PROJECT REFERENCE NO. SIG. 11 U-5828

3 Phase Fully Actuated (Cary Signal System)

January 2012, "Standard Specifications for Roads and Structures" dated January 2012, and all applicable sections of the latest version of the generic Project Special Provisions. The PSP can be accessed

https://connect.ncdot.gov/resources/safety/Pages/ITS-Design-Resources.aspx 2. Do not program signal for late night flashing

operation unless otherwise directed by the Engineer. 3. Phase 1 may be lagged.

4. Reposition all existing signal heads. 5. Set all detector units to presence mode.

6. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.

Fiber channel #: 17

NOTES 1. Refer to "Roadway Standard Drawings NCDOT" dated at the following website:

7. Cary signal system data:

LEGEND **PROPOSED EXISTING** Traffic Signal Head Modified Signal Head N/A **O**-> Sign Pedestrian Signal Head With Push Button & Sign Metal Strain Pole Inductive Loop Detector Controller & Cabinet Junction Box 2-in Underground Conduit -----Right of Way with Marker Directional Arrow "YIELD" Sign (R1-2) "U-TURN YIELD TO RIGHT TURN" Sign (R10-16) No U-Turn Sign (R3-4) Street Sign (D3–1)

Construction Zone Drums

Construction Zone

SIGNAL UPGRADE - TEMPORARY DESIGN 3



SR 1002 (Aviation Parkway) at SR 3084 (Evans Road)

Division 5 Wake County Morrisville PLAN DATE: APRIL 2016 REVIEWED BY: SL PHILLIPS 750 N.Greenfield Pkwy, Garner, NC 27529 PREPARED BY: SP PENNINGTON REVIEWED BY: REVISIONS INIT. DATE

9/22/2016 SIG. INVENTORY NO. 05-1533T3

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

032607

PHASE All Heads L.E.D. INDUCTIVE LOOPS DETECTOR UNITS SIGNAL DIST. FROM TIMING NEMA | ≥ LOOP NO. STOPBAR TURNS PHASE | Z | FEATURE | TIME (sec) | FACE 6X40 2-4-2 1A 11 Ø2+6 1 X - DELAY 21, 22 6X40 2-4-2 1B 10 6X6 61, 62 6X6 300 2A 6X6 300 6A 21, 22 6X40 2-4-2 61, 62 PHASING DIAGRAM DETECTION LEGEND DETECTED MOVEMENT METAL POLE #2 METAL POLE #1 UNDETECTED MOVEMENT (OVERLAP) NCDOT STD: S35L1 NCDOT STD: S30L1 UNSIGNALIZED MOVEMENT ← − → PEDESTRIAN MOVEMENT 45 MPH -2% Grade SR 1002 (Aviation Parkway) -----_________ SR 1002 (Aviation Parkway) +2% Grade 45 MPH - METAL POLE #3 METAL POLE #4 NCDOT STD: S30L1 _ ভ ≥ NCDOT STD: S35L1

SIGNAL FACE I.D.

TABLE OF OPERATION

TIMING CHART ASC/3-2070LN2 CONTROLLER								
PHASE	Ø1		Ø2		Ø6		Ø8	
MINIMUM GREEN *	7	SEC.	12	SEC.	12	SEC.	7	SEC.
VEHICLE EXT. *	2.0	SEC.	6.0	SEC.	6.0	SEC.	2.0	SEC.
YELLOW CHANGE INT.	3.0	SEC.	4.7	SEC.	4.7	SEC.	3.0	SEC.
RED CLEARANCE	3.4	SEC.	2.1	SEC.	2.1	SEC.	3.7	SEC.
MAX. 1 *	25	SEC.	90	SEC.	90	SEC.	30	SEC.
RECALL POSITION	NONE		MIN. RECALL		MIN. RECALL		NONE	
LOCK DET.	OFF		ON		ON		OFF	
WALK *		SEC.		SEC.	ı	SEC.	l	SEC.
PED. CLEAR		SEC.		SEC.	1	SEC.	l	SEC.
VOLUME DENSITY	OFF		OFF		OFF		OFF	
ACTUATION B4 ADD *	_	VEH.	0	VEH.	0	VEH.	_	VEH.
SEC. PER ACTUATION *	_	SEC.	2.5	SEC.	2.5	SEC.	_	SEC.
MAX. INITIAL *	_	SEC.	34	SEC.	34	SEC.	_	SEC.
TIME B4 REDUCTION *	_	SEC.	15	SEC.	15	SEC.	_	SEC.
TIME TO REDUCE *	_	SEC.	45	SEC.	45	SEC.	_	SEC.
MINIMUM GAP	_	SEC.	3.0	SEC.	3.0	SEC.	_	SEC.
DUAL ENTRY	OFF		OFF		OFF		OFF	
SIMULTANEOUS GAP	ON		ON		ON		ON	

PHASING DIAGRAM

* 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

STOPLINE LOCATION DIAGRAM | 130+00 STA: 129+90 -L--OFF: 79' LT. STA: 130+11 -L- — OFF: 81' LT. STA: 130+36 -L-OFF: 79' RT. - STA: 130+82 -L-OFF: 56′ LT. STA: 130+47 -L- ---STA: 130+81 -L-OFF: 78' RT. OFF: 20' LT.

NC Dept of Transportation Division of Highways Final Drawing Date: 10/10/2016

Docusigned by: ITS & Signals Unit

> PLANS PREPARED IN THE OFFICE OF: Kimley»Horn

(919) 677-2000

LOOP & DETECTOR INSTALLATION CHART ASC/3-2070LN2 CONTROLLER W/ TS-2 CABINET

NC License #F-0102 421 Fayetteville Street, Suite 600 Raleigh, NC 27601

1"=40'