

3 Phase Fully Actuated Asheville Signal System

NOTES

- 1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- 2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- 3. Phase 1 may be lagged.
- 4. Reposition existing signal heads numbered 22, 23 and 62.
- 5. Set all detector units to presence mode.
- 6. In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
- 7. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- 8. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- 9. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- 10. Pavement markings are existing.
- 11. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

LEGEND

DISTANCE PHASE STRETCH DELAY TIME TIME FROM LOOP TURNS STOPBAR 6x60 6×15 2Α 6×6 4Α 6×40 4 | Y | Y | +5 6×40 +5 300 6×6 6×30 +5 | 2-4-2 8 | Y | Y | 8B 6×30 +5 2-4-2 8 | Y | Y | * Microwave Detection Zone

DETECTOR PROGRAMMING

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

INDUCTIVE LOOPS

MetalPole # 1

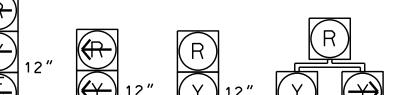
Case # S30L1

MetalPole # 2

Case # S30L1

45 MPH +1% Grade

US 74A / NC 81 (Swannanoa River Road)



SIGNAL FACE I.D.

All Heads L.E.D.

G 21 22, 23 42

MetalPole # 4

Case # S30L1

|MetalPole # 3 Case # S30L1

P21, P22 P41, P42 P61, P62

61, 62 81, 82 P81, P82

PHASING DIAGRAM DETECTION LEGEND DETECTED MOVEMENT UNDETECTED MOVEMENT (OVERLAP) UNSIGNALIZED MOVEMENT ← − − > PEDESTRIAN MOVEMENT

PHASING DIAGRAM

02+6

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Install new base-mounted

cabinet on existing foundation.

US 74A / NC 81 (Swannanoa River Road)

TABLE OF OPERATION

SIGNAL

FACE

22, 23

42

61,62

81, 82

P21, P22

P41, P42

P61, P62

P81, P82

04+8

PHASE

DW W DW DR

1 DW DW W DRK

w | w | Dw | DR

DW DW W DRK

35 MPH +1% Grade (Design Speed 45 MPH)

OASIS 2070 TIMING CHART					
	PHASE				
FEATURE	1	2	4	6	8
Min Green 1 *	7	12	7	12	7
Extension 1 *	2.0	6.0	3.0	6.0	3.0
Max Green 1 *	15	90	25	90	25
Yellow Clearance	3.0	4.4	4.2	4.4	4.2
Red Clearance	2.8	1.6	2.2	1.6	2.2
Red Revert	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	7	7	7	7
Don't Walk 1	-	25	17	20	18
Seconds Per Actuation *	-	2.5	-	2.5	-
Max Variable 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	-	YELLOW	-	YELLOW	-
Dual Entry	-	-	ON	-	ON
		1		1	

ON

ON

 \bigcirc 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 K×3 Controller & Cabinet Junction Box 2-in Underground Conduit _----N/A Right of Way Directional Arrow Metal Strain Pole Microwave Detection Zone Out of Pavement Detector Curb Ramp

Signal Upgrade

1"=30'

US 74A / NC 81 (Swannanoa River Road) Bleachery Boulevard

ivision 13 Buncombe County PLAN DATE: July 2016 REVIEWED BY: T.J. Williams 750 N.Greenfield Pkwy.Garner.NC 27529 PREPARED BY: R.N. Zinser REVIEWED BY: REVISIONS INIT. DATE

043914 SIG. INVENTORY NO.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL

SIGNATURES COMPLETED

SEAL

* 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.