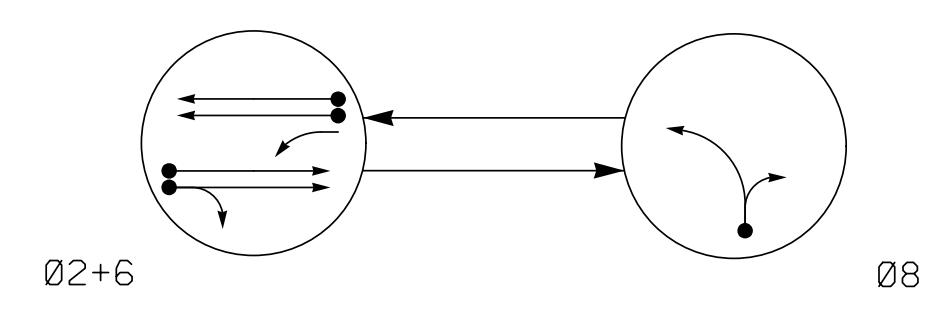


**PHASING DIAGRAM**



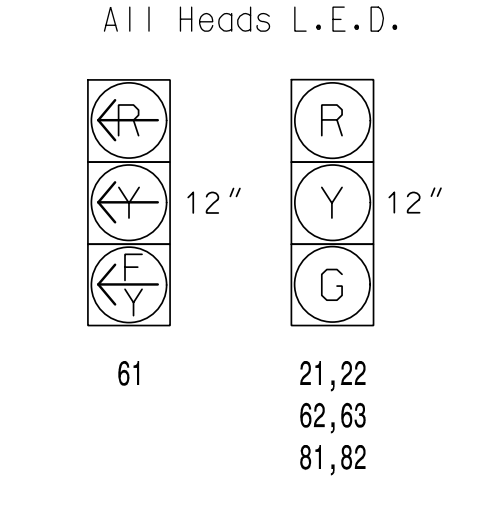
**PHASING DIAGRAM DETECTION LEGEND**

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

**TABLE OF OPERATION**

SIGNAL FACE	PHASE		
	Ø 2+6	Ø 8	FLASH
21,22	G	R	Y
61	F	R	Y
62,63	G	R	Y
81,82	R	G	R

**SIGNAL FACE I.D.**



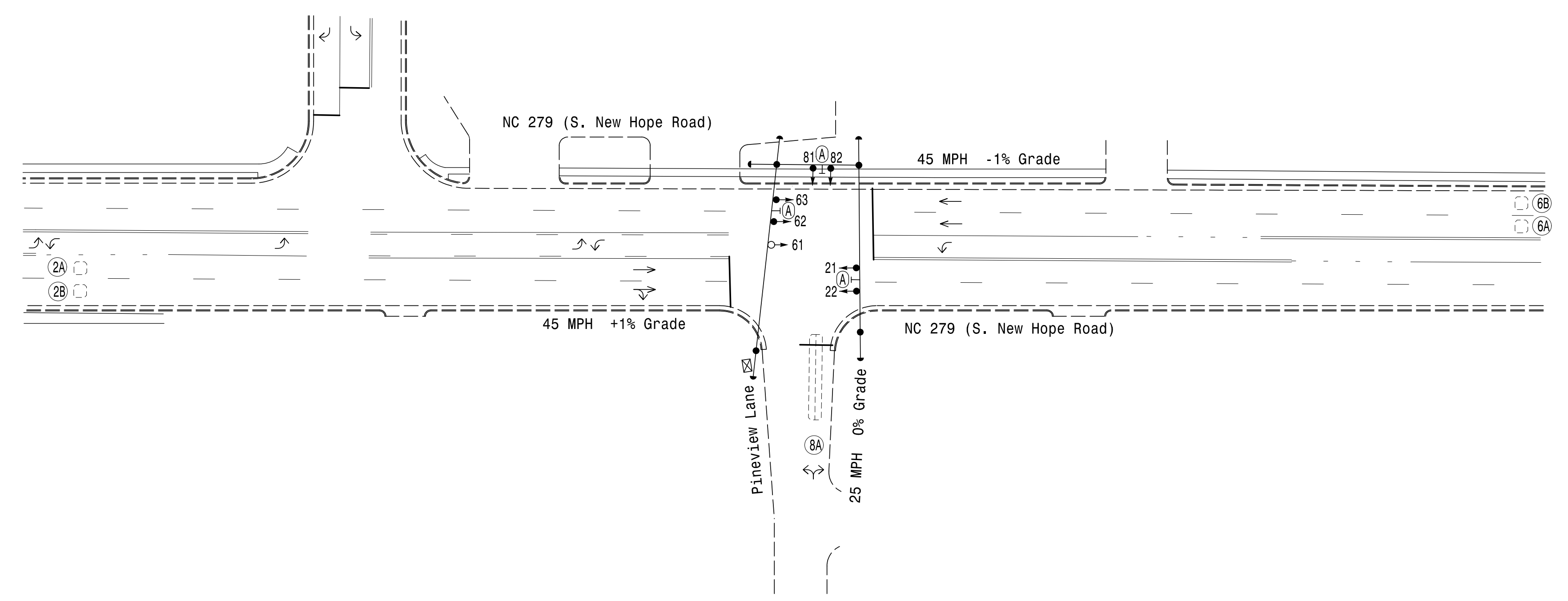
**DETECTOR INSTALLATION CHART**

LOOP	DETECTOR				PROGRAMMING							
	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
2A	6X6	300	EXIST	-	2	Yes	-	-	X	N	-	X
2B	6X6	300	EXIST	-	2	Yes	-	-	X	N	-	X
6A	6X6	300	EXIST	-	6	Yes	-	-	X	N	-	X
6B	6X6	300	EXIST	-	6	Yes	-	-	X	N	-	X
8A	6X40	+5	2-4-2	-	8	Yes	-	5	-	N	-	X

**2 Phase Fully Actuated Gastonia Signal System**

**NOTES**

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Reposition existing signal heads numbered 62 & 63.
- Set all detector units to presence mode.
- 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 shall supersede these values.
- Install new cabinet on the existing cabinet foundation.
- All new cabinets and base extenders shall be black in color. See Project Special Provisions for details.
- Reconnect lead-in cable to separate loops 2A, 2B, 6A, & 6B, as shown.
- Existing signal heads 61, & 62 have been relabeled to 62, & 63, respectively.
- Existing phase 4 has been changed to phase 8 on this plan. Change all signal heads, pedestrian signal heads, pedestrian push buttons, and loops as needed to achieve the phasing shown.
- City of system data:  
Controller Asset #1231.



**TIMING CHART**

FEATURE	PHASE		
	2	6	8
Min Green *	12	12	7
Walk *	-	-	-
Ped Clear	-	-	-
Veh. Extension *	6.0	6.0	2.0
Max 1 *	90	90	30
Yellow	4.6	4.6	3.0
Red Clear	1.0	1.0	2.3
Red Revert	2.0	2.0	2.0
Actuations B4 Add *	-	-	-
Seconds /Actuation *	1.5	1.5	-
Max Initial *	34	34	-
Time Before Reduction *	15	15	-
Time To Reduce *	30	30	-
Minimum Gap	3.0	3.0	-
Locking Detector	X	X	-
Recall Position	MIN RECALL	MIN RECALL	-
Dual Entry	-	-	-
Simultaneous Gap	X	X	X

\* 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
□→ Pedestrian Signal Head With Push Button & Sign	□→ N/A
○→ Signal Pole with Guy	○→ N/A
○→ Signal Pole with Sidewalk Guy	○→ N/A
⊠→ Inductive Loop Detector	⊠→ N/A
⊠→ Controller & Cabinet	⊠→ N/A
□→ Junction Box	□→ N/A
--- 2-in Underground Conduit	--- 2-in Underground Conduit
N/A Right of Way	N/A Right of Way
→ Directional Arrow	→ Directional Arrow
⊠ Street Name Sign (D3-1)	⊠ Street Name Sign (D3-1)

**Signal Upgrade**

Prepared For:  
**Kimley-Horn**  
750 N. Greenfield Pkwy, Garner, NC 27529  
NC License #0102  
421 Fayetteville Street, Suite 600  
Raleigh, NC 27601  
(919) 677-2000

**NC 279 (S. New Hope Road) at Pineview Lane**

Division 12 Gaston County Gastonia

PLAN DATE: May 2021 REVIEWED BY: SL Phillips  
PREPARED BY: CF Davis REVIEWED BY: KP Baumann

REVISIONS: \_\_\_\_\_ INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

3/11/2022

SIG. INVENTORY NO. 12-1231

3/9/2022 11:16:30 AM Daniel B. Curr 1 \*\*\*K:\meyer-horn.com\SE\_RAL\RAL\_TIP\DK-TIS\01036569\_Gastonia Signal System\Signal\SW54 - Signal Design\121231-2021.dgn