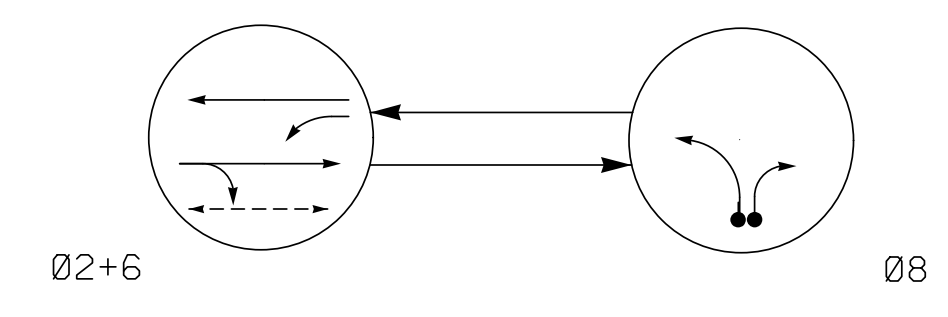


**PHASING DIAGRAM**



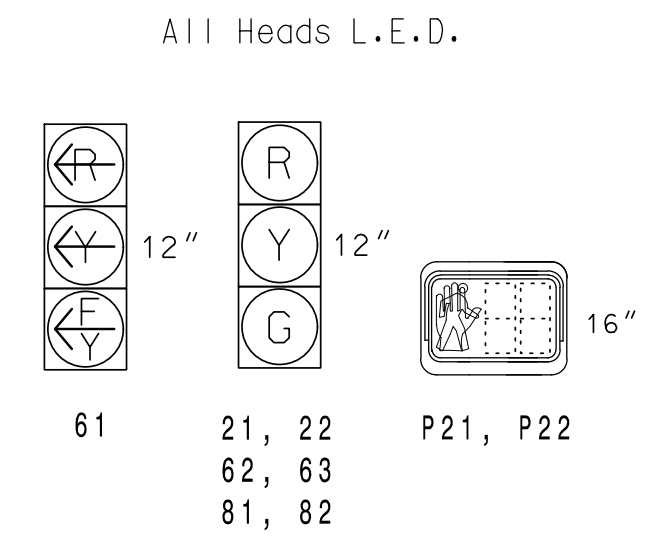
**PHASING DIAGRAM DETECTION LEGEND**

- ◄●◄ DETECTED MOVEMENT
- ◄◄◄ UNDETECTED MOVEMENT (OVERLAP)
- ◄-◄ UNSIGNALIZED MOVEMENT
- ◄-◄-◄ PEDESTRIAN MOVEMENT

**TABLE OF OPERATION**

SIGNAL FACE	PHASE		
	G	R	Y
21, 22	G	R	Y
61	W	DW	DRK
62, 63	G	R	Y
81, 82	R	G	R
P21, P22	W	DW	DRK

**SIGNAL FACE I.D.**



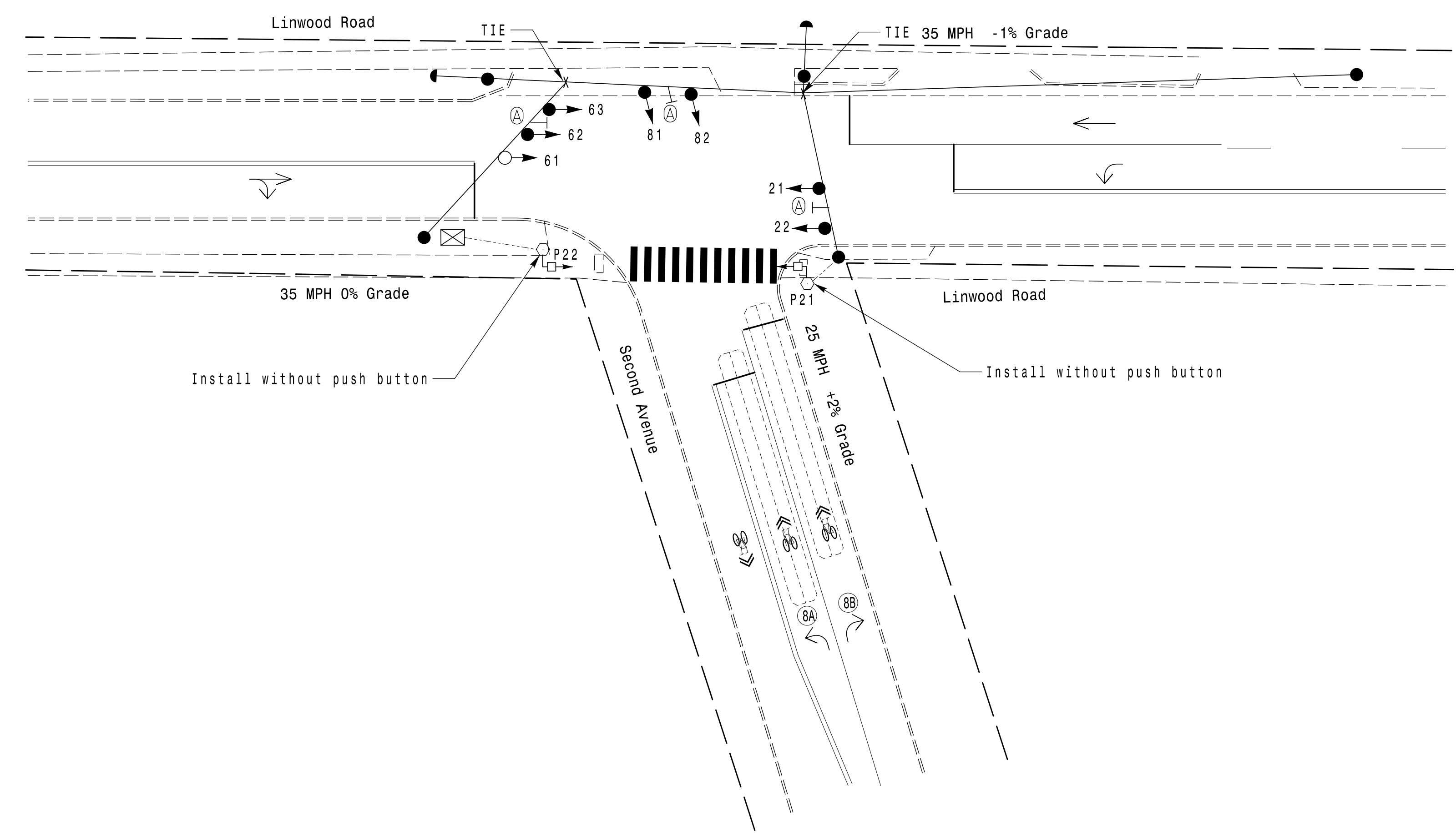
**DETECTOR INSTALLATION CHART**

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
8A	6X60	+5	2-4-2	-	8	Yes	-	-	-	N	-	X
8B	6X60	+5	2-4-2	-	8	Yes	-	-	-	N	-	X

**2 Phase Semi-Actuated Gastonia Signal System**

**NOTES**

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
4. In the event of loop replacement, refer to the current ITS and Signal Design Manual and submit a Plan of Record to the Signal Design Section.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
7. 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.
8. Pavement markings are existing.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
10. Install new cabinet on the existing cabinet foundation.
11. All new cabinets and base extenders shall be black in color. See Project Special Provisions for details.
12. All proposed pedestrian signal heads and pedestals shall be black in color. See Project Special Provisions for details.
13. City system data:  
Controller Asset: #0061



**TIMING CHART**

FEATURE	PHASE		
	2	6	8
Min Green *	10	10	7
Walk *	4	-	-
Ped Clear	8	-	-
Veh. Extension *	-	-	2.0
Max I *	45	45	25
Yellow	3.9	3.9	3.0
Red Clear	2.2	2.2	2.3
Red Revert	2.0	2.0	2.0
Actuations B4 Add *	-	-	-
Seconds / Actuation *	-	-	-
Max Initial *	-	-	-
Time Before Reduction *	-	-	-
Time To Reduce *	-	-	-
Minimum Gap	-	-	-
Locking Detector	-	-	-
Recall Position	PED/MAX	MAX RECALL	-
Dual Entry	-	-	-
Simultaneous Gap	X	X	X

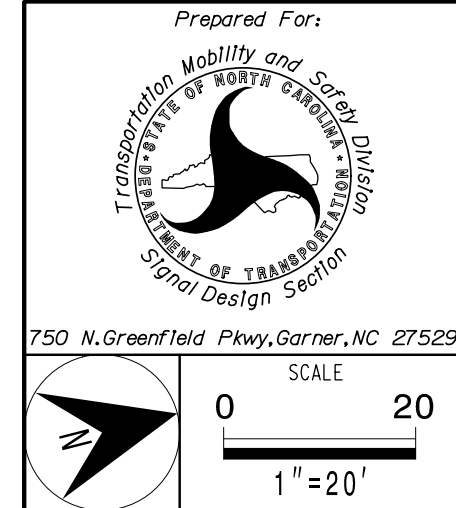
\* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

**LEGEND**

PROPOSED	EXISTING
○→ Traffic Signal Head	●→ Traffic Signal Head
◐→ Modified Signal Head	N/A
⊥ Sign	⊥ Sign
○ Type II Signal Pedestal	● Type II Signal Pedestal
□ Pedestrian Signal Head with Sign	■ Pedestrian Signal Head with 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
(A) Street Name Sign (D3-1)	(A) Street Name Sign (D3-1)

**Signal Upgrade**

PLANS PREPARED IN THE OFFICE OF:  
**Kimley-Horn**  
NC License #F-0102  
421 Fayetteville Street, Suite 600  
Raleigh, NC 27601  
(919) 677-2000



<b>Linwood Road at Second Avenue</b>	
Division 12	Gaston County
Prepared By: SP Pennington	Reviewed By: SL Phillips
Prepared By: SP Pennington	Reviewed By: KP Baumann
REVISIONS	INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

	3/11/2022 DATE
SIG. INVENTORY NO.	12-0061

3/9/2022 11:13:23 AM D:\m181\le\_c\pfr1 \*\*\*k:\miley-horn.com\SEL\RAL\IP\OK\_LITS\01036569\_Gastonia\_Signal\_System\9\_Signal\_System\9\_Signal\_System.dgn