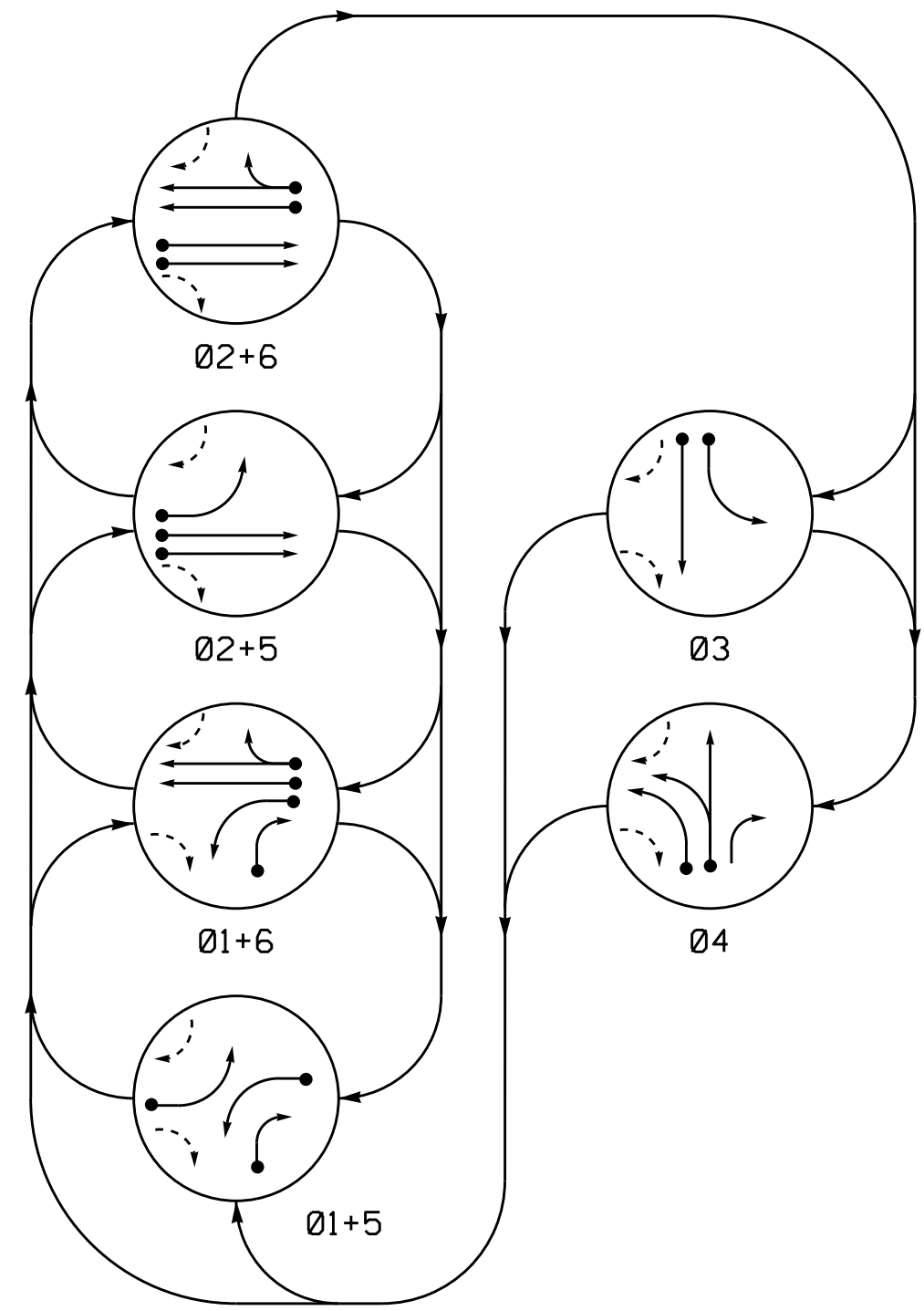


PHASING DIAGRAM



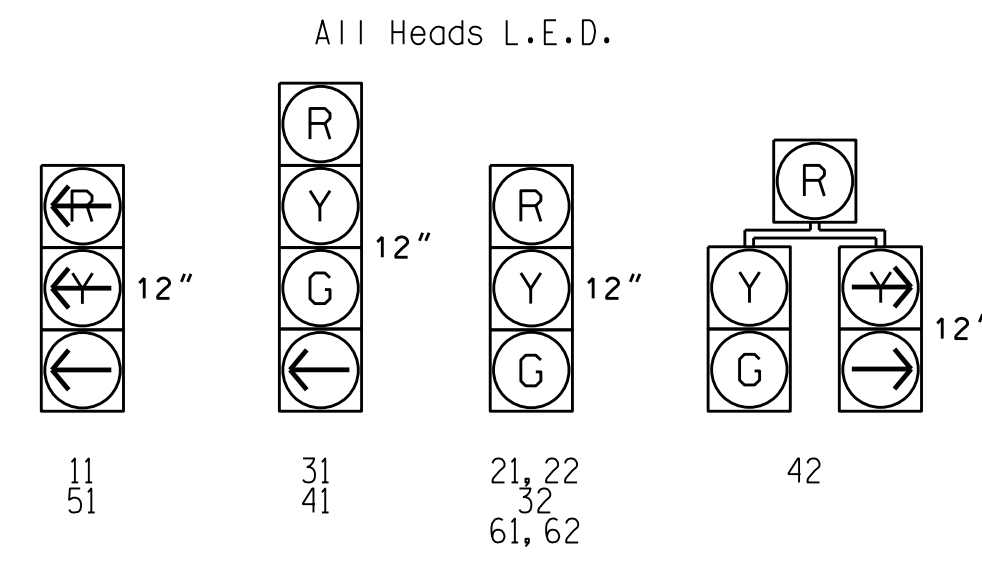
PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE						L	F	I	H
	01+5	01+6	02+5	02+6	03	04				
11										
21,22	R	R	G	G	R	R	Y			
31	R	R	R	R	G	R	R			
32	R	R	R	R	G	R	R			
41	R	R	R	R	R	G	R			
42	R	R	R	R	R	G	R			
51										
61, 62	R	G	R	G	R	R	Y			

SIGNAL FACE I.D.



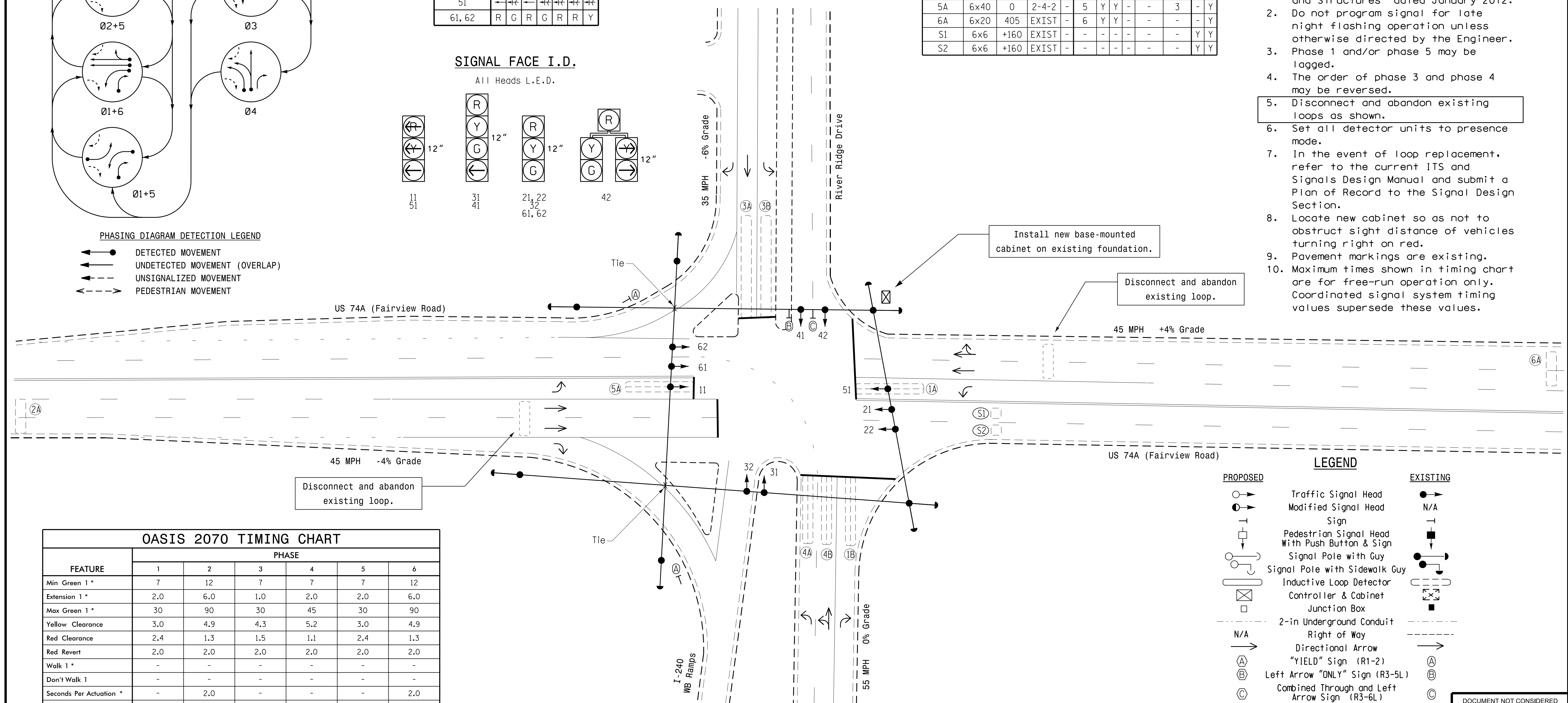
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				SYSTEM LOOP	NEW CARD	
					PHASE	CALLING	EXTENSION	STRETCH TIME			DELAY TIME
1A	6x40	0	2-4-2	-	1	Y	Y	-	3	-	Y
1B	6x40	0	2-4-2	-	1	Y	Y	-	15	-	Y
2A	6x20	405	EXIST	-	2	Y	Y	-	-	-	Y
3A	6x20	0	EXIST	-	3	Y	Y	-	-	-	Y
3B	6x60	0	EXIST	-	3	Y	Y	-	-	-	Y
4A	6x40	0	2-4-2	-	4	Y	Y	-	-	-	Y
4B	6x40	0	2-4-2	-	4	Y	Y	-	-	-	Y
5A	6x40	0	2-4-2	-	5	Y	Y	-	3	-	Y
6A	6x20	405	EXIST	-	6	Y	Y	-	-	-	Y
S1	6x6	+160	EXIST	-	-	-	-	-	-	-	Y
S2	6x6	+160	EXIST	-	-	-	-	-	-	-	Y

6 Phase Fully Actuated Asheville Signal System

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 and/or phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- 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.



OASIS 2070 TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Min Green 1 *	7	12	7	7	7	12
Extension 1 *	2.0	6.0	1.0	2.0	2.0	6.0
Max Green 1 *	30	90	30	45	30	90
Yellow Clearance	3.0	4.9	4.3	5.2	3.0	4.9
Red Clearance	2.4	1.3	1.5	1.1	2.4	1.3
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-
Seconds Per Actuation *	-	2.0	-	-	-	2.0
Max Variable Initial *	-	45	-	-	-	45
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	-	-	-	-	-	-
Simultaneous Gap	ON	ON	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.

LEGEND

PROPOSED	EXISTING
Traffic Signal Head	N/A
Modified Signal Head	N/A
Sign	N/A
Pedestrian Signal Head With Push Button & Sign	N/A
Signal Pole with Guy	N/A
Signal Pole with Sidewalk Guy	N/A
Inductive Loop Detector	N/A
Controller & Cabinet	N/A
Junction Box	N/A
2-in Underground Conduit	N/A
Right of Way	N/A
Directional Arrow	N/A
"YIELD" Sign (R1-2)	N/A
Left Arrow "ONLY" Sign (R3-5L)	N/A
Combined Through and Left Arrow Sign (R3-6L)	N/A

Signal Upgrade

US 74A (Fairview Road) at I-240 WB Ramp / River Ridge Drive

Division 13 Buncombe County Asheville

PLAN DATE: June 2016 REVIEWED BY: T.J. Williams

PREPARED BY: R.N. Zinser REVIEWED BY:

REVISIONS INIT. DATE

SCALE 0 30 1"=30'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL RICHARD N. ZINSER ENGINEER 043914

8/10/2016

SIG. INVENTORY NO. 13-0441

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 R.N.Z.