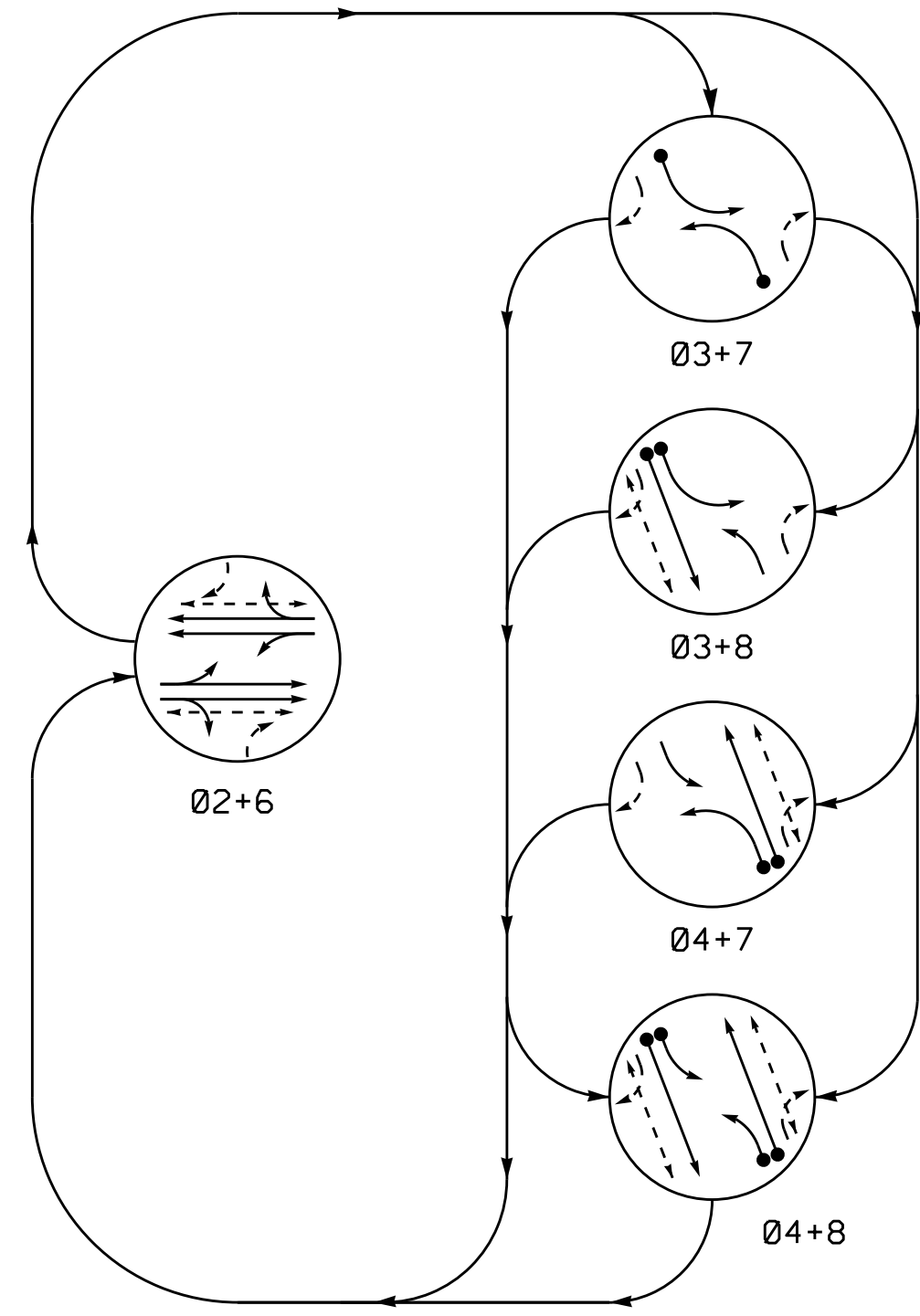


PHASING DIAGRAM

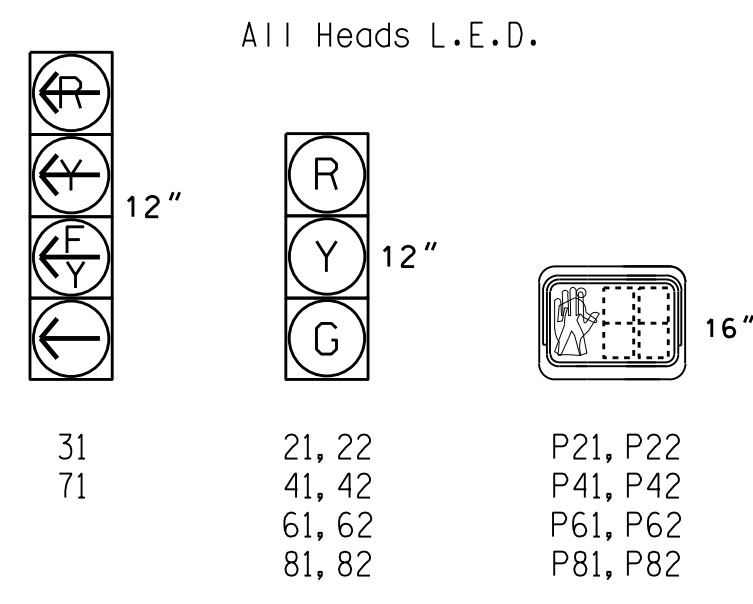


PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE					
	02+6	03+7	03+8	04+7	04+8	F L O O D
21, 22	G	R	R	R	R	Y
31	-	-	-	-	-	-
41, 42	R	R	R	G	G	R
61, 62	G	R	R	R	R	Y
71	-	-	-	-	-	-
81, 82	R	R	G	R	G	R
P21, P22	W	DW	DW	DW	DW	DRK
P41, P42	DW	DW	DW	W	W	DRK
P61, P62	W	DW	DW	DW	DW	DRK
P81, P82	DW	DW	W	W	DRK	

SIGNAL FACE I.D.



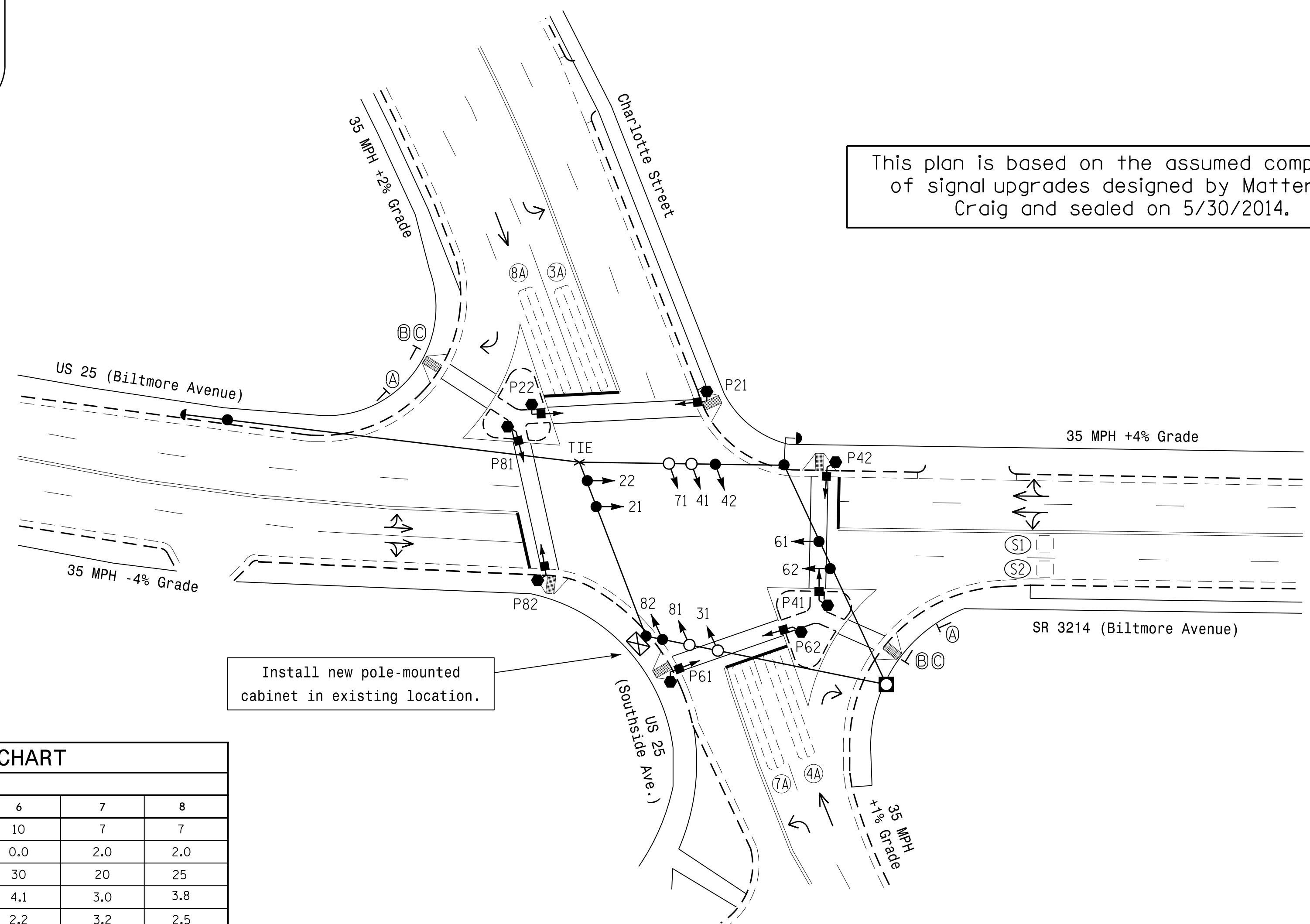
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART												
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING					SYSTEM LOOP	NEW CARD	
					PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME			DELAY TIME
3A	6X40	0	2-4-2	-	3	Y	Y	-	-	15	-	Y
4A	6X40	0	2-4-2	-	4	Y	Y	-	-	3	-	Y
7A	6X40	0	2-4-2	-	7	Y	Y	-	-	15	-	Y
8A	6X40	0	2-4-2	-	8	Y	Y	-	-	-	-	Y
S1	6X6	+180	5	-	-	-	-	-	-	-	-	Y
S2	6X6	+180	5	-	-	-	-	-	-	-	-	Y

5 Phase Semi-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 3 and/or phase 7 may be lagged.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Program controller to operate using FYA compact mode.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

This plan is based on the assumed completion of signal upgrades designed by Mattern & Craig and sealed on 5/30/2014.



Install new pole-mounted cabinet in existing location.

OASIS 2070 TIMING CHART							
FEATURE	PHASE						
	2	3	4	6	7	8	
Min Green 1 *	10	7	7	10	7	7	
Extension 1 *	0.0	2.0	2.0	0.0	2.0	2.0	
Max Green 1 *	30	20	25	30	20	25	
Yellow Clearance	4.1	3.0	3.8	4.1	3.0	3.8	
Red Clearance	2.2	3.2	2.5	2.2	3.2	2.5	
Walk 1 *	7	-	7	7	-	7	
Don't Walk 1	13	-	9	9	-	11	
Seconds Per Actuation *	-	-	-	-	-	-	
Max Variable Initial *	-	-	-	-	-	-	
Time Before Reduction *	-	-	-	-	-	-	
Time To Reduce *	-	-	-	-	-	-	
Minimum Gap	-	-	-	-	-	-	
Recall Mode	MAX RECALL	-	-	MAX RECALL	-	-	
Vehicle Call Memory	-	-	-	-	-	-	
Dual Entry	-	-	ON	-	-	ON	
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 | - |
| ⊥ 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 | - - - |
| ➔ Directional Arrow | ➔ |
| ⊡ Metal Strain Pole | ⊡ |
| ○ Type II Signal Pedestal | ● |
| N/A Curb Ramp | ⊡ |
| (A) "YIELD" Sign (R1-2) | (A) |
| (B) Pedestrian Crossing Sign (W11-2) | (B) |
| (C) Downward Pointing Arrow Sign (W16-7P) | (C) |

Signal Upgrade

US 25/SR 3214 (Biltmore Ave.)
at
US 25 (Southside Ave.)/
Charlotte Street

Division 13 Buncombe County Asheville

PLAN DATE: February 2016 REVIEWED BY: P.L. Alexander

PREPARED BY: R.N. Zinser REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

DATE: 12/16/2016

SIG. INVENTORY NO. 13-0248

SCALE 0 30
1"=30'

10-060-2016 07-16
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