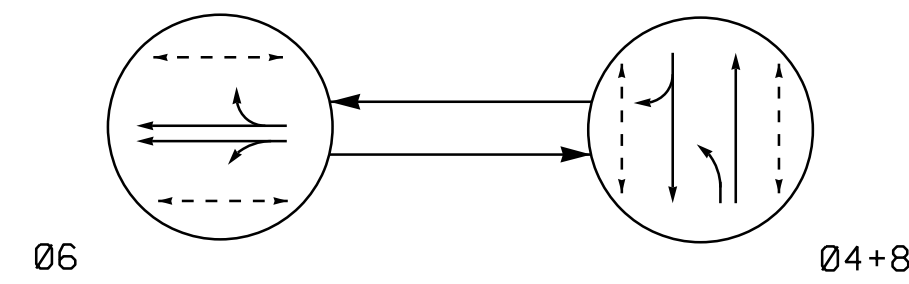


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

- ←●→ DETECTED MOVEMENT
- ←○→ UNDETECTED MOVEMENT (OVERLAP)
- ←---→ UNSIGNALIZED MOVEMENT
- ←- - -> PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE		
	06	04+8	FLASH
41,42	R	G	R
61,62	G	R	Y
81,82	R	G	R
P41,P42	DW	W	DRK
P61,P62	W	DW	DRK
P63,P64	W	DW	DRK
P81,P82	DW	W	DRK

W - Walk
DW - Don't Walk
DRK - Dark

OASIS 2070E 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
S1	6X6	80	EXIST	-	-	-	-	-	-	-	Y	Y
S2	6X6	80	EXIST	-	-	-	-	-	-	-	Y	Y

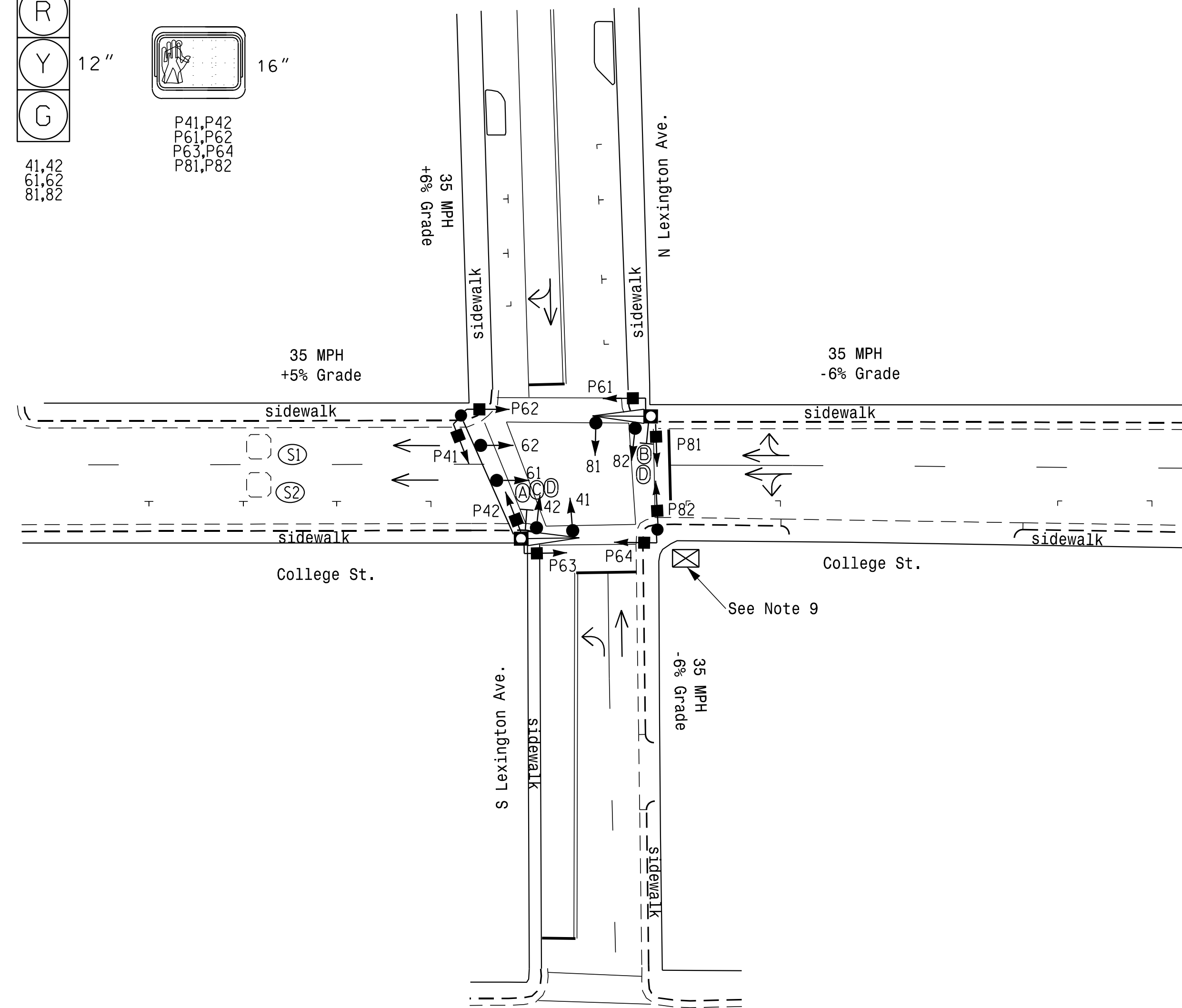
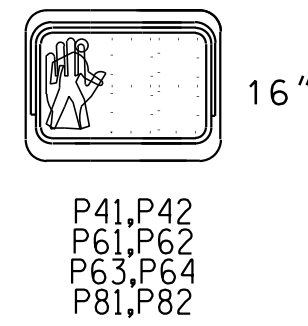
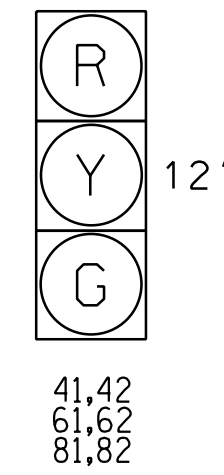
2 Phase Pre-Timed (Asheville Signal System)

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.
- 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.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Locate new cabinet on existing foundation.
- Program controller to allow an Advance Walk movement before serving the vehicle phase.
- Program phase 6 for Rest-In-Walk.
- Existing Yellow change interval for phase 4 may be decreased by 0.2 seconds per week until required value is reached.

SIGNAL FACE I.D.

All Heads L.E.D.



OASIS 2070E TIMING CHART

FEATURE	PHASE		
	4	6	8
Min Green 1 *	7	10	7
Extension 1 *	0.0	0.0	0.0
Max Green 1 *	20	30	20
Yellow Clearance	3.0	3.1	3.0
Red Clearance	1.6	1.8	1.8
Red Revert	2.0	2.0	2.0
Walk 1 *	11	20	11
Don't Walk 1	9	10	9
Walk Advance **	3.0	3.0	3.0
Seconds Per Actuation *	-	-	-
Max Variable Initial *	-	-	-
Time Before Reduction *	-	-	-
Time To Reduce *	-	-	-
Minimum Gap	-	-	-
Recall Mode	MAX/PED	MAX/PED	MAX/PED
Vehicle Call Memory	-	-	-
Dual Entry	-	-	-
Simultaneous Gap	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.

** See Note 10.

LEGEND

- | PROPOSED | EXISTING |
|--|--|
| ○→ Traffic Signal Head | ●→ N/A |
| ●→ Modified Signal Head | ○→ N/A |
| ⊥ Sign | ⊥ Sign |
| ⊥ Pedestrian Signal Head With Push Button & Sign | ⊥ Pedestrian Signal Head With Push Button & Sign |
| ⊥ Signal Pole with Guy | ⊥ Signal Pole with Guy |
| ⊥ Signal Pole with Sidewalk 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 |
| N/A Right of Way | --- Right of Way |
| → Directional Arrow | → Directional Arrow |
| ⊥ Metal Pole with Mastarm | ⊥ Metal Pole with Mastarm |
| (A) 'NO LEFT TURN' Sign (R3-2) | (A) 'NO LEFT TURN' Sign (R3-2) |
| (B) 'NO RIGHT TURN' Sign (R3-1) | (B) 'NO RIGHT TURN' Sign (R3-1) |
| (C) 'NO TURN ON RED' Sign (R10-11a) | (C) 'NO TURN ON RED' Sign (R10-11a) |
| (D) 'ONE WAY' Sign (R6-2) | (D) 'ONE WAY' Sign (R6-2) |

Signal Upgrade

Mattern & Craig
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City of Asheville logo and seal.

College St at N Lexington Ave and S Lexington Ave

Division 13 Buncombe County Asheville

PLAN DATE: MAY 2016 REVIEWED BY: SMH

PREPARED BY: BGR REVIEWED BY: JBV

REVISIONS: _____

INIT. DATE

SEAL: JAMES B. VOSS, PROFESSIONAL ENGINEER, No. 022599

SIGNATURE: James B. Voss DATE: 12/13/2016

SIG. INVENTORY NO. COA-0106