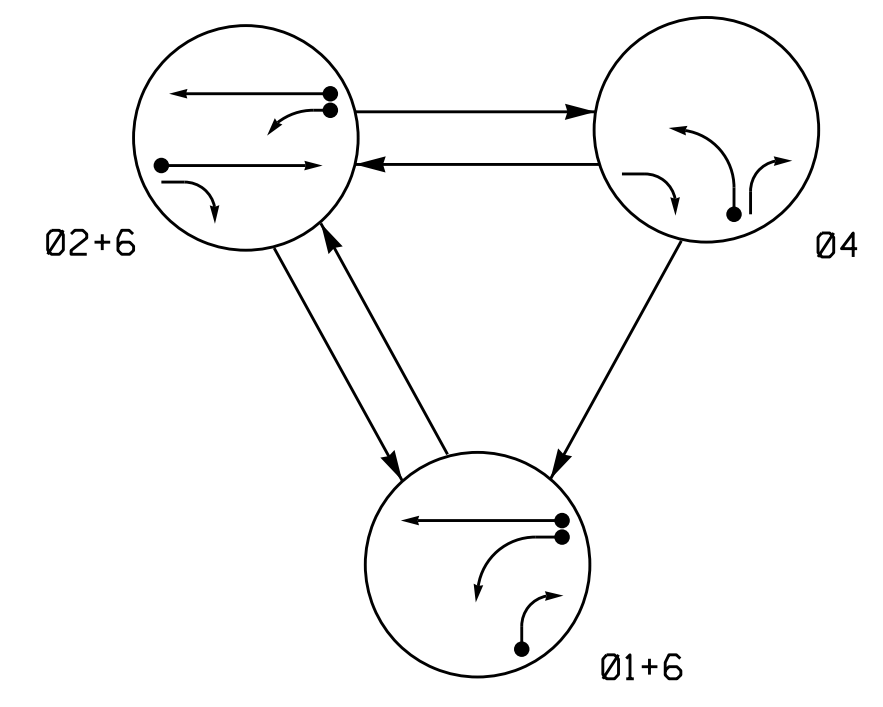


PHASING DIAGRAM

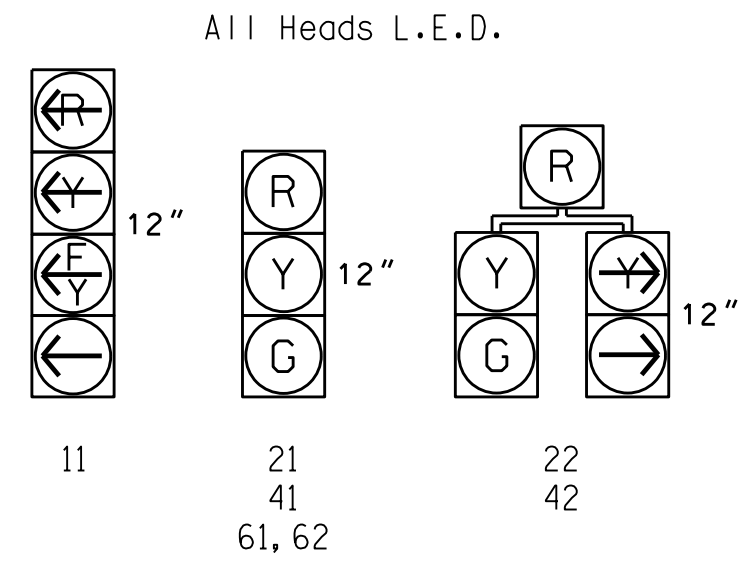


PHASING DIAGRAM DETECTION LEGEND
 ● DETECTED MOVEMENT
 ○ UNDETECTED MOVEMENT (OVERLAP)
 - - - UNSIGNALIZED MOVEMENT
 - - - PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE			
	01+6	02+6	04	01+6
11	—	—	—	—
21	R	G	R	Y
22	R	G	R	Y
41	R	R	G	R
42	R	R	G	R
61, 62	G	G	R	Y

SIGNAL FACE I.D.



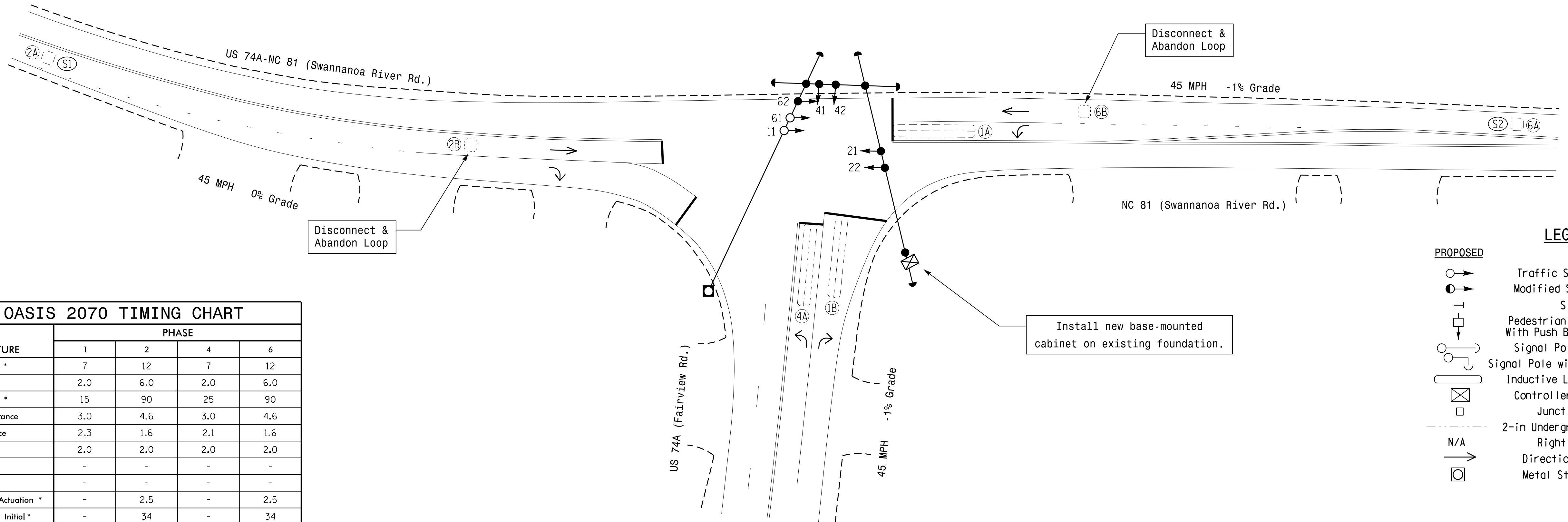
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
					PHASE	CALLING	EXTENSION	FULL TIME DELAY				
1A	6X40	0	2-4-2	-	1	Y	Y	-	-	15	-	Y
1B	6X40	0	2-4-2	-	6	Y	Y	Y	-	3	-	Y
2A/S1	6X6	300	5	-	2	Y	Y	-	-	-	Y	Y
2B	6X6	90	5	-	DISCONNECT & ABANDON							
4A	6X40	0	2-4-2	-	4	Y	Y	-	-	3	-	Y
6A/S2	6X6	300	5	-	6	Y	Y	-	-	-	Y	Y
6B	6X6	90	4	-	DISCONNECT & ABANDON							

3 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 may be lagged.
- Reposition existing signal head number 62.
- Abandon existing loops 2B and 6B.
- Set all detector units to presence mode.
- 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	4	6
Min Green 1 *	7	12	7	12
Extension 1 *	2.0	6.0	2.0	6.0
Max Green 1 *	15	90	25	90
Yellow Clearance	3.0	4.6	3.0	4.6
Red Clearance	2.3	1.6	2.1	1.6
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
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	-	-	-	-
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.

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
○ Metal Strain Pole	○ N/A

Signal Upgrade

Prepared in the Offices of:

 750 N. Greenfield Pkwy, Garner, NC 27529

US 74A/NC 81 (Swannanoa River Road) at US 74A (Fairview Road)

Division 13 Buncombe County Asheville
 PLAN DATE: May 2016 REVIEWED BY: P.L. Alexander
 PREPARED BY: R.N. Zinser REVIEWED BY:

REVISIONS: _____ INIT. DATE

SCALE: 1"=30'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 RICHARD N. ZINSELER
 043914
 Richard N. Zinser 8/9/2016
 DATE: _____
 SIG. INVENTORY NO. 13-0288

09-AUG-2016 09:57
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