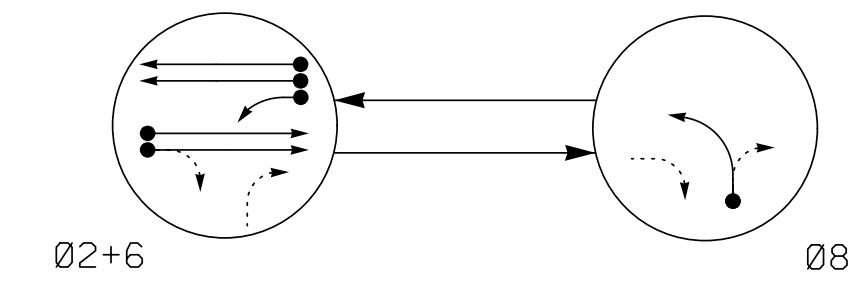


**PHASING DIAGRAM**



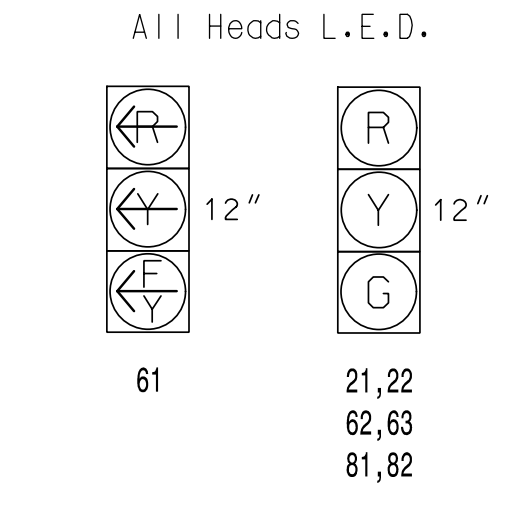
**PHASING DIAGRAM DETECTION LEGEND**

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

**TABLE OF OPERATION**

SIGNAL FACE	PHASE		
	Ø 2+6	Ø 4+8	FLASH
21,22	G	R	Y
61	Y	R	Y
62,63	G	R	Y
81,82	R	G	R

**SIGNAL FACE I.D.**



**DETECTOR INSTALLATION CHART**

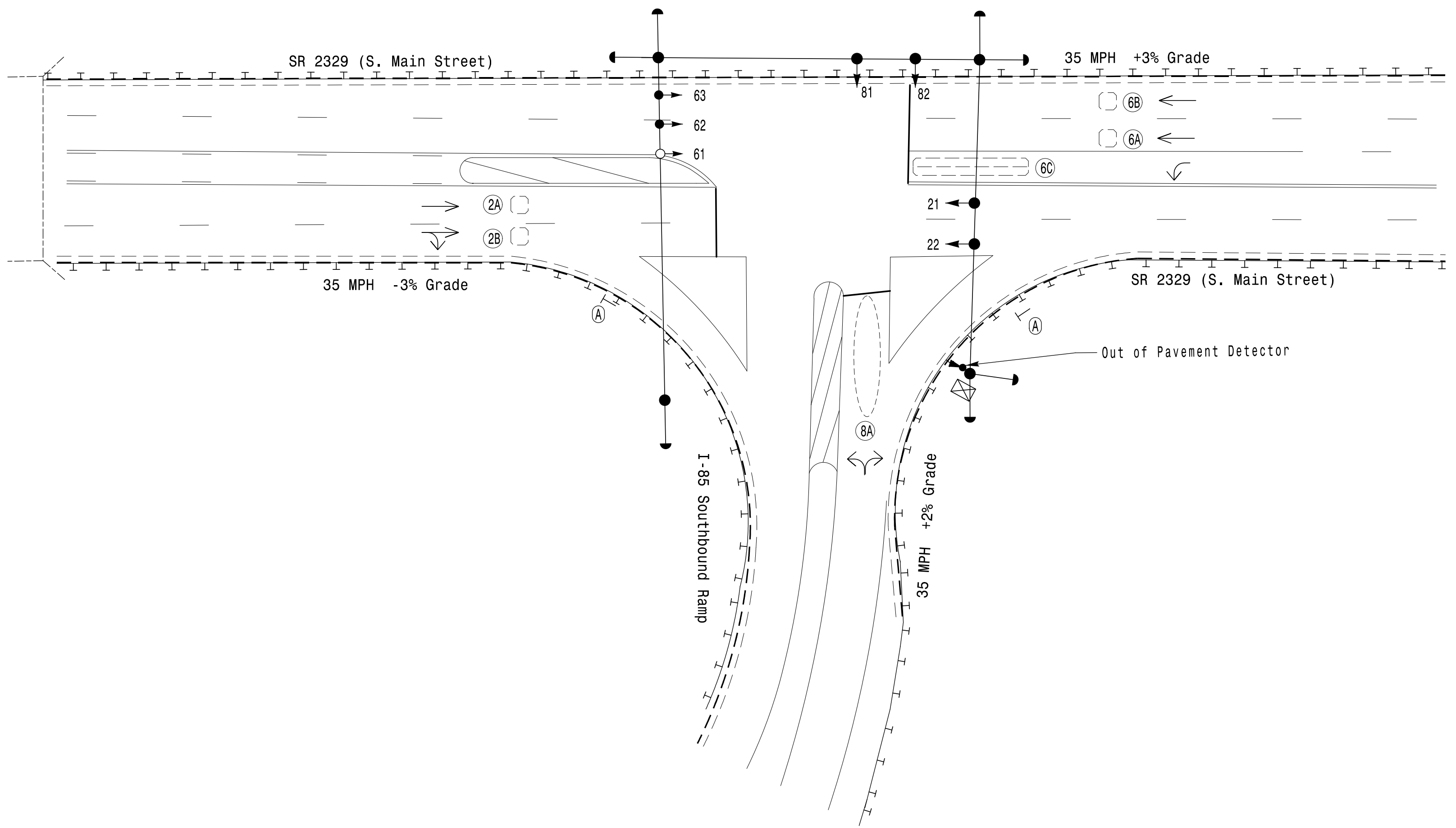
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	LOOP	NEW CARD
2A	6X6	70	EXIST	-	2	Yes	-	-	-	N	-	X
2B	6X6	70	EXIST	-	2	Yes	-	-	-	N	-	X
6A	6X6	70	EXIST	-	6	Yes	-	-	-	N	-	X
6B	6X6	70	EXIST	-	6	Yes	-	-	-	N	-	X
6C	6X40	0	2-4-2	-	6	Yes	-	-	-	N	-	X
* 8A	N/A	0	N/A	-	8	Yes	-	-	-	N	-	X

\* Microwave Detection

**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 and 63.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Remove existing "Left Turn Signal" sign-(R10-10L)
- 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 and 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 detection zones as needed to achieve the phasing shown.
- City system data:  
Controller Asset #1320.



**TIMING CHART**

FEATURE	PHASE		
	2	6	8
Min Green *	10	10	7
Walk *	-	-	-
Red Clear	-	-	-
Veh. Extension *	3.0	3.0	3.0
Max 1 *	45	45	25
Yellow	4.1	4.1	3.0
Red Clear	1.8	1.8	2.4
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	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	● →
● → Modified Signal Head	N/A
↑ Sign	↑
○ → Signal Pole with Guy	● →
○ → Signal Pole with Sidewalk Guy	● →
□ ⊗ Inductive Loop Detector	□ ⊗
□ Controler & Cabinet Junction Box	■
--- 2-in Underground Conduit	---
N/A Right of Way	---
→ Directional Arrow	→
N/A Guardrail	---
○ Microwave Detection Area	○
○ Out of Pavement Detector	●
⊗ "YIELD" Sign (R1-2)	⊗

**Signal Upgrade**

Prepared For:  
**Kimley-Horn**

PLANS PREPARED IN THE OFFICE OF:  
**Kimley-Horn**  
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Raleigh, NC 27601  
(919) 677-2000

**SR 2329 (S. Main Street)  
at  
I-85 Southbound Ramp**

Division 12 Gaston County Gastonia

PLAN DATE: May 2021 REVIEWED BY: SL Phillips  
PREPARED BY: LL Matney REVIEWED BY: KP Baumann

SCALE: 1" = 30'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

**SEAL 044434**  
KEVIN P. BAUMANN  
ENGINEER

DocuSigned by:  
*Kevin P. Baumann*  
3/11/2022

SIG. INVENTORY NO. 12-1320

3/9/2022 11:16:34 AM DanHill@curr1 \*\*\*K:\mley-horn.com\SE-RAL\MRAL-TIP\DK-TIS\011036569\_Gastonia Signal System9\_Signal\KWS4 - Signal Design\121320-2021.dgn