2 Phase Fully 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. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- 5. Pavement markings are existing.
- 6. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
- 7. Disconnect and abandon existing loops 2B and 6B.
- 8. Install new cabinet on the existing cabinet foundation.
- 9. All new cabinets and base extenders shall be black in color. See Project Special Provisions for details.
- 10. 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.
- 11. City of system data:

Controller Asset #1046.

LEGEND <u>PROPOSED</u> <u>EXISTING</u> Traffic Signal Head **-**Modified Signal Head Sign Pedestrian Signal Head Signal Pole with Guy Signal Pole with Sidewalk Guy Inductive Loop Detector Controller & Cabinet Junction Box ----- 2-in Underground Conduit N/A Right of Way Directional Arrow $\langle A \rangle$ Street Name Sign

Signal Upgrade 750 N.Greenfield Pkwy,Garner,NC 27529 PREPARED BY: DM Curri

— Disconnect & Abandon Existing Loop 6B

Kimley » Horn

SR 2439 (Lowell Bethesda Rd)

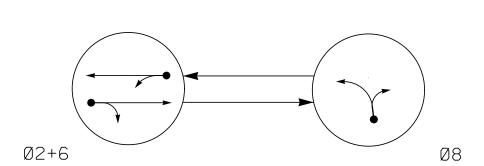
SR 2209 (Cramerton Rd) Division 12 Gaston County Gastonia REVIEWED BY: SL Phillips May 2021 REVIEWED BY: KP Baumann

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL

SIGNATURES COMPLETED

3/11/2022 SIG. INVENTORY NO.

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

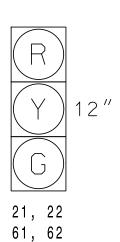
DETECTED MOVEMENT UNDETECTED MOVEMENT (OVERLAP)

UNSIGNALIZED MOVEMENT ← − → PEDESTRIAN MOVEMENT

TABLE OF OPERATION PHASE SIGNAL FACE 21,22 61,62 81,82

SIGNAL FACE I.D.

All Heads L.E.D.



81, 82

Gas Station

DETECTOR INSTALLATION CHART

PHASE

6 Yes

8 Yes

PROGRAMMING

EXTEND DELAY

TIME TIME

ADDED

DETECTOR

SIZE

LOOP

DISTANCE FROM

STOPBAR

6X6 | 300 | EXIST

6X6 300 EXIST

6X40 0 2-4-2

TURNS

, 45 MPH

+3% Grade

SR 2439 (Lowell Bethesda Road)

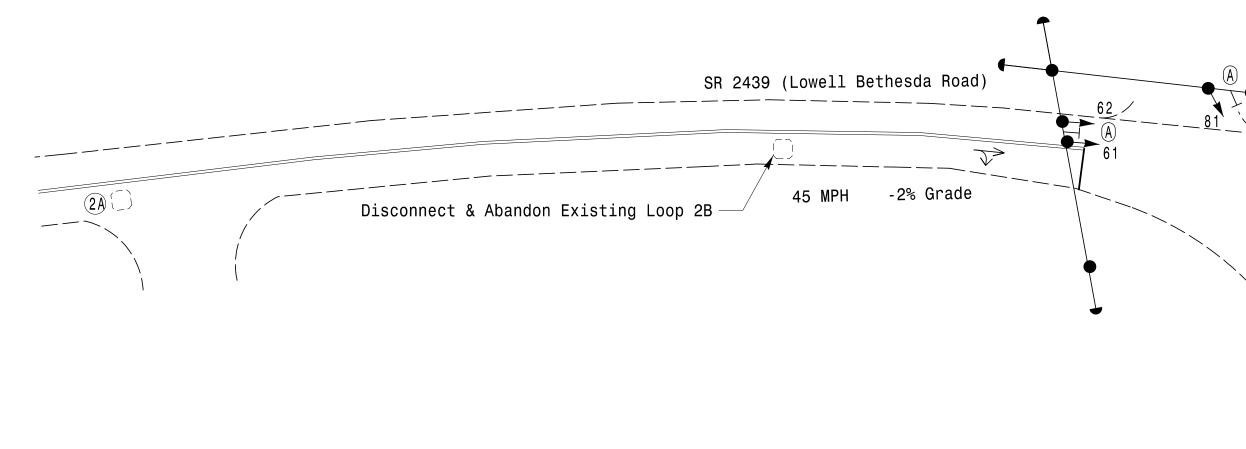
PLANS PREPARED IN THE OFFICE OF:

421 Fayetteville Street, Suite 600

NC License #F-0102

Raleigh, NC 27601

(919) 677-2000



TIMING CHART			
	PHASE		
FEATURE	2	6	8
Min Green *	12	12	7
Walk *	-	-	-
Ped Clear	-	-	-
Veh. Extension *	6.0	6.0	2.0
Max 1 *	45	45	20
Yellow	4.7	4.7	3.0
Red Clear	1.6	1.6	2.6
Red Revert	2.0	2.0	2.0
Actuations B4 Add *	-	-	-
Seconds /Actuation *	2.5	2.5	-
Max Initial *	34	34	-
Time Before Reduction *	15	15	-
Time To Reduce *	30	30	-
Minimum Gap	3.0	3.0	-
Locking Detector	X	Х	-
Recall Position	MIN RECALL	MIN RECALL	-

* 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.

Dual Entry

Simultaneous Gap