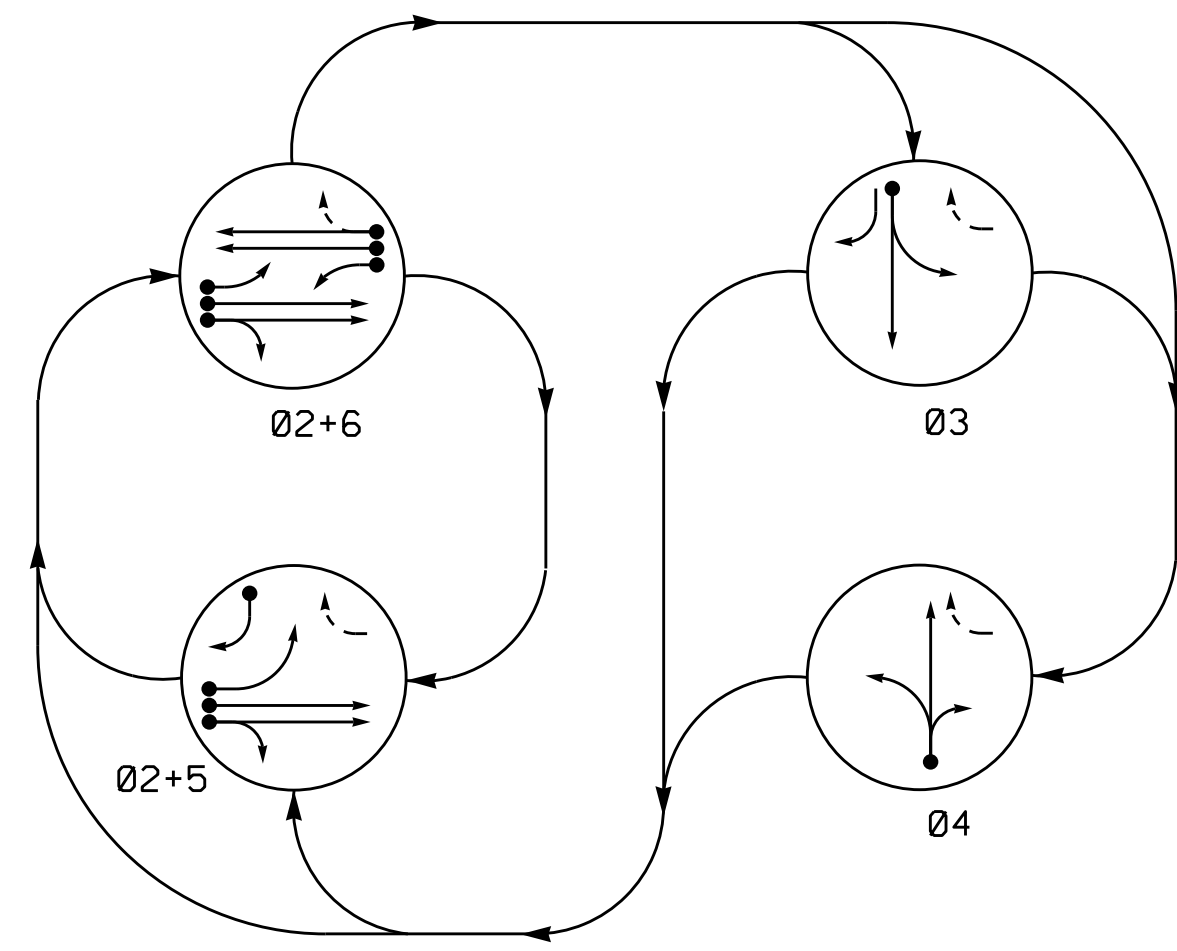


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

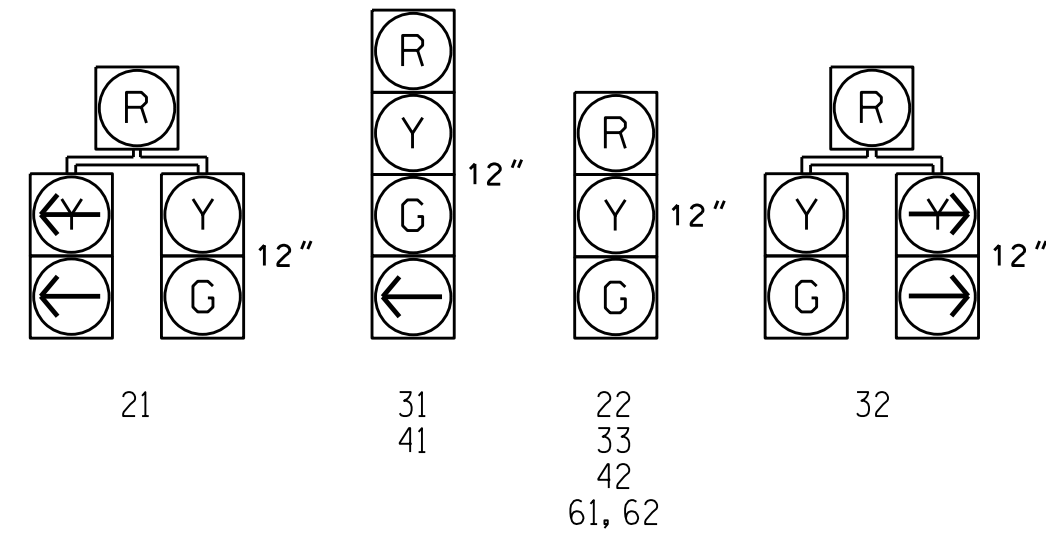
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE				
	Ø2+5	Ø2+6	Ø3	Ø4	FLASH
21	G	R	R	R	Y
22	G	G	R	R	Y
31	R	R	G	R	R
32	R	R	G	R	R
33	R	R	G	R	R
41	R	R	R	G	R
42	R	R	R	G	R
61, 62	R	G	R	R	Y

SIGNAL FACE I.D.

All Heads L.E.D.



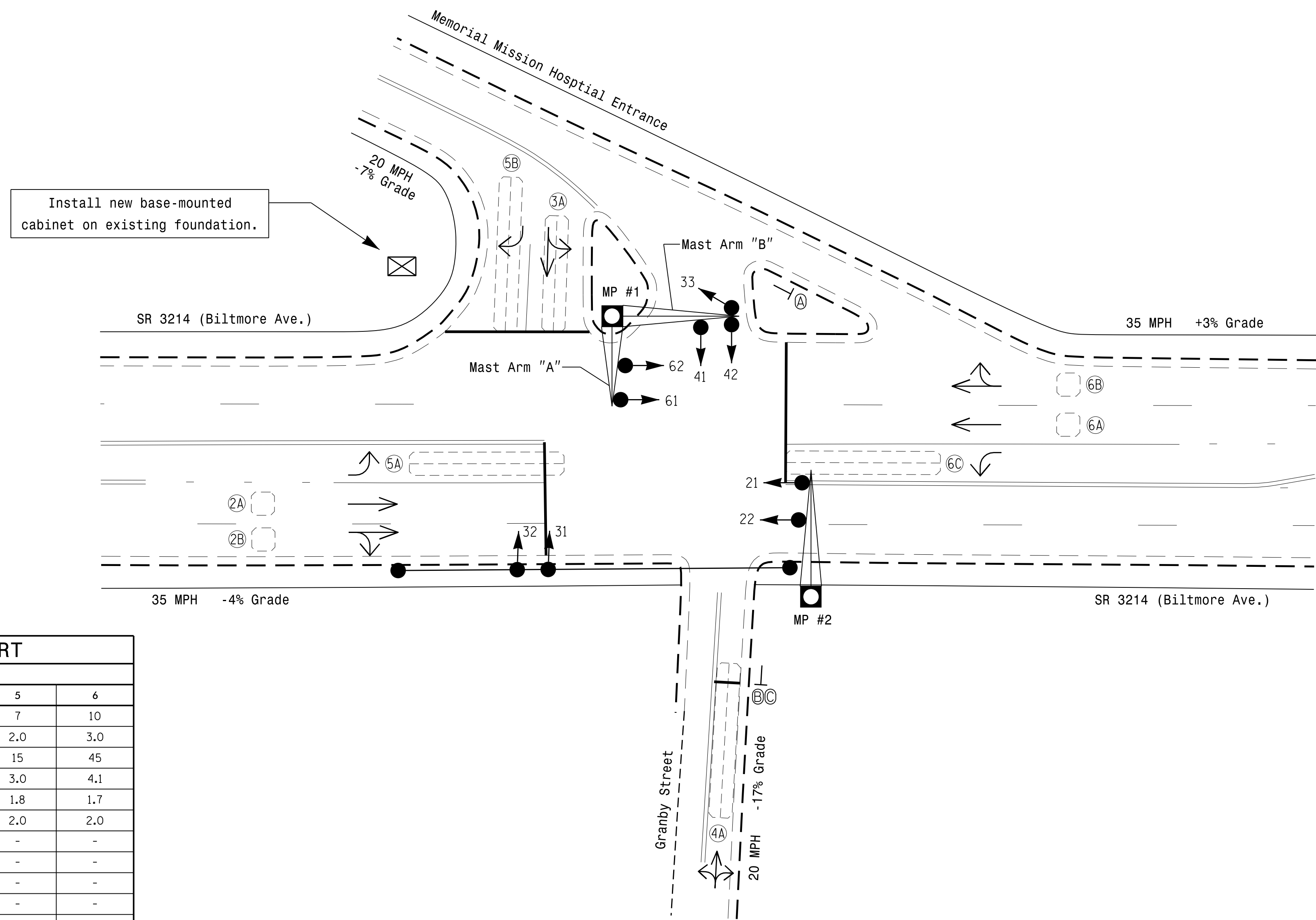
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING							
					PHASE	CALLING	EXTENSION	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD	
2A	6X6	70	EXIST	-	2	Y	Y	-	-	-	-	Y
2B	6X6	70	EXIST	-	2	Y	Y	-	-	-	-	Y
3A	6X30	0	2-4-2	-	3	Y	Y	-	-	-	-	Y
4A	6X40	+5	2-4-2	-	4	Y	Y	-	-	-	-	Y
5A	6X40	+5	2-4-2	-	5	Y	Y	-	-	15	-	Y
5B	6X40	0	2-4-2	-	5	Y	Y	-	-	15	-	Y
6A	6X6	70	EXIST	-	6	Y	Y	-	-	-	-	Y
6B	6X6	70	EXIST	-	6	Y	Y	-	-	-	-	Y
6C	6X40	0	2-4-2	-	6	Y	Y	-	-	-	-	Y

4 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.
- Enable Backup Protect for phase 2 to allow the controller to clear from phase 2+6 to phase 2+5 by progressing through an all red display.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- The cabinet should be designed to include an Auxiliary Output file for future use.
- 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				
	2	3	4	5	6
Min Green 1 *	10	7	7	7	10
Extension 1 *	3.0	2.0	2.0	2.0	3.0
Max Green 1 *	45	25	25	15	45
Yellow Clearance	4.1	3.2	4.1	3.0	4.1
Red Clearance	1.7	2.4	3.2	1.8	1.7
Red Revert	5.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	-
Don't Walk 1	-	-	-	-	-
Seconds Per Actuation *	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-
Time To Reduce *	-	-	-	-	-
Minimum Gap	-	-	-	-	-
Recall Mode	MIN RECALL	-	-	-	MIN RECALL
Vehicle Call Memory	YELLOW	-	-	-	YELLOW
Dual Entry	-	-	-	-	-
Simultaneous Gap	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 | - Sign |
| ○ Pedestrian Signal Head | ● Pedestrian Signal Head With Push Button & Sign |
| ○ Signal Pole with Guy | ● Signal Pole with Sidewalk Guy |
| ○ Inductive Loop Detector | ○ Inductive Loop Detector |
| ○ Controller & Cabinet | ○ Controller & Cabinet |
| ○ Junction Box | ○ Junction Box |
| ○ 2-in Underground Conduit | ○ 2-in Underground Conduit |
| ○ Right of Way | ○ Right of Way |
| ○ Directional Arrow | ○ Directional Arrow |
| ○ Metal Pole with Mastarm | ○ Metal Pole with Mastarm |
| ○ "YIELD" Sign (R1-2) | ○ "YIELD" Sign (R1-2) |
| ○ "STOP HERE ON RED" Sign (R10-6) | ○ "STOP HERE ON RED" Sign (R10-6) |
| ○ "NO TURN ON RED" Sign (R10-11) | ○ "NO TURN ON RED" Sign (R10-11) |

Signal Upgrade

SR 3214 (Biltmore Ave.) at Memorial Mission Hospital-Entrance/Granby Street

Division 13 Buncombe County Asheville

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

PREPARED BY: R.N. Zinser REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

DATE: 8/10/2016

SIG. INVENTORY NO. 13-0462

I:\0462\2016_10\20...
 S:\1\2550\13...
 R.N.Zinser