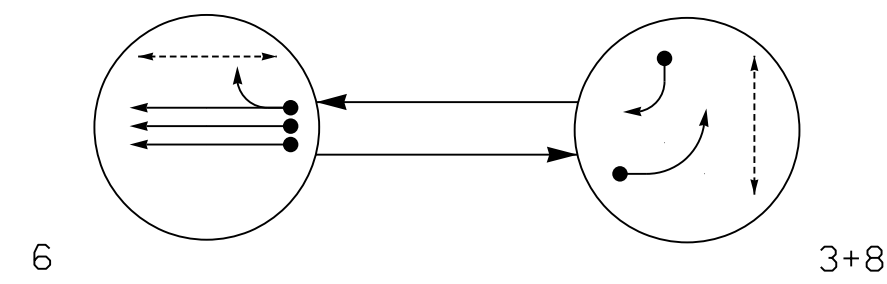


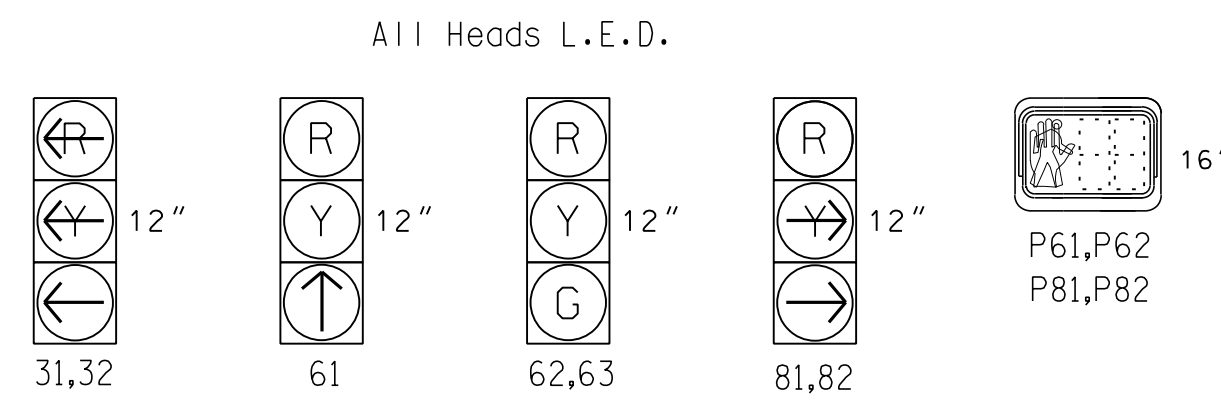
PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND
 ● DETECTED MOVEMENT
 ◄ UNDETECTED MOVEMENT (OVERLAP)
 ◄ UNSIGNALIZED MOVEMENT
 ◄ PEDESTRIAN MOVEMENT

SIGNAL FACE	PHASE		
	6	3+8	FLASH
31,32	←R	←R	←R
61	↑	R	R
62,63	G	R	R
81,82	R	←R	←R
P61,P62	W	DW	DRK
P81,P82	DW	W	DRK

SIGNAL FACE I.D.



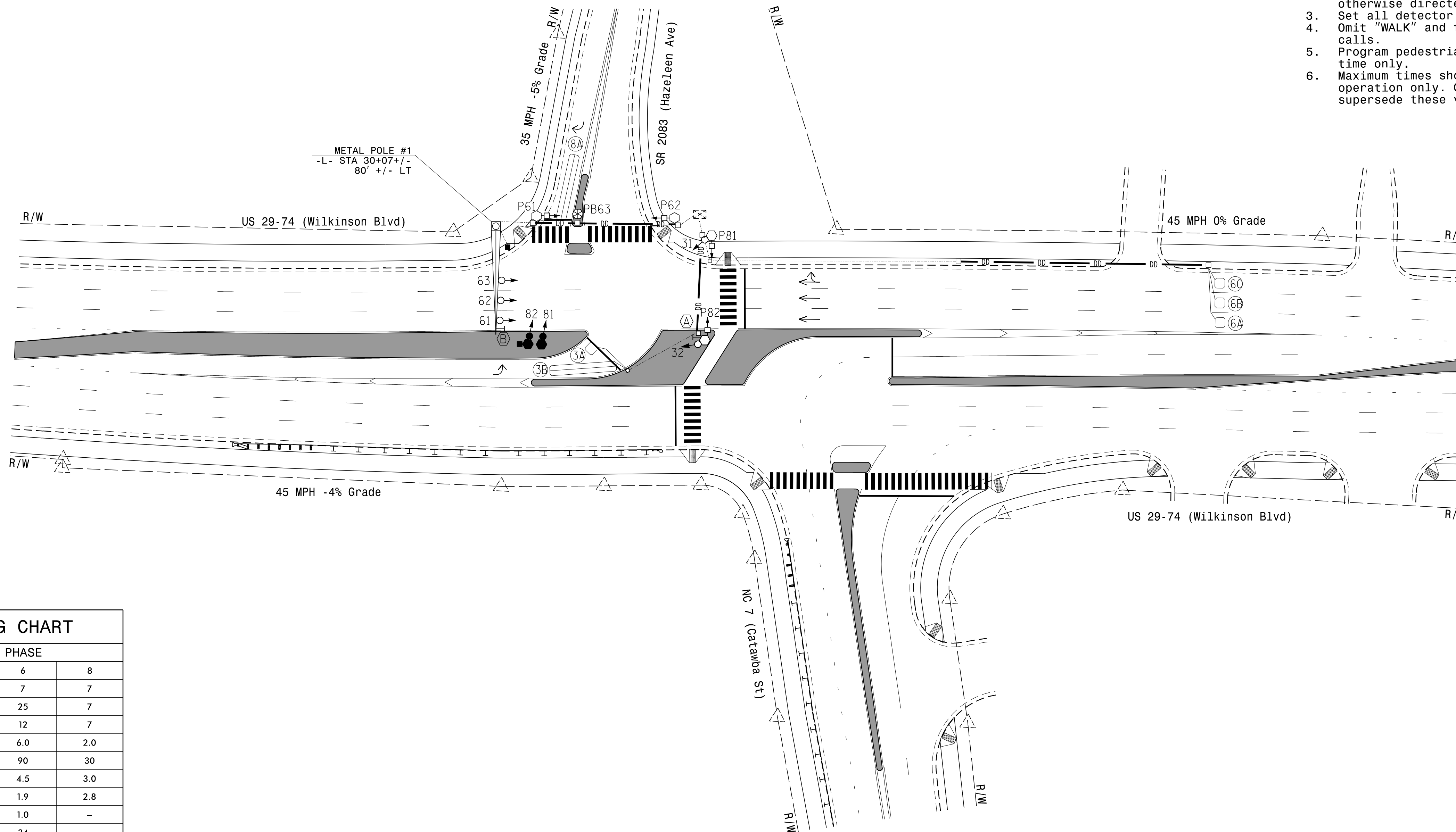
MAXTIME DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL CALL	DELAY DURING GREEN	NEW CARD	
3A	6X6	0	3	X	3	-	-	X	-	X	-	X
3B	6X40	0	2-4-2	X	3	-	-	X	-	X	-	X
6A	6X6	300	4	X	6	-	-	X	X	X	-	X
6B	6X6	300	4	X	6	-	-	X	X	X	-	X
6C	6X6	300	4	X	6	-	-	X	X	X	-	X
8A	6X40	0	2-4-2	X	8	15.0	-	X	-	X	-	X

2 Phase Fully Actuated (Belmont Signal System)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specification for Roads and Structures" dated January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Set all detector units to presence mode.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



FEATURE	PHASE		
	3	6	8
Walk *	-	7	7
Ped Clear	-	25	7
Min Green *	7	12	7
Passage *	2.0	6.0	2.0
Max 1 *	30	90	30
Yellow Change	3.0	4.5	3.0
Red Clear	2.8	1.9	2.8
Added Initial *	-	1.0	-
Maximum Initial *	-	34	-
Time Before Reduction *	-	15	-
Time To Reduce *	-	30	-
Minimum Gap	-	3.0	-
Advance Walk	-	7	-
Non Lock Detector	X	-	X
Vehicle Recall	-	MIN RECALL	-
Dual Entry	X	-	X

* These values may be field adjusted. Do not adjust Min Green and Extension times for phase 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

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	N/A → Right of Way
○ → Directional Arrow	○ → Directional Arrow
N/A → Metal Pole with Mastarm	○ → Metal Pole with Mastarm
N/A → Guardrail	○ → Guardrail
○ → Type I Pushbutton Post	○ → Type I Pushbutton Post
○ → Type II Signal Pedestal	○ → Type II Signal Pedestal
N/A → Curb Ramp	○ → Curb Ramp
○ → No U-Turn Sign (R3-4)	○ → No U-Turn Sign (R3-4)
○ → No Left Turn Sign (R3-2)	○ → No Left Turn Sign (R3-2)

New Installation - Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

RK&K
 P: (919) 878-8560
 8801 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
 NC License No. F-0112
 www.rk.com
 Responsive People | Creative Solutions

Prepared For the Offices of:

 750 N. Greenfield Pkwy, Garner, NC 27529

US 29-74 (Wilkinson Blvd) at SR 2083 (Hazeleen Ave)
 Division 12 Gaston County Belmont
 PLAN DATE: August 2025 REVIEWED BY: DT Sears
 PREPARED BY: WP Erickson-Jones REVIEWED BY:
 REVISIONS: _____ INIT. DATE
 _____ INIT. DATE
 _____ INIT. DATE

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 044558
 DAVID T. SEARS
 David T. Sears
 09183285741E
 SIGNATURE DATE
 8/11/2025
 SIG. INVENTORY NO. 12-1919

8/11/2025
 R:\Projects\6051\U-6143\Sigs\Signal\12-1919_csbm.dgn
 ds0005