

3 Phase Fully Actuated Asheville Signal System

PHASING DIAGRAM

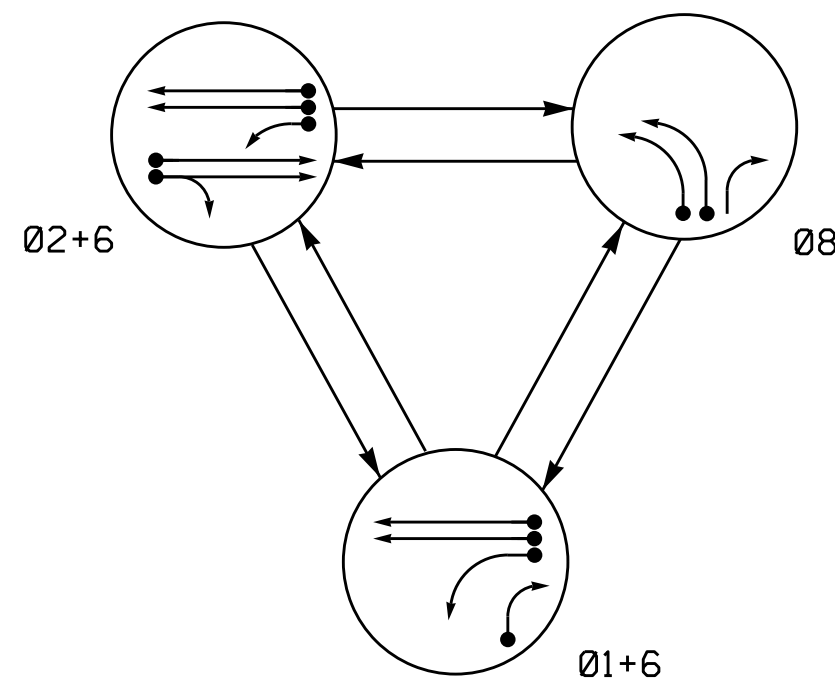
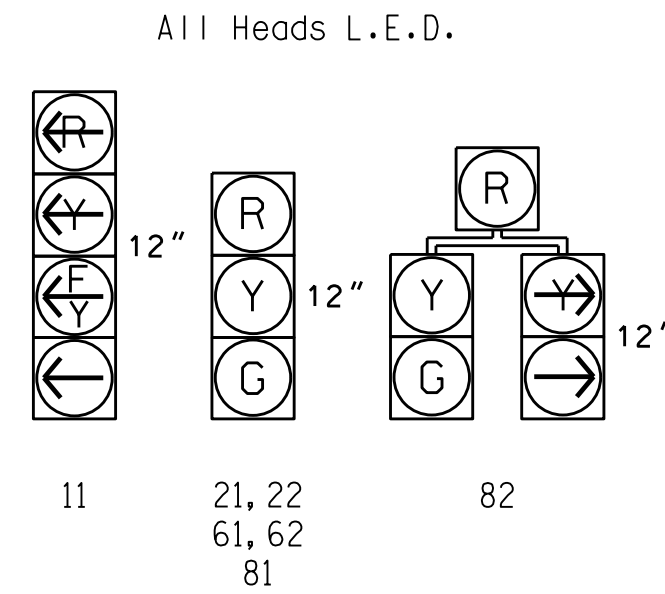


TABLE OF OPERATION

SIGNAL FACE	PHASE			
	Ø 1 + 6	Ø 2 + 6	Ø 8	F Loop
11	←	←	←	←
21, 22	R	G	R	Y
61, 62	G	G	R	Y
81	R	R	G	R
82	R	R	G	R

SIGNAL FACE I.D.



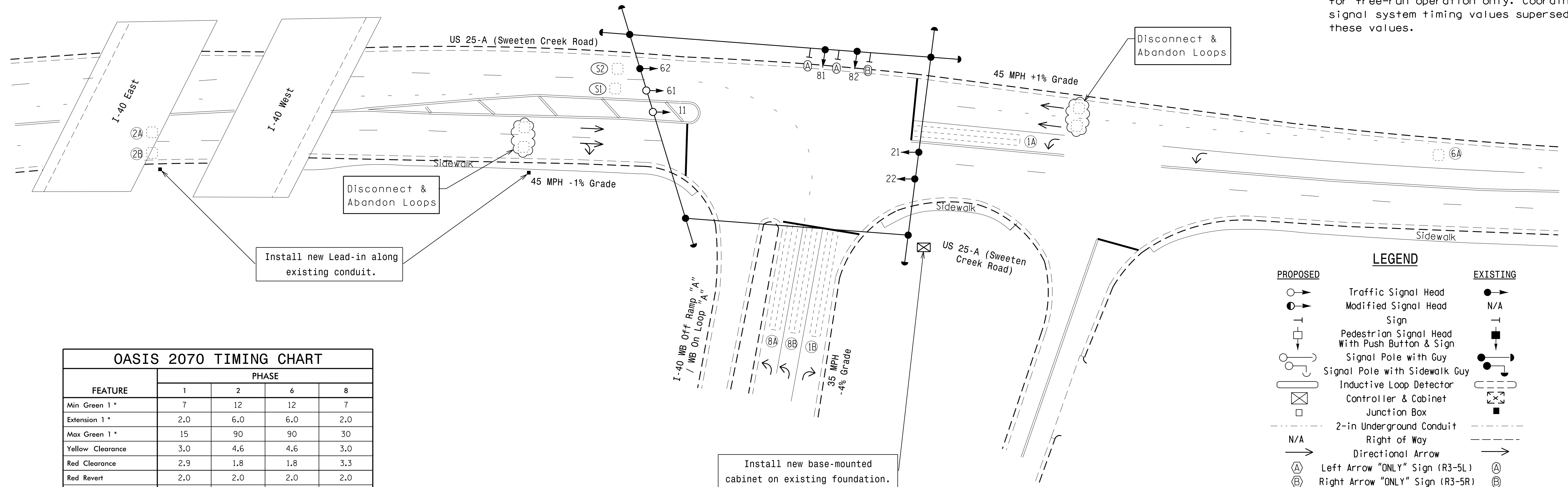
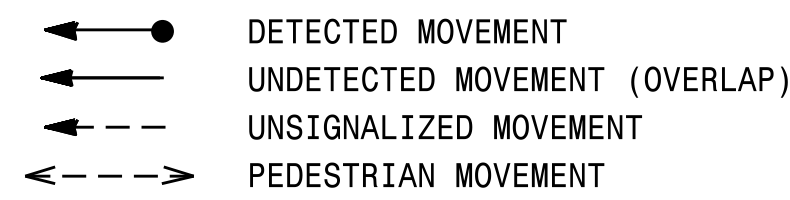
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	DETECTOR PROGRAMMING								
				NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X60	0	2-4-2	-	1	Y	Y	-	-	15	-	Y
1B	6X60	0	2-4-2	-	6	Y	Y	Y	-	3	-	Y
2A	6X6	300	EXIST	-	2	Y	Y	-	-	-	-	Y
2B	6X6	300	EXIST	-	2	Y	Y	-	-	-	-	Y
6A	6X6	300	EXIST	-	6	Y	Y	-	-	-	-	Y
8A	6X60	0	2-4-2	-	8	Y	Y	-	-	-	-	Y
8B	6X60	0	2-4-2	-	8	Y	Y	-	-	-	-	Y
S1	6X6	+164	EXIST	-	-	-	-	-	-	-	-	Y
S2	6X6	+164	EXIST	-	-	-	-	-	-	-	-	Y

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 may be lagged.
- Reposition existing signal head # 62.
- Disconnect and abandon existing loops as shown.
- Set all detector units to presence mode.
- 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.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

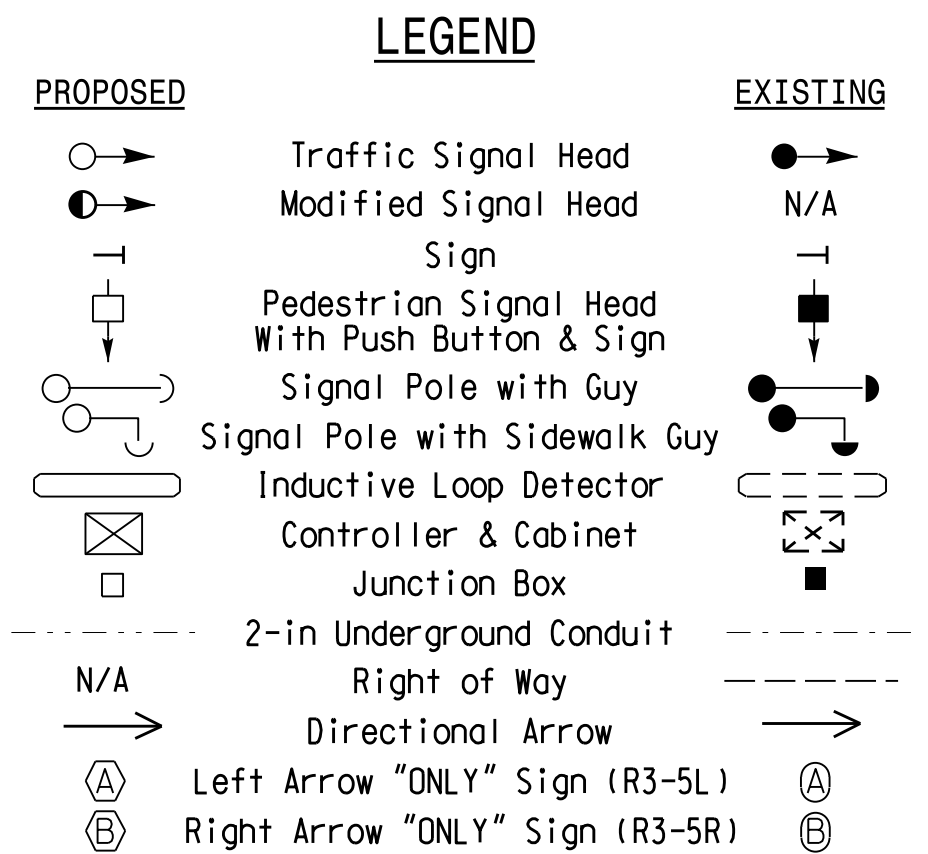
PHASING DIAGRAM DETECTION LEGEND



OASIS 2070 TIMING CHART

FEATURE	PHASE			
	1	2	6	8
Min Green 1 *	7	12	12	7
Extension 1 *	2.0	6.0	6.0	2.0
Max Green 1 *	15	90	90	30
Yellow Clearance	3.0	4.6	4.6	3.0
Red Clearance	2.9	1.8	1.8	3.3
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	-	1.8	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	-	SOFT RECALL	SOFT 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.



Signal Upgrade

Prepared In the Offices of:

US 25-A (Sweeten Creek Road) at I-40 WB Off Ramp "A" / WB On Loop "A"

Division 13 Buncombe County Asheville

PLAN DATE: May 2016 REVIEWED BY: T. Williams

PREPARED BY: M. Mahbooba REVIEWED BY:

REVISIONS: _____ INIT: _____ DATE: _____

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE: 0 30 1"=30'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SIG. INVENTORY NO. 13-0668

8/9/2016

09-AUG-2016 07:51
 S:\115451\115451\115451\SIG\Signal System\Signal Design\115451\Sig.dgn
 Design: mmb0000
 Design: mmb0000
 Design: mmb0000
 Design: mmb0000
 Design: mmb0000