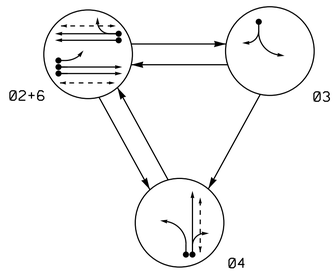
PROJECT REFERENCE NO.	SHEET NO.
U-4715 B	Sig. 101.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

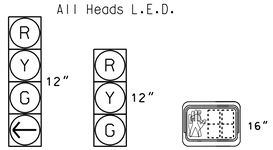
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø2+6	Ø3	Ø4	FLASH
21,22	G	R	R	Y
31	R	G	R	R
32	R	G	R	R
41	R	R	G	R
42	R	R	G	R
61,62	G	R	R	Y
P21,P22	W	DW	DW	DRK
P41,P42	DW	DW	W	DRK
P61,P62	W	DW	DW	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



31
41

21,22
32
42
61,62

P21,P22
P41,P42
P61,P62

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

INDUCTIVE LOOPS					DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
2A	6X6	70	4	-	2	Y	Y	-	-	-	-	Y
2B	6X6	70	4	-	2	Y	Y	-	-	-	-	Y
2C	6X60	0	2-4-2	-	2	Y	Y	-	-	-	-	Y
3A	6X60	0	2-4-2	-	3	Y	Y	-	-	10	-	Y
4A	6X60	0	2-4-2	-	4	Y	Y	-	-	-	-	Y
4B	6X60	0	2-4-2	-	4	Y	Y	-	-	10	-	Y
6A	6X6	70	4	-	6	Y	Y	-	-	-	-	Y
6B	6X6	70	4	-	6	Y	Y	-	-	-	-	Y
S1	6X6	+130	4	-	-	-	-	-	-	-	Y	Y
S2	6X6	+130	4	-	-	-	-	-	-	-	Y	Y

OASIS 2070 TIMING CHART

FEATURE	PHASE 2	3	4	6
Min Green 1 *	10	7	7	10
Extension 1 *	3.0	1.0	5.0	3.0
Max Green 1 *	45	15	25	45
Yellow Clearance	4.6	3.8	4.4	4.6
Red Clearance	2.0	1.7	1.7	2.0
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	7	-	7	7
Don't Walk 1	5	-	15	7
Seconds Per Actuation *	-	-	-	-
Max Variable Initial*	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduction *	-	-	-	-
Minimum Gap	-	-	-	-
Recall Mode	MIN RECALL	-	-	MIN RECALL
Vehicle Call Memory	YELLOW	-	-	YELLOW
Dual Entry	-	-	-	-
Simultaneous Gap	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.

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. Set all detector units to presence mode.
4. 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.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. The cabinet should be designed to include an Auxiliary Output file for future use.
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.

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 with Marker	
	Directional Arrow	
	Pavement Marking Arrow	
	Type II Signal Pedestal	
N/A	Curb Ramp	
A	No Left Turn Sign (R3-2L)	A
B	No Right Turn Sign (R3-2R)	B

Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

US 25 (Merrimon Avenue)
at
I-240 Off-Ramp/Marcellus Street

Division 13 Buncombe County Asheville

PLAN DATE: June 2016 REVIEWED BY: T.J. Williams
PREPARED BY: R.N. Zinser REVIEWED BY:

SCALE 0 20 1"=20'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 043914 ENGINEER RICHARD N. ZINSER
DocuSigned by: Richard N. Zinser F138807347224BF 8/10/2016
DATE
SIG. INVENTORY NO. 13-0449

10-AUG-2016 11:14
S:#TISGUI#ITS Signal#Signal Design Section#Eastern Region#Div-13#U-4715B (Asheville Signal System)#Signal Designs#13-0449#130449_sig_dsn_2016rmxd.dgn
rnzinser