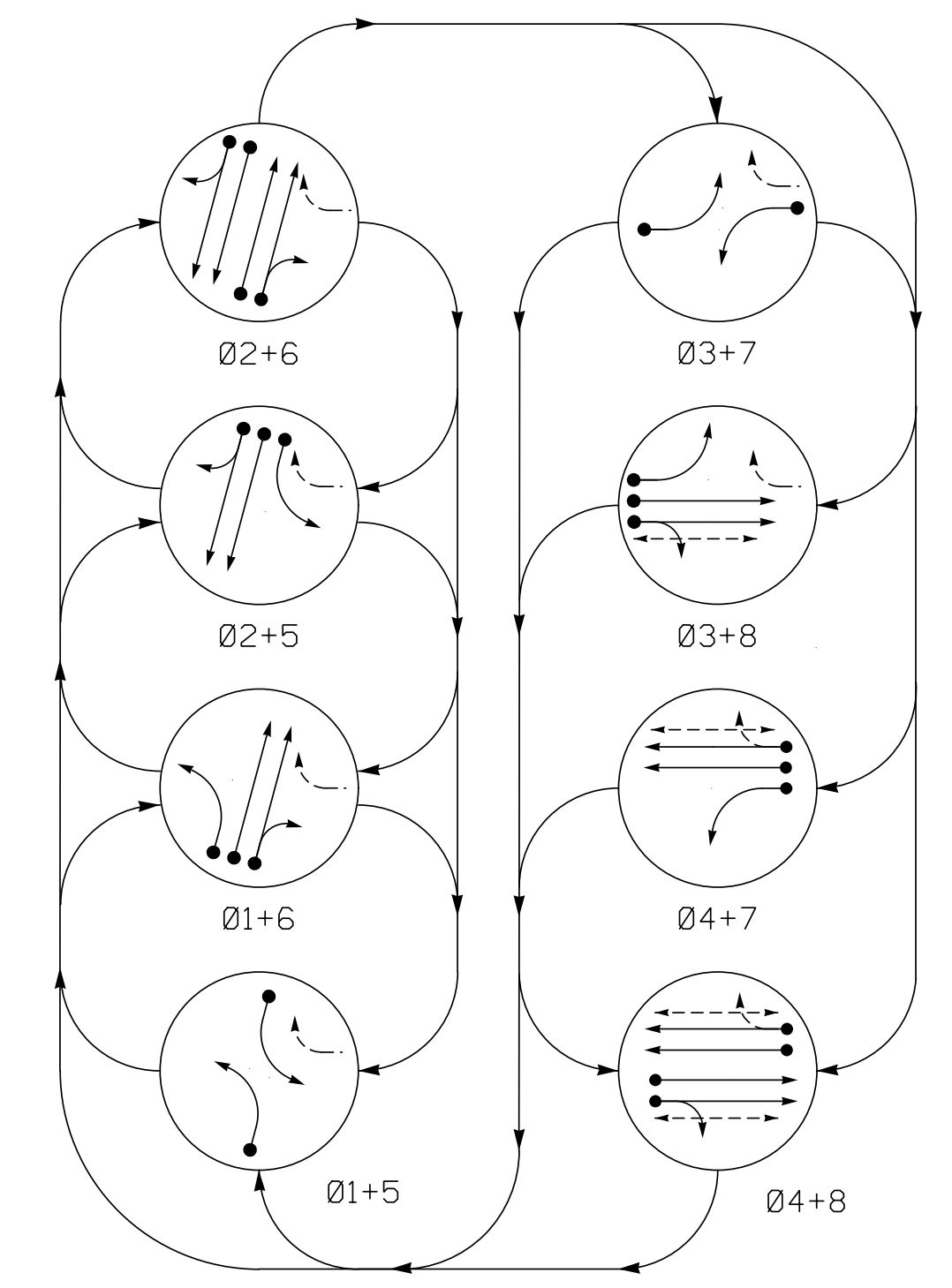
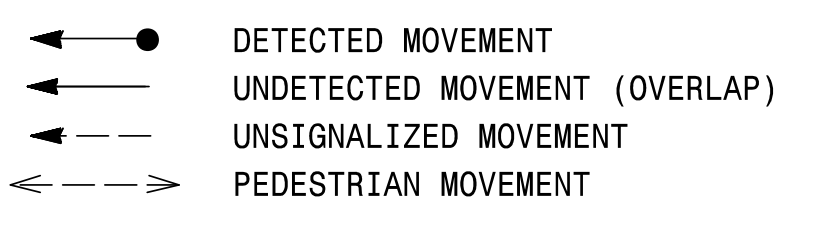


PHASING DIAGRAM

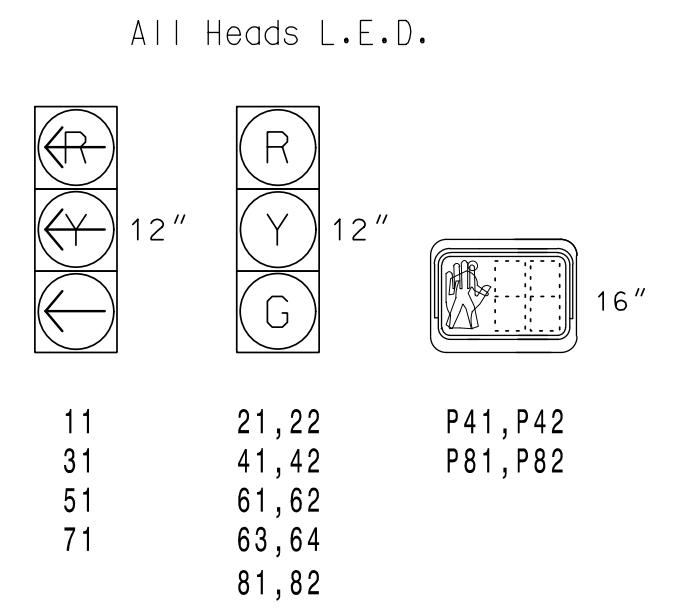


PHASING DIAGRAM DETECTION LEGEND



SIGNAL FACE	PHASE							
	ø 1+5	ø 1+6	ø 2+5	ø 2+6	ø 3+7	ø 3+8	ø 4+7	ø 4+8
11	-	R	R	R	R	R	R	R
21,22	R	R	G	G	R	R	R	Y
31	R	R	R	R	-	-	-	-
41,42	R	R	R	R	R	G	G	R
51	-	R	R	R	R	R	R	R
61,62,63,64	R	G	R	G	R	R	R	Y
71	R	R	R	R	-	-	-	-
81,82	R	R	R	R	G	R	G	R
P41,P42	DW	DW	DW	DW	DW	W	W	DRK
P81,P82	DW	DW	DW	DW	W	DW	W	DRK

SIGNAL FACE I.D.

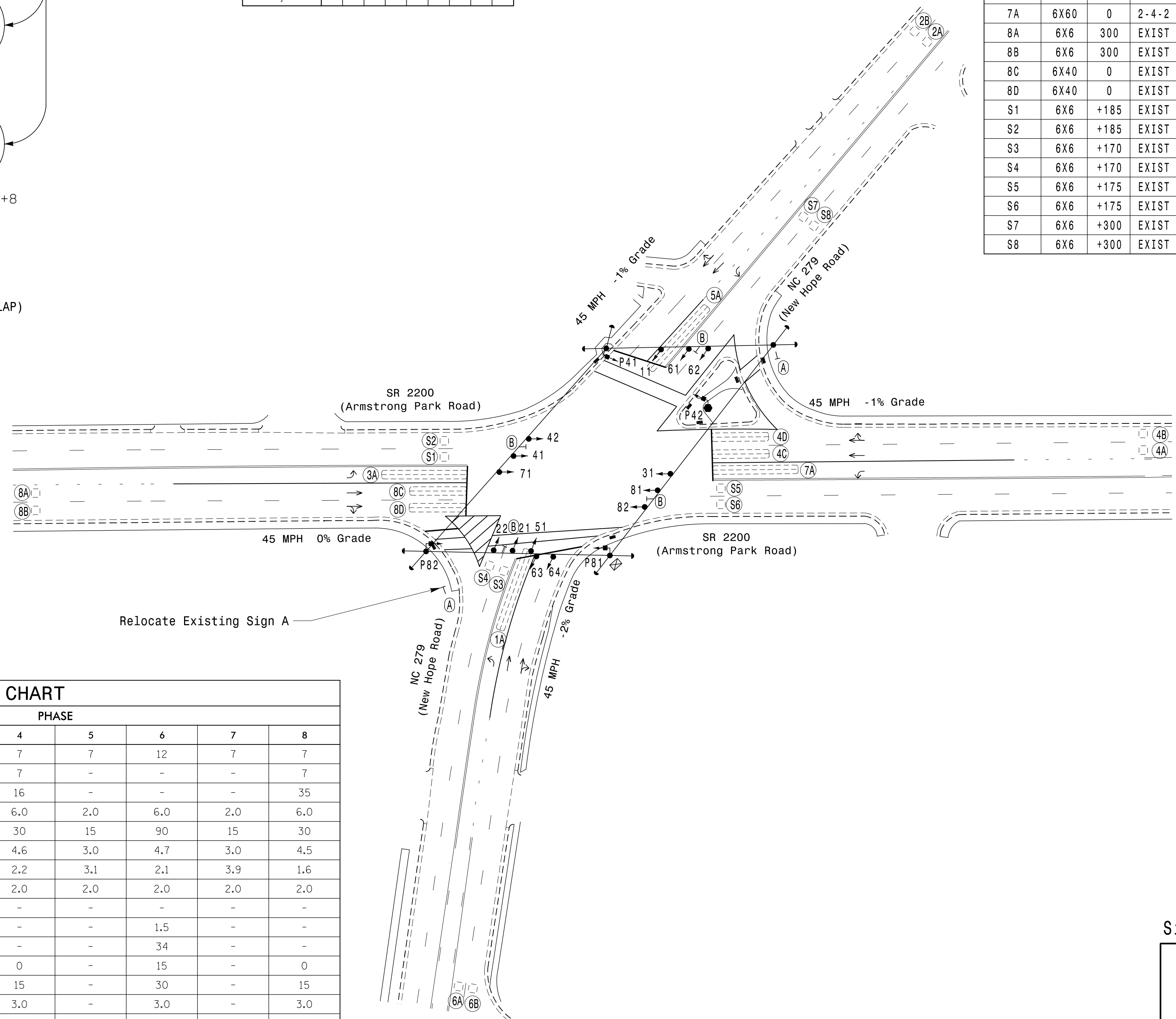


LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	LOOP SYSTEM	NEW CARD
1A	6X60	+5	2-4-2	-	1	Yes	-	3	-	N	X	X
2A	6X6	300	EXIST	-	2	Yes	-	-	X	N	-	X
2B	6X6	300	EXIST	-	2	Yes	-	-	X	N	-	X
3A	6X60	0	2-4-2	-	3	Yes	-	-	-	N	-	X
4A	6X6	300	EXIST	-	4	Yes	-	-	-	N	-	X
4B	6X6	300	EXIST	-	4	Yes	-	-	-	N	-	X
4C	6X40	0	2-4-2	-	4	Yes	2	5	-	N	-	X
4D	6X40	0	2-4-2	-	4	Yes	2	5	-	N	-	X
5A	6X60	+5	2-4-2	-	5	Yes	-	3	-	N	-	X
6A	6X6	300	EXIST	-	6	Yes	-	-	X	N	-	X
6B	6X6	300	EXIST	-	6	Yes	-	-	X	N	-	X
7A	6X60	0	2-4-2	-	7	Yes	-	-	-	N	-	X
8A	6X6	300	EXIST	-	8	Yes	-	-	-	N	-	X
8B	6X6	300	EXIST	-	8	Yes	-	-	-	N	-	X
8C	6X40	0	EXIST	-	8	Yes	2	5	-	N	-	X
8D	6X40	0	EXIST	-	8	Yes	2	5	-	N	-	X
S1	6X6	+185	EXIST	-	SYS	No	-	-	-	N	X	X
S2	6X6	+185	EXIST	-	SYS	No	-	-	-	N	X	X
S3	6X6	+170	EXIST	-	SYS	No	-	-	-	N	X	X
S4	6X6	+170	EXIST	-	SYS	No	-	-	-	N	X	X
S5	6X6	+175	EXIST	-	SYS	No	-	-	-	N	X	X
S6	6X6	+175	EXIST	-	SYS	No	-	-	-	N	X	X
S7	6X6	+300	EXIST	-	SYS	No	-	-	-	N	X	X
S8	6X6	+300	EXIST	-	SYS	No	-	-	-	N	X	X

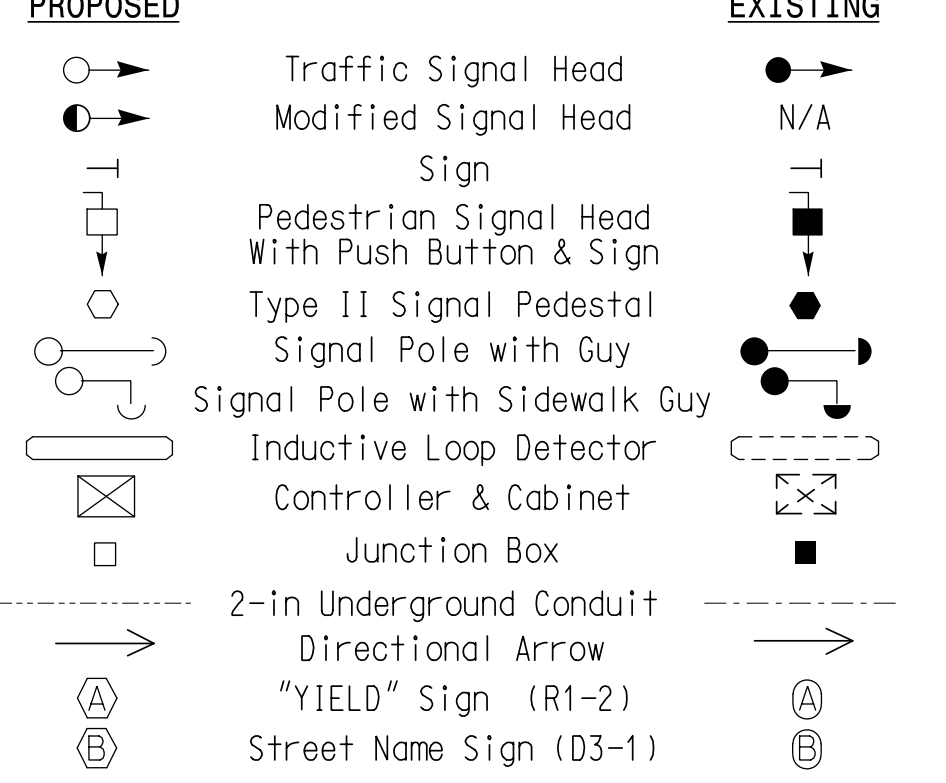
8 Phase Fully Actuated Gastonia Signal System

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.
- Phase 1 and/or phase 5 may be lagged.
- Phase 3 and/or phase 7 may be lagged.
- Set all detector units to presence mode.
- 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.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- 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 S1, S2, S3, S4, S5, S6, S7 & S8 as shown.
- City system data: Controller Asset #0986.



LEGEND



FEATURE	TIMING CHART								
	PHASE	1	2	3	4	5	6	7	8
Min Green *		7	12	7	7	7	12	7	7
Walk *		-	-	-	7	-	-	-	7
Ped Clear		-	-	-	16	-	-	-	35
Veh. Extension *		2.0	6.0	2.0	6.0	2.0	6.0	2.0	6.0
Max 1 *		15	90	15	30	15	90	15	30
Yellow		3.0	4.6	3.0	4.6	3.0	4.7	3.0	4.5
Red Clear		2.4	2.3	3.9	2.2	3.1	2.1	3.9	1.6
Red Revert		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Actuations B4 Add *		-	-	-	-	-	-	-	-
Seconds /Actuation *		-	1.5	-	-	-	1.5	-	-
Max Initial *		-	34	-	-	-	34	-	-
Time Before Reduction *		-	15	-	0	-	15	-	0
Time To Reduce *		-	30	-	15	-	30	-	15
Minimum Gap		-	3.0	-	3.0	-	3.0	-	3.0
Locking Detector		-	X	-	-	-	X	-	-
Recall Position		-	MIN RECALL	-	-	-	MIN RECALL	-	-
Dual Entry		-	-	-	-	-	-	-	-
Simultaneous Gap		X	X	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.

Signal Upgrade

Prepared For:

PLANS PREPARED IN THE OFFICE OF:
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(919) 677-2000

NC 279 (New Hope Road)
at
SR 2200 (Armstrong Park Road)

Division 12 Gaston County Gastonia

PLAN DATE: May 2021 REVIEWED BY: SL Phillips
PREPARED BY: DM Curri REVIEWED BY: KP Baumann

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Discussed by: 3/11/2022

SIG. INVENTORY NO. 12-0986