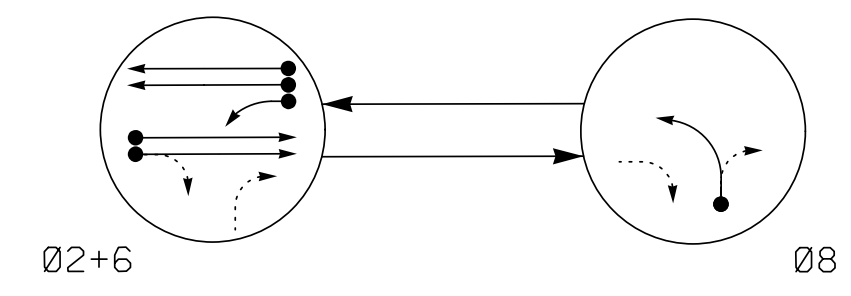


PHASING DIAGRAM



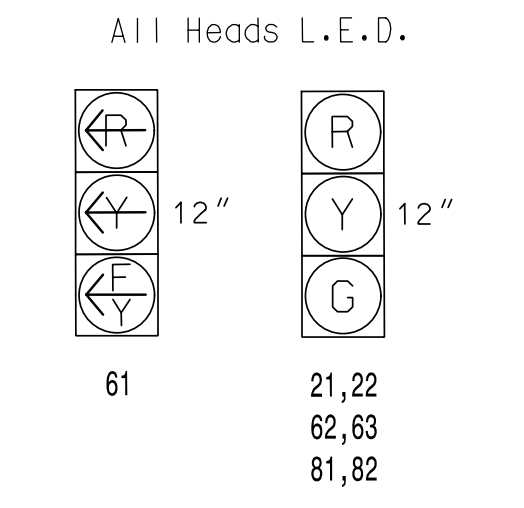
PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE		
	Ø2+6	Ø4+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

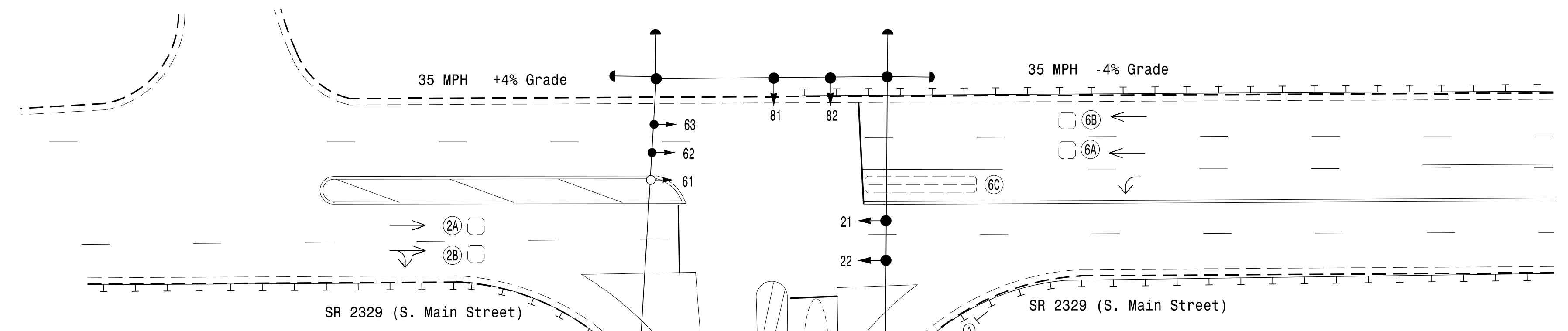
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
2A	6X6	70	EXIST	-	2	Yes	-	-	-	N	-	X
2B	6X6	70	EXIST	-	2	Yes	-	-	-	N	-	X
6A	6X6	70	EXIST	-	6	Yes	-	-	-	N	-	X
6B	6X6	70	EXIST	-	6	Yes	-	-	-	N	-	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 #1319.



TIMING CHART

FEATURE	PHASE		
	2	6	8
Min Green *	10	10	7
Walk *	-	-	-
Ped Clear	-	-	-
Veh. Extension *	3.0	3.0	3.0
Max 1 *	45	45	20
Yellow	4.1	4.1	3.0
Red Clear	1.2	1.2	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	●→ N/A
●→ Modified Signal Head	○→ N/A
⊥ Sign	⊥ Sign
○→ Signal Pole with Guy	●→ Signal Pole with Sidewalk Guy
○→ Signal Pole with Sidewalk Guy	○→ Inductive Loop Detector
⊠ Controller & Cabinet	⊠ Junction Box
□	□
--- 2-in Underground Conduit	--- 2-in Underground Conduit
N/A	--- Right of Way
→	→ Directional Arrow
N/A	→ Guardrail
○ Microwave Detection Area	○ Microwave Detection Area
○ Out of Pavement Detector	○ Out of Pavement Detector
⊠ "YIELD" Sign (R1-2)	⊠ "YIELD" Sign (R1-2)

Signal Upgrade

Prepared For: **SR 2329 (S. Main Street) at I-85 Northbound Ramp**

Division 12 Gaston County Gastonia

PLAN DATE: May 2021 REVIEWED BY: SL Phillips

PREPARED BY: LL Matney REVIEWED BY: KP Baumann

REVISIONS: _____ INIT. DATE

SCALE: 1" = 30'

Documented by: _____ DATE: 3/11/2022

SIG. INVENTORY NO. 12-1319

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

3/9/2022 11:16:32 AM DanHill@curr1 ***K:\Inley-Horn.com\SE-RAL\MRAL-TIPDK-TIS\011036569_Gastonia Signal System9_Signal.kws4 - Signal Design\121319-2021.dgn