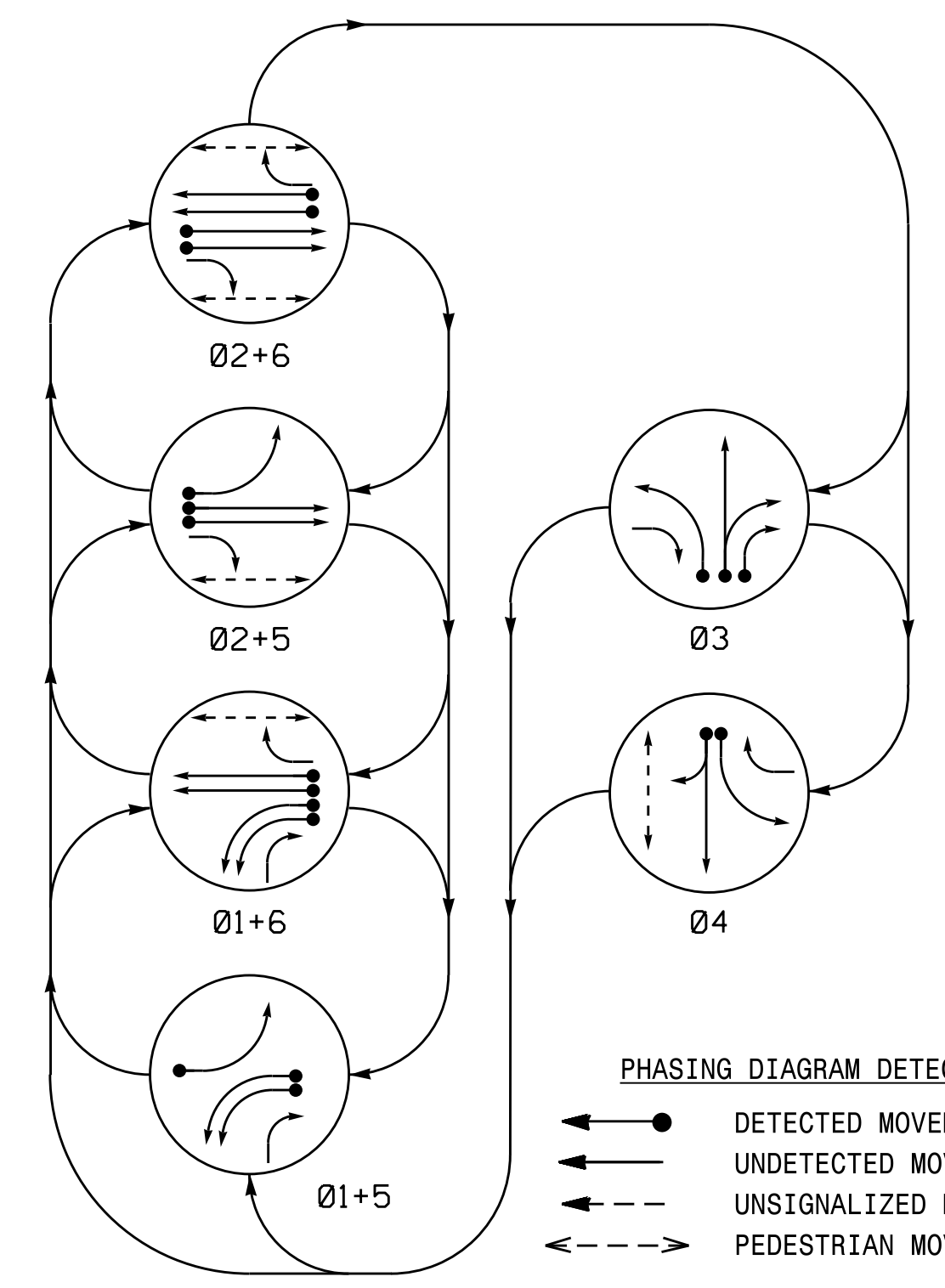
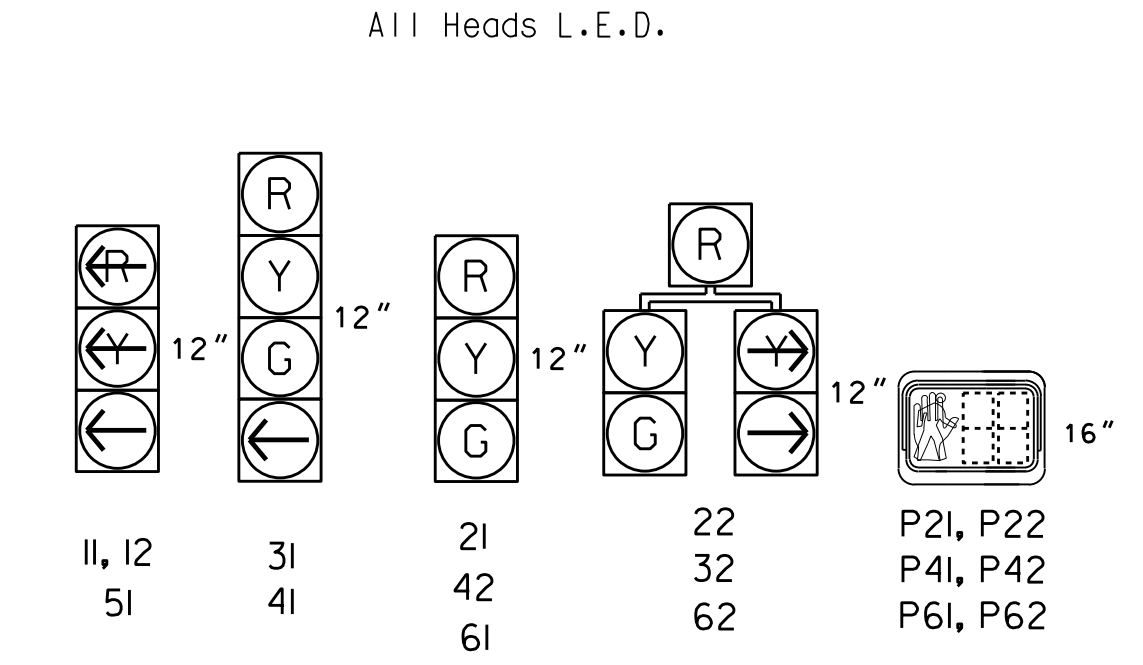


6 Phase Fully Actuated Asheville Signal System



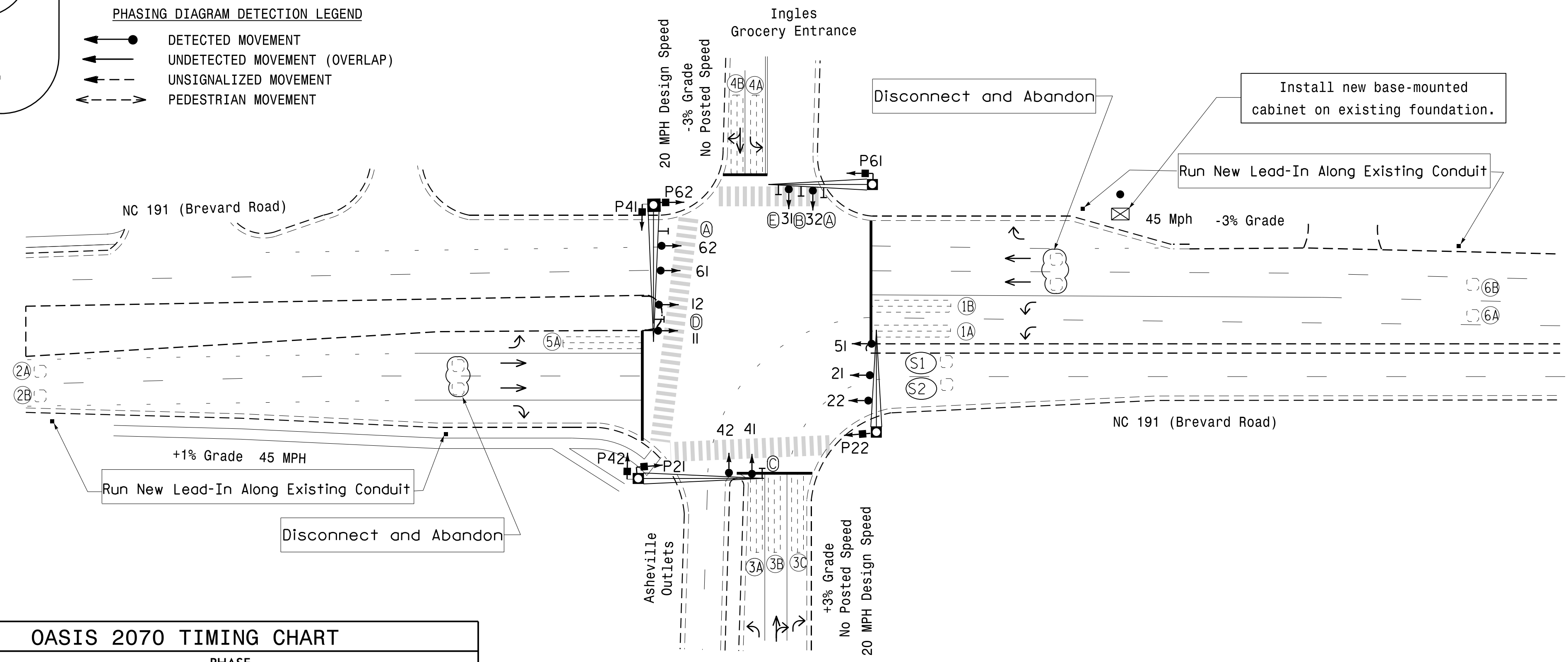
SIGNAL FACE	PHASE					
	Ø 1+5	Ø 1+6	Ø 2+5	Ø 2+6	Ø 3	Ø 4
11, 12	←	←	←	←	←	←
21	R	R	G	G	R	R
22	R	R	G	G	R	R
31	R	R	R	R	G	R
32	R	R	R	R	G	R
41	R	R	R	R	R	G
42	R	R	R	R	R	G
51	←	←	←	←	←	←
61	R	G	R	G	R	R
62	R	G	R	G	R	R
P21, P22	DW	DW	W	W	DW	DRK
P41, P42	DW	DW	DW	DW	DW	DRK
P61, P62	DW	W	DW	DW	DW	DRK

SIGNAL FACE I.D.



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
1A	6X40	0	2-4-2	-	1	Y	Y	-	-	-	-	Y
1B	6X40	0	2-4-2	-	1	Y	Y	-	-	-	-	Y
2A	6X6	300	5	-	2	Y	Y	-	-	-	-	Y
2B	6X6	300	5	-	2	Y	Y	-	-	-	-	Y
3A	6X40	0	2-4-2	-	3	Y	Y	-	-	-	-	Y
3B	6X40	0	2-4-2	-	3	Y	Y	-	-	-	5	Y
3C	6X40	0	2-4-2	-	3	Y	Y	-	-	-	20	Y
4A	6X40	+5	2-4-2	-	4	Y	Y	-	-	-	3	Y
4B	6X40	+5	2-4-2	-	4	Y	Y	-	-	-	10	Y
5A	6X40	0	2-4-2	-	5	Y	Y	-	-	-	-	Y
6A	6X6	300	5	-	6	Y	Y	-	-	-	-	Y
6B	6X6	300	5	-	6	Y	Y	-	-	-	-	Y
S1	6X6	+150	4	-	-	-	-	-	-	-	-	Y
S2	6X6	+150	4	-	-	-	-	-	-	-	-	Y

- 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 and/or phase 5 may be lagged.
  - The order of phase 3 and phase 4 may be reversed.
  - Set all detector units to presence mode.
  - Disconnect existing loops as shown.
  - Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
  - 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.



FEATURE	PHASE					
	1	2	3	4	5	6
Min Green 1 *	7	12	7	7	7	12
Extension 1 *	2.0	6.0	2.0	2.0	2.0	6.0
Max Green 1 *	15	90	35	35	15	90
Yellow Clearance	3.0	4.8	3.0	3.0	3.0	4.8
Red Clearance	3.5	1.6	3.9	3.9	3.3	1.6
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	7	-	7	-	7
Don't Walk 1	-	21	-	32	-	13
Seconds Per Actuation *	-	1.5	-	-	-	1.5
Max Variable Initial *	-	34	-	-	-	34
Time Before Reduction *	-	15	-	-	-	15
Time To Reduce *	-	30	-	-	-	30
Minimum Gap	-	3.2	-	-	-	3.2
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW
Dual Entry	-	-	-	-	-	-
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.

PROPOSED	LEGEND	EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head	
	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 Pole with Mastarm	
	Pedestrian Signal Pedestal	
N/A	Wheelchair Ramp	
	Right Arrow "ONLY" Sign (R3-5R)	
	Combined Through and Right Arrow Sign (R3-6R)	
	Left Arrow "ONLY" Sign (R3-5L)	
	U-Turn "MUST YIELD" Sign	
	U-Turn "YIELD TO RIGHT TURN" Sign (R10-16)	

Signal Upgrade

Prepared in the Offices of:  
  
 TRANSPORTATION MOBILITY AND SAFETY DIVISION  
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
 Signal Design Section  
 750 N. Greenfield Pkwy, Garner, NC 27529

NC 191 (Brevard Road) at Asheville Outlets Ingles Grocery Entrance

Division 13 Buncombe County Asheville  
 PLAN DATE: January 2016 REVIEWED BY: T. J. Williams  
 PREPARED BY: C. Pierce REVIEWED BY: J. Williams 9/27/2016

SCALE 0 40  
 1"=40'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SIG. INVENTORY NO. 13-0647

27-060-2016 13-14  
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 09/27/2016 10:14 AM  
 J. Williams