type

Ν

Ν



TIMING CHART ASC/3-2070LXN2 CONTROLLER												
PHASE	01		02	2	04		<b>Ø</b> 5		Ø6		Ø8	
MINIMUM GREEN *	7	SEC.	12	SEC.	7	SEC.	7	SEC.	12	SEC.	7	SEC.
VEHICLE EXT. *	2.0	SEC.	6.0	SEC.	2.0	SEC.	2.0	SEC.	6.0	SEC.	2.0	SEC.
YELLOW CHANGE INT.	3.0	SEC.	4.7	SEC.	3.0	SEC.	3.0	SEC.	4.7	SEC.	3.0	SEC.
RED CLEARANCE	2.8	SEC.	1.4	SEC.	2.9	SEC.	2.3	SEC.	1.4	SEC.	2.9	SEC.
MAX. 1 *	15	SEC.	90	SEC.	30	SEC.	25	SEC.	90	SEC.	30	SEC.
RECALL POSITION	NOI	٧E	MIN. RE	CALL	ИОИ	٧E	ИОИ	1E	MIN. RE	CALL	NON	√E
LOCK DET.	OF	F	10	1	OF	F	OF	F	01	7	OF	F
DELAYED GREEN *	_	SEC.	5	SEC.	5	SEC.	_	SEC.	5	SEC.	5	SEC.
WALK *	_	SEC.	7	SEC.	7	SEC.	_	SEC.	7	SEC.	7	SEC.
PED. CLEAR	_	SEC.	9	SEC.	20	SEC.	_	SEC.	18	SEC.	17	SEC.
VOLUME DENSITY	OF	F	10	1	OFI	=	OFF	:	10	1	OF	F
ACTUATION B4 ADD *	_	VEH.	_	VEH.	_	VEH.	_	VEH.	_	VEH.	_	VEH.
SEC. PER ACTUATION *	_	SEC.	1.5	SEC.	-	SEC.	_	SEC.	1.5	SEC.	_	SEC.
MAX. INITIAL *	_	SEC.	34	SEC.	_	SEC.	_	SEC.	34	SEC.	_	SEC.
TIME B4 REDUCTION *	_	SEC.	15	SEC.	_	SEC.	_	SEC.	15	SEC.	_	SEC.
TIME TO REDUCE *	_	SEC.	45	SEC.	_	SEC.	_	SEC.	45	SEC.	_	SEC.
MINIMUM GAP	_	SEC.	3.0	SEC.	_	SEC.	_	SEC.	3.0	SEC.	_	SEC.
DUAL ENTRY	OF	F	OF	F	ON	<u> </u>	OFF	•	OF	F	10	1
SIMULTANEOUS GAP	01	1	10	1	ON		ON		40	1	10	1

* 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 c	all other phases should not be	lower than 4 seconds.	

EMERGENCY VEHICLE PREEMPTION					
FUNCTION	PRE 3	PRE 4			
DELAY BEFORE PREEMPT	0	0			
PMT OVERRIDE	OFF	OFF			
PED CLEAR THROUGH YELLOW	Y	Y			
TERMINATE PHASES	N	N			
ENTRANCE WALK	1	1			
ENTRANCE PED CLEAR	10	10			
ENTRANCE MIN GREEN	1	1			
ENTRANCE YELLOW CLEAR	25.5*	25.5*			
ENTRANCE RED CLEAR	25.5*	25 <b>.</b> 5*			
MIN DWELL GREEN	7	7			
MAX CALL TIME	120	120			
EXIT PHASE(S)	2+6	2+6			
EXIT YELLOW CLEAR	25.5*	25.5*			
EXIT RED CLEAR	25.5*	25.5*			

\* Time defaults to time used for phase during normal operation.

