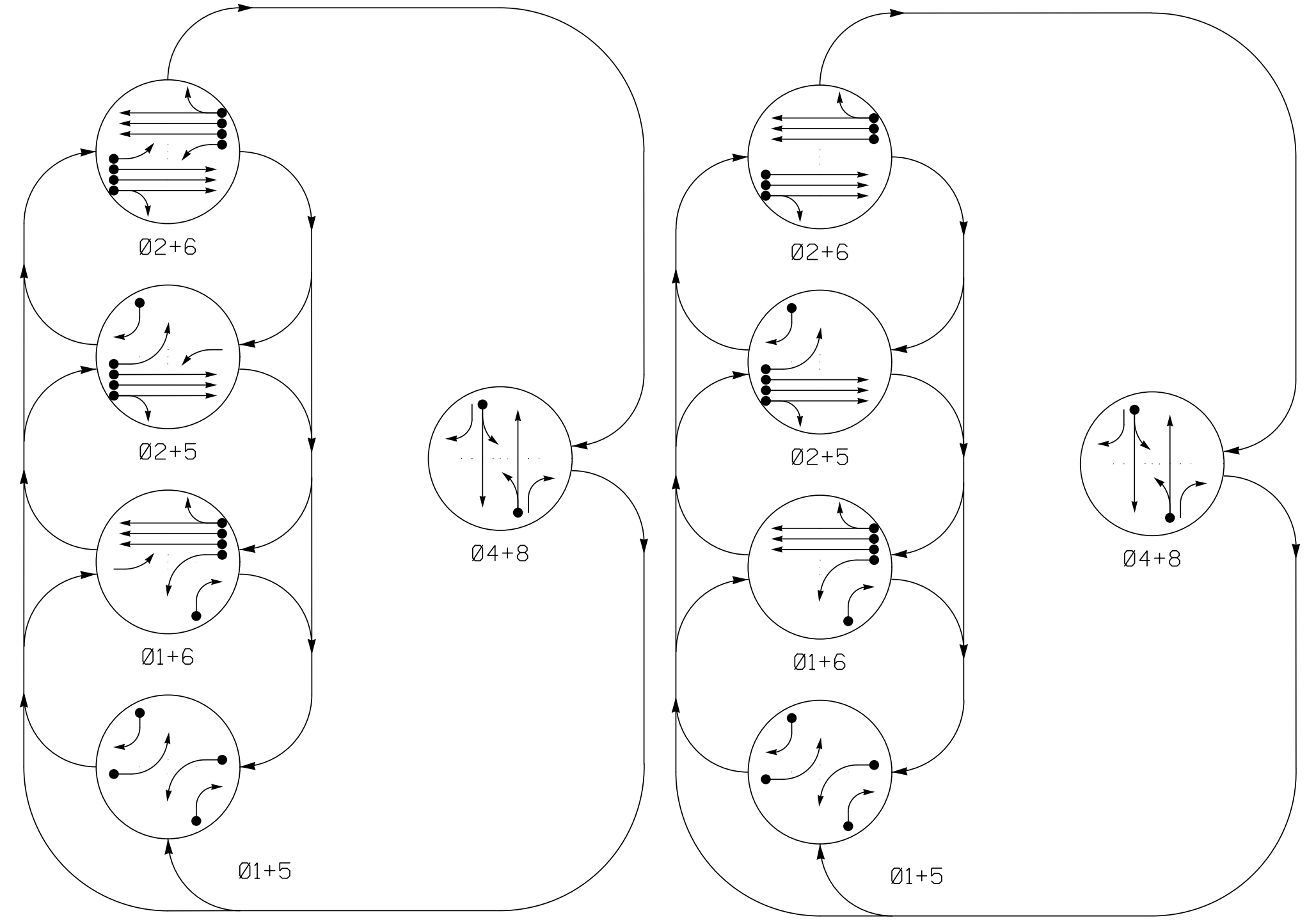


DEFAULT PHASING DIAGRAM

ALTERNATE PHASING DIAGRAM



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE					
	Ø 1+5	Ø 1+6	Ø 2+5	Ø 2+6	Ø 4+8	FLASH
11	←	←	←	←	←	←
21, 22, 23	R	R	G	G	R	Y
41	R	R	R	R	G	R
42	R	R	R	R	G	R
51	←	←	←	←	←	←
61, 62, 63	R	G	R	G	R	Y
81	R	R	R	R	G	R
82	R	R	R	R	G	R

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE					
	Ø 1+5	Ø 1+6	Ø 2+5	Ø 2+6	Ø 4+8	FLASH
11	←	←	←	←	←	←
21, 22, 23	R	R	G	G	R	Y
41	R	R	R	R	G	R
42	R	R	R	R	G	R
51	←	←	←	←	←	←
61, 62, 63	R	G	R	G	R	Y
81	R	R	R	R	G	R
82	R	R	R	R	G	R

DETECTOR INSTALLATION CHART

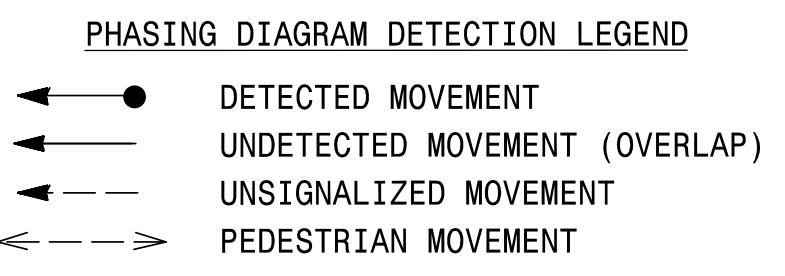
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	-	1	Yes	-	-	-	N	-	X
1B	6X40	15	2-4-2	-	6#	Yes	-	3	-	G	-	X
2A	6X6	300	EXIST	-	2	Yes	-	-	-	X	N	-
2B	6X6	300	EXIST	-	2	Yes	-	-	-	X	N	-
2C	6X6	300	EXIST	-	2	Yes	-	-	-	X	N	-
4A	6X40	0	2-4-2	-	4	Yes	-	-	-	N	-	X
5A	6X40	0	2-4-2	-	5	Yes	-	-	-	N	-	X
5B	6X40	0	2-4-2	-	2#	Yes	-	3	-	G	-	X
6A	6X6	300	EXIST	-	6	Yes	-	-	-	X	N	-
6B	6X6	300	EXIST	-	6	Yes	-	-	-	X	N	-
6C	6X6	300	EXIST	-	6	Yes	-	-	-	X	N	-
8A	6X40	15	2-4-2	-	8	Yes	-	-	-	N	-	X

* Disable delay during Alternate Phasing Operation.
Disable phase call for loop during Alternate Phasing Operation.

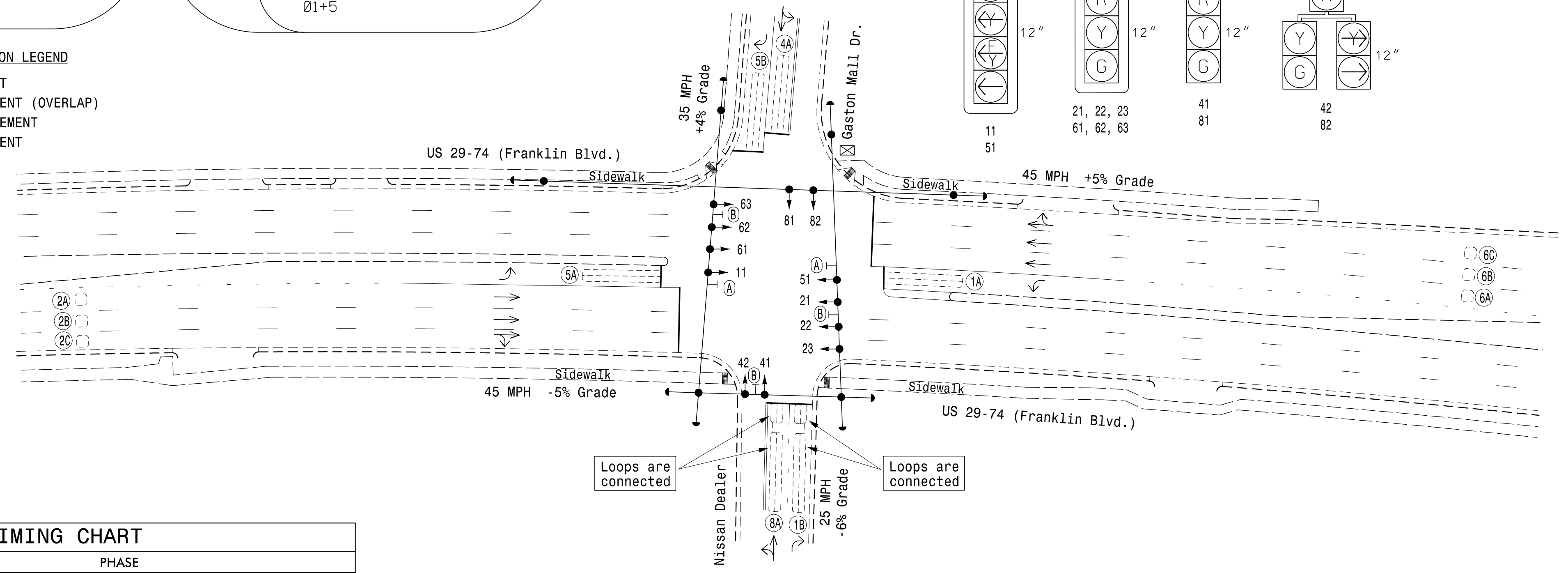
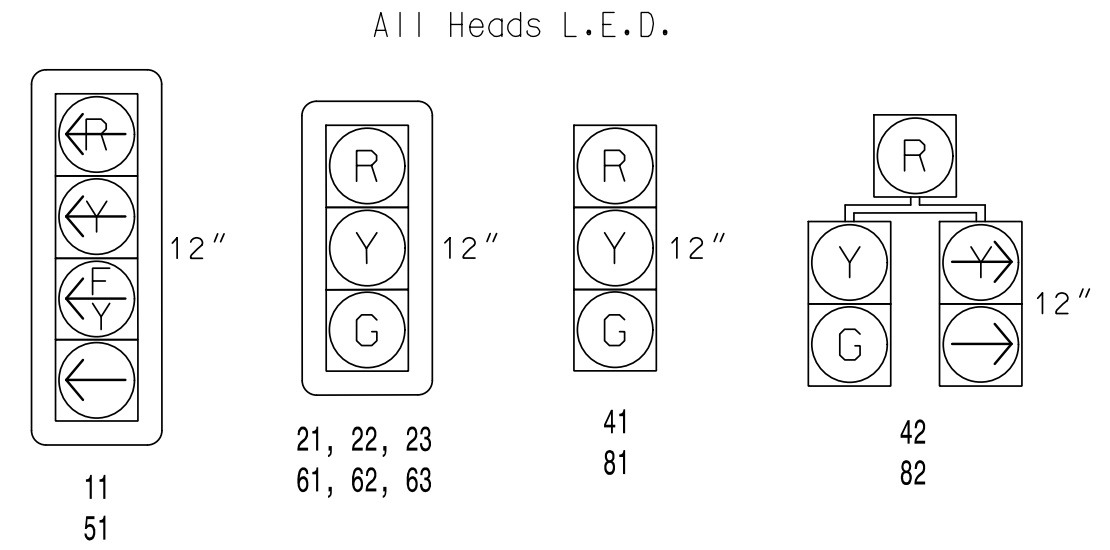
5 Phase Fully Actuated With Alternate Phasing Operation Gastonia Signal System

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Phase 1 and/or phase 5 may be lagged.
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. The City Engineer or their representative will determine the hours of use for each phasing plan.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
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. City system data:
Controller Asset #1778



SIGNAL FACE I.D.

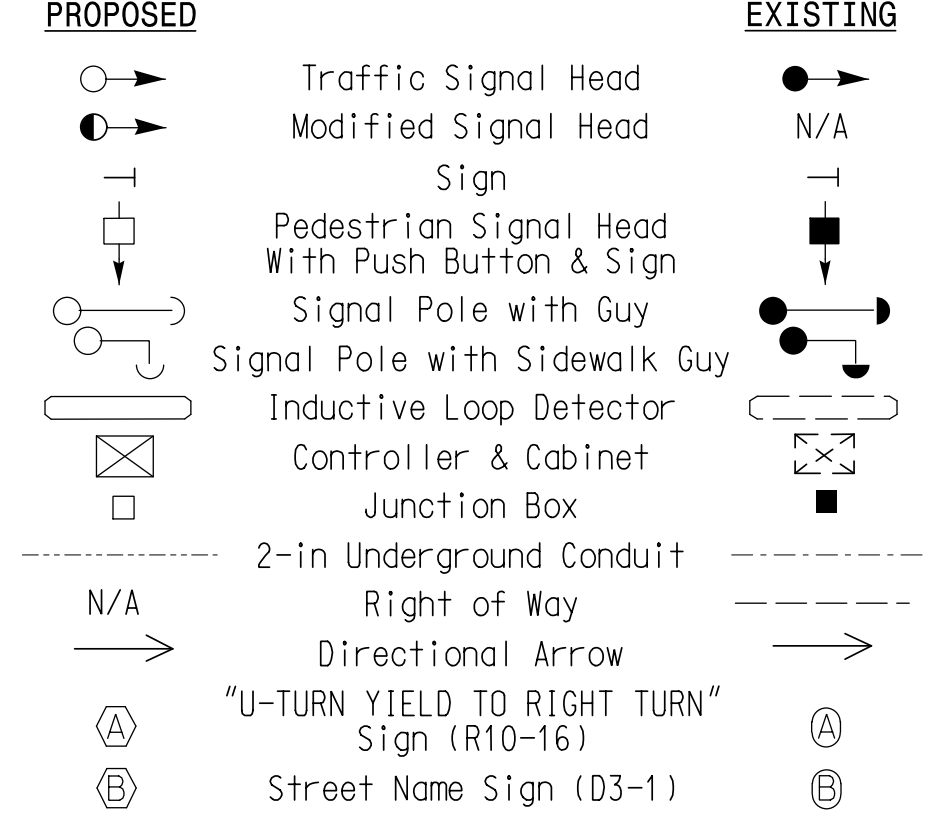


TIMING CHART

FEATURE	PHASE					
	1	2	4	5	6	8
Min Green *	7	12	10	7	12	10
Walk *	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-
Veh. Extension *	2.0	6.0	3.0	2.0	6.0	3.0
Max I *	20	90	30	20	90	30
Yellow	3.0	5.0	3.6	3.1	5.0	3.6
Red Clear	2.6	1.5	3.0	2.8	1.5	3.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Actuations B4 Add *	-	-	-	-	-	-
Seconds / Actuation *	-	1.0	-	-	1.0	-
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	-	-	X	-	-	X
Simultaneous Gap	X	X	X	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



Signal Upgrade

Prepared For: **US 29-74 (Franklin Boulevard) at Gaston Mall Drive / Nissan Dealer**

Division 12 Gaston County Gastonia

PLAN DATE: May 2021 REVIEWED BY: SL Phillips

PREPARED BY: SP Pennington REVIEWED BY: KP Baumann

750 N. Greenfield Pkwy, Garner, NC 27529

NC License #0102 421 Fayetteville Street, Suite 600 Raleigh, NC 27601 (919) 677-2000

SCALE: 0 40 1"=40'

REVISIONS: INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Seal: NORTH CAROLINA PROFESSIONAL ENGINEER KEVIN P. BAUMANN SEAL 044434

Designed by: [Signature] DATE: 3/11/2022

SIG. INVENTORY NO. 12-1778

3/9/2022 11:12:54 AM Dantellb.Cur1 ***Kimley-Horn.com\\SE-RAL\\RAL\\IPDK-LIS\\011036569_Gastonia Signal System\\Signal\\SWS4 - Signal Design\\121778-2021.dgn