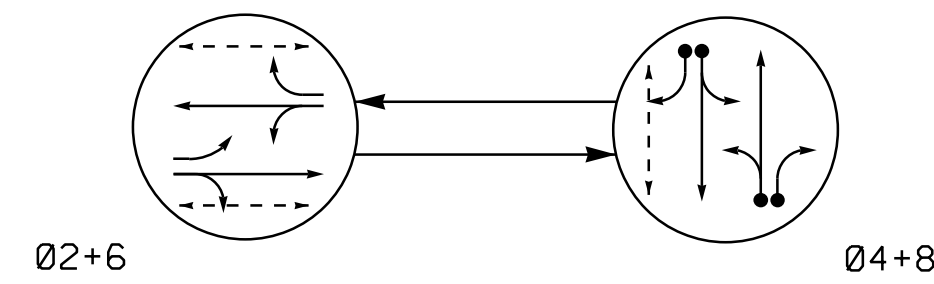


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE			FLASH
	02+6	04+8		
21,22,23	G	R	Y	
41,42	R	G	R	
61,62	G	R	Y	
81,82	R	G	R	
P21,P22	W	DW	DRK	
P41,P42	DW	W	DRK	
P61,P62	W	DW	DRK	

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

OASIS 2070E LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING							
					PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
4A	EXIST	+5	2-4-2	-	4	Y	Y	-	-	3	-	Y
4B	EXIST	+5	2-4-2	-	4	Y	Y	-	-	15	-	Y
8A	EXIST	+5	2-4-2	-	8	Y	Y	-	-	3	-	Y
8B	EXIST	+5	2-4-2	-	8	Y	Y	-	-	15	-	Y

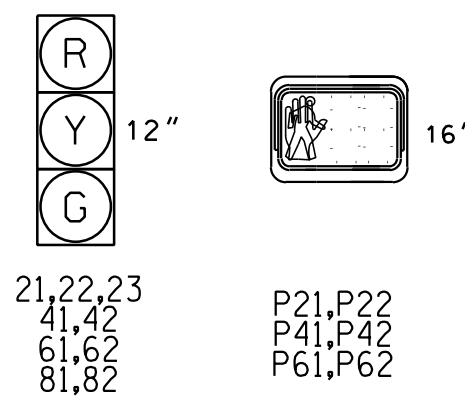
2 Phase Semi-Actuated (Asheville Signal System)

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.
- 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.
- Locate new cabinet on existing foundation.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Omit "Walk" and "Flashing Don't Walk" with no pedestrian calls on Phase 4.

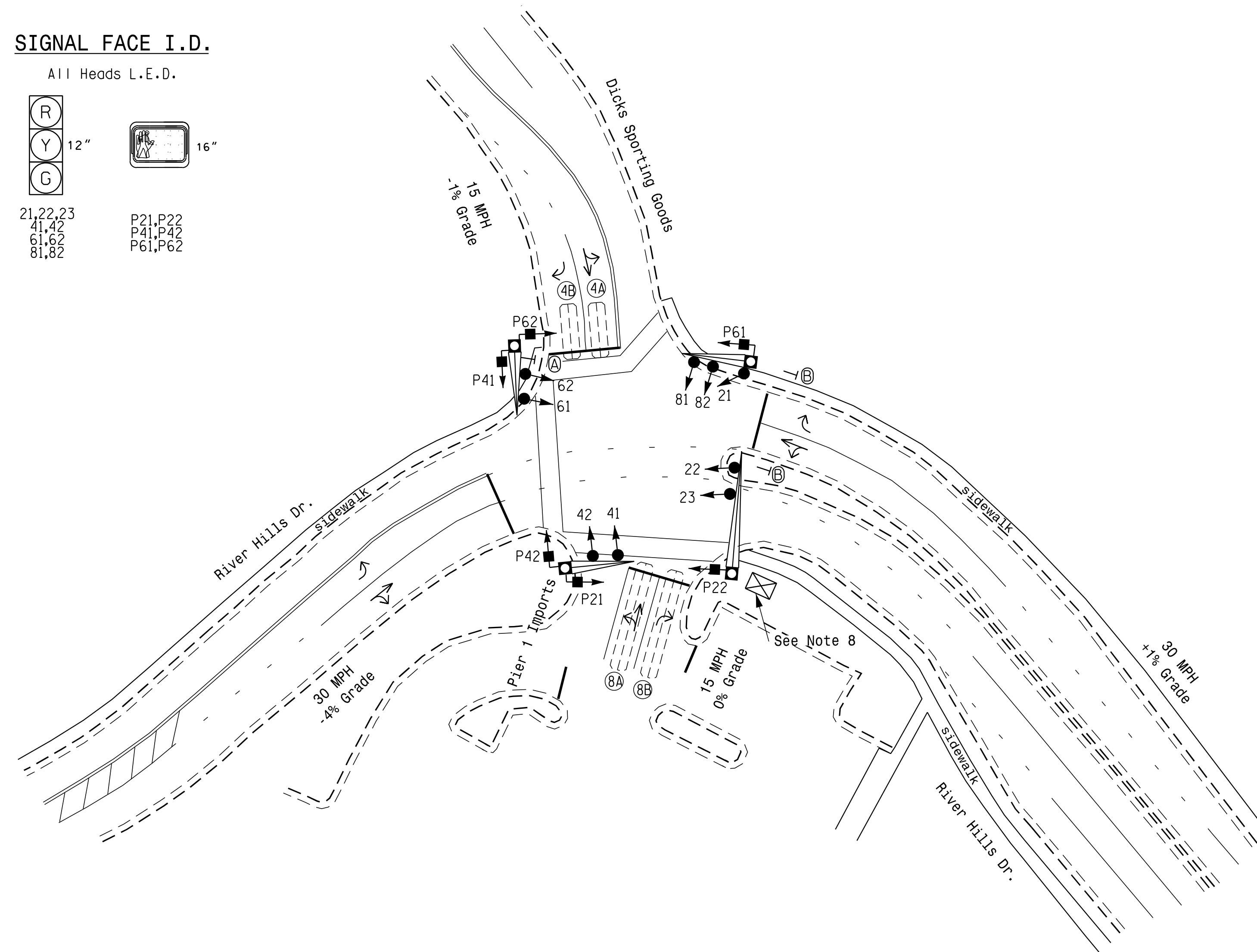
SIGNAL FACE I.D.

All Heads L.E.D.



21,22,23
 41,42
 61,62
 81,82

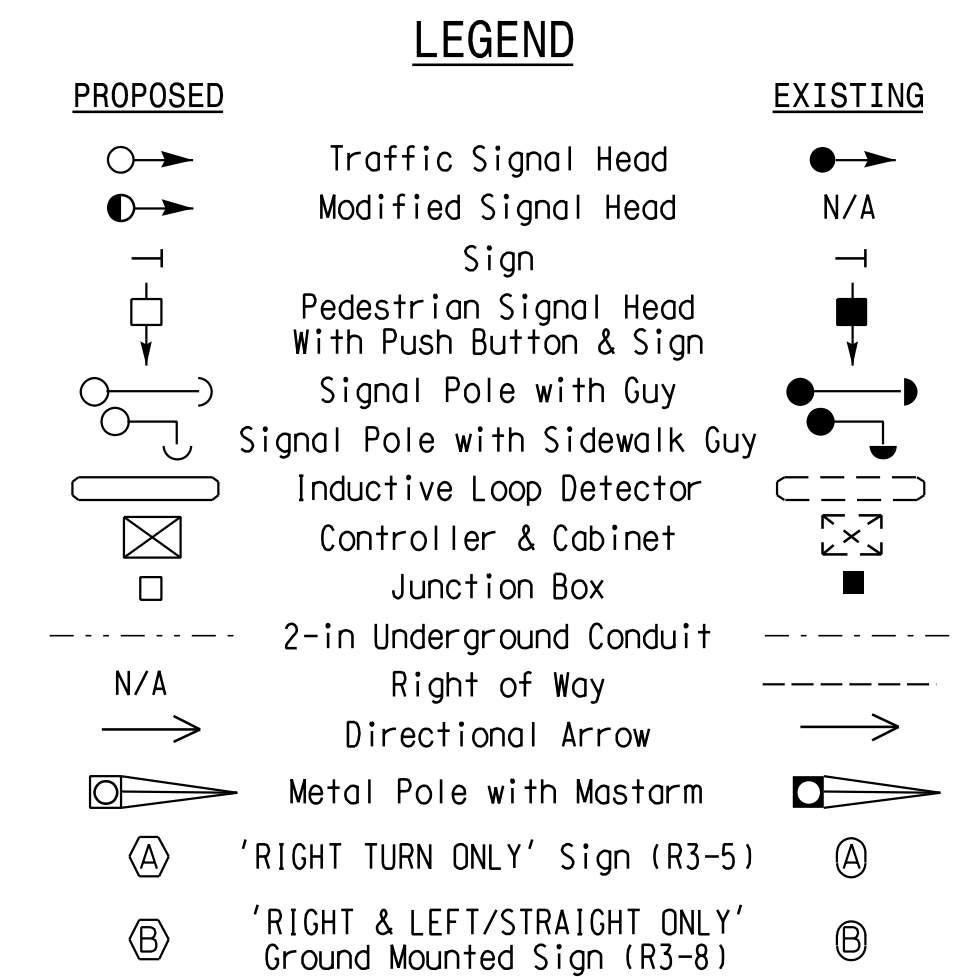
P21,P22
 P41,P42
 P61,P62



OASIS 2070E TIMING CHART

FEATURE	PHASE			
	2	4	6	8
Min Green 1 *	10	7	10	7
Extension 1 *	0.0	3.0	0.0	2.0
Max Green 1 *	30	20	30	20
Yellow Clearance	3.8	3.0	3.5	3.0
Red Clearance	1.8	3.1	1.8	3.4
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	16	7	17	-
Don't Walk 1	14	13	13	-
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

* 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.



Signal Upgrade

Prepared for the Offices of:
CITY OF ASHEVILLE
 River Hills Rd. at Dick's Sporting Goods and Pier 1 Imports Shopping Centers
 Division 13 Buncombe County Asheville
 PLAN DATE: JUNE 2016 REVIEWED BY: SMH
 PREPARED BY: BGR REVIEWED BY: JBV

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 JAMES B. VOSS
 022599
 12/13/2016
 SIGNATURE DATE
 SIG. INVENTORY NO. COA-0014

Mattern & Craig
 CONSULTING ENGINEERS • SURVEYORS
 FIRM LICENSE No. C-1154
 12 BROAD STREET
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 (828) 254-2201
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SCALE
 0 30
 1"=30'