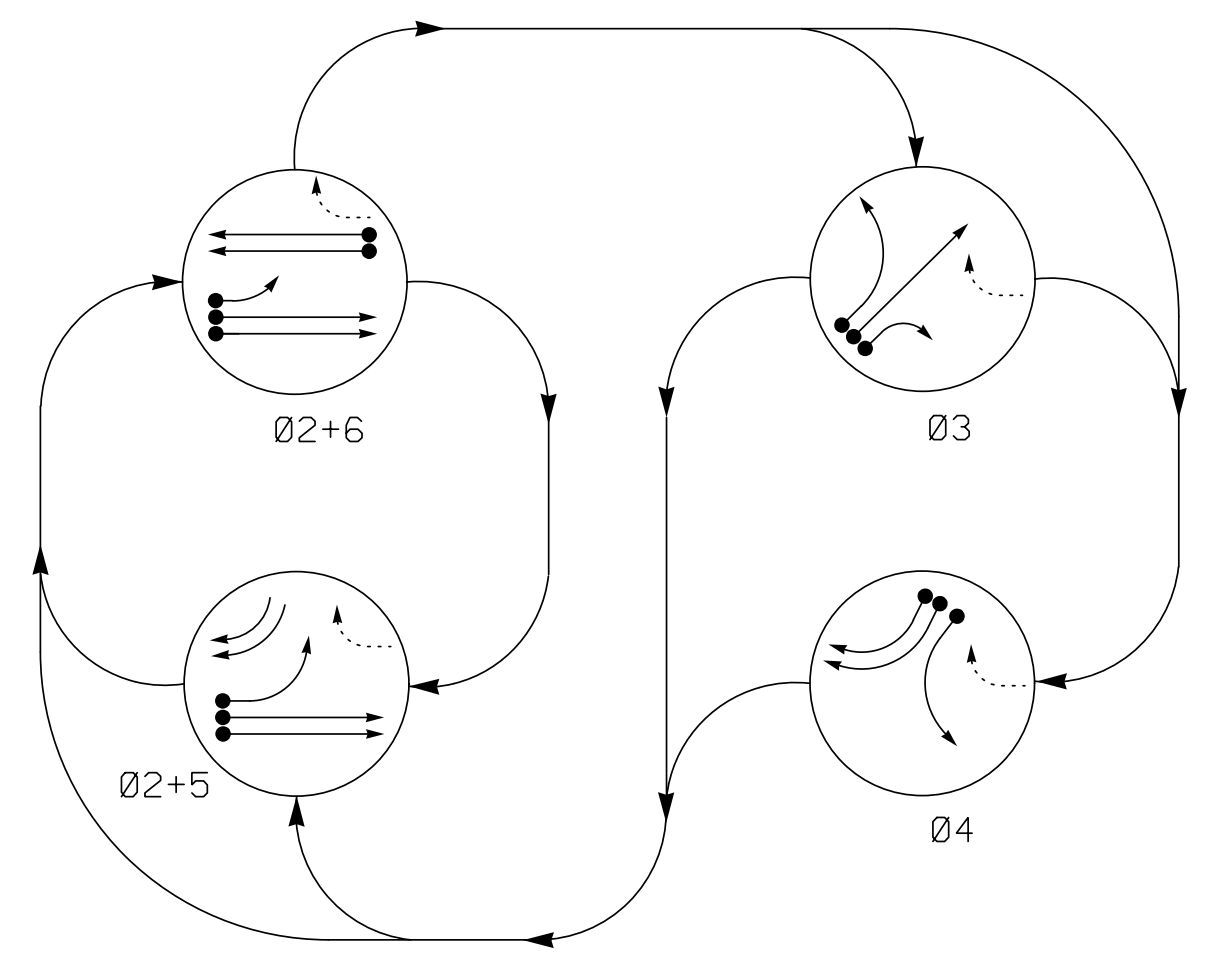


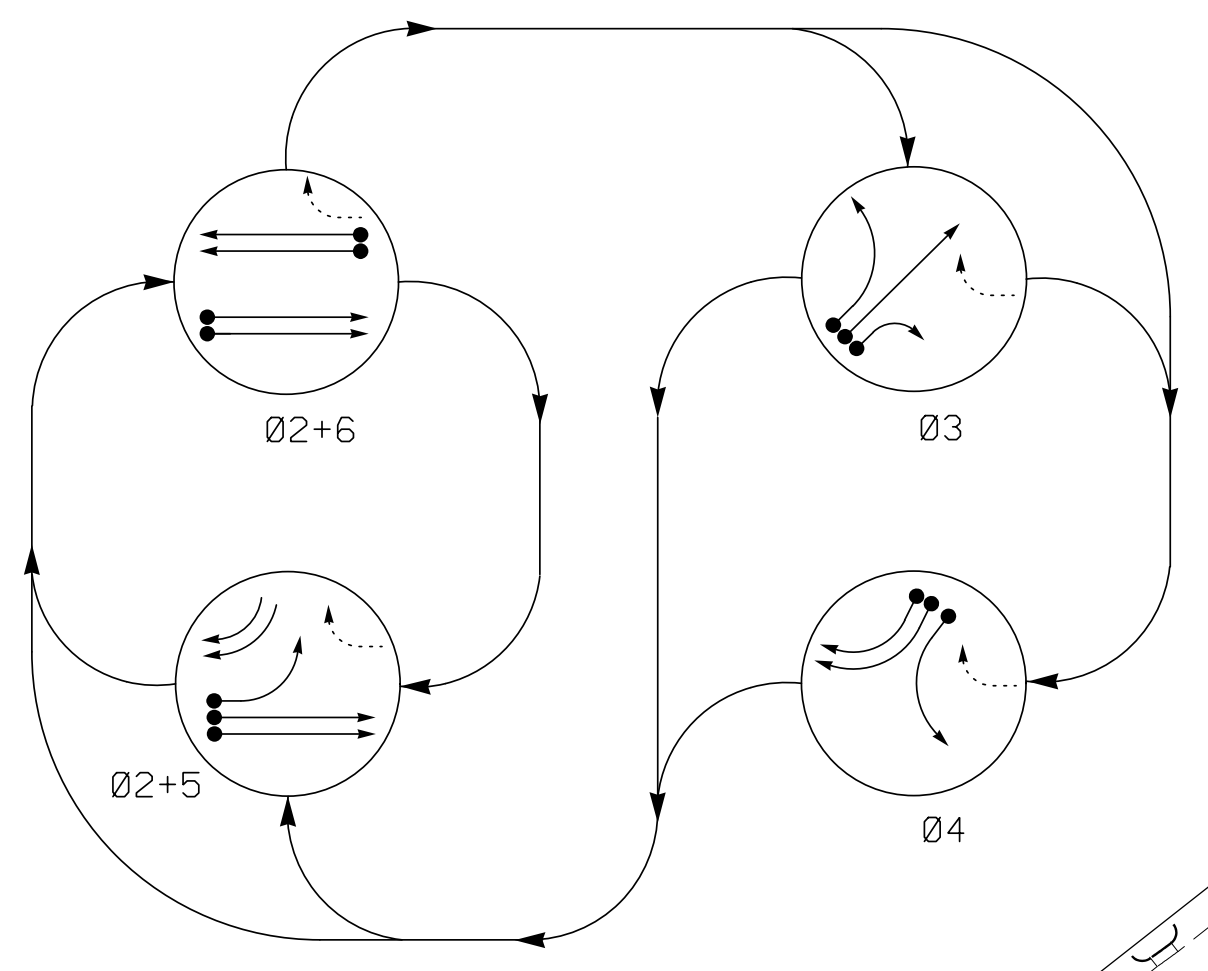
DEFAULT PHASING DIAGRAM



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE				
	Ø 2+5	Ø 2+6	Ø 3	Ø 4	F L T S H
21,22	G	G	R	R	Y
31	R	R	G	R	R
32	R	R	G	R	R
41	←	←	←	←	←
42,43	→	R	R	→	R
51	←	←	←	←	←
61,62,63	R	G	R	R	Y

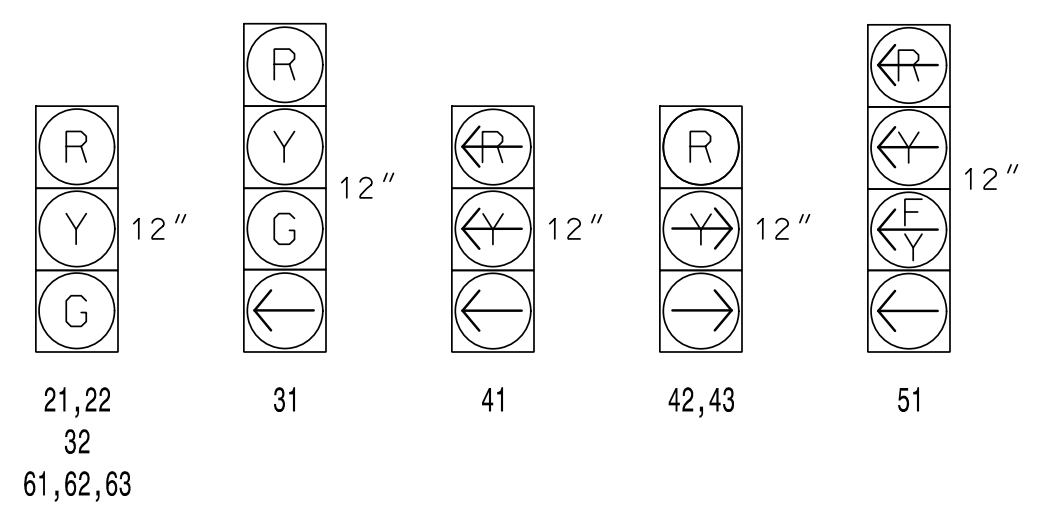
ALTERNATE PHASING DIAGRAM



ALTERNATE PHASING TABLE OF OPERATION

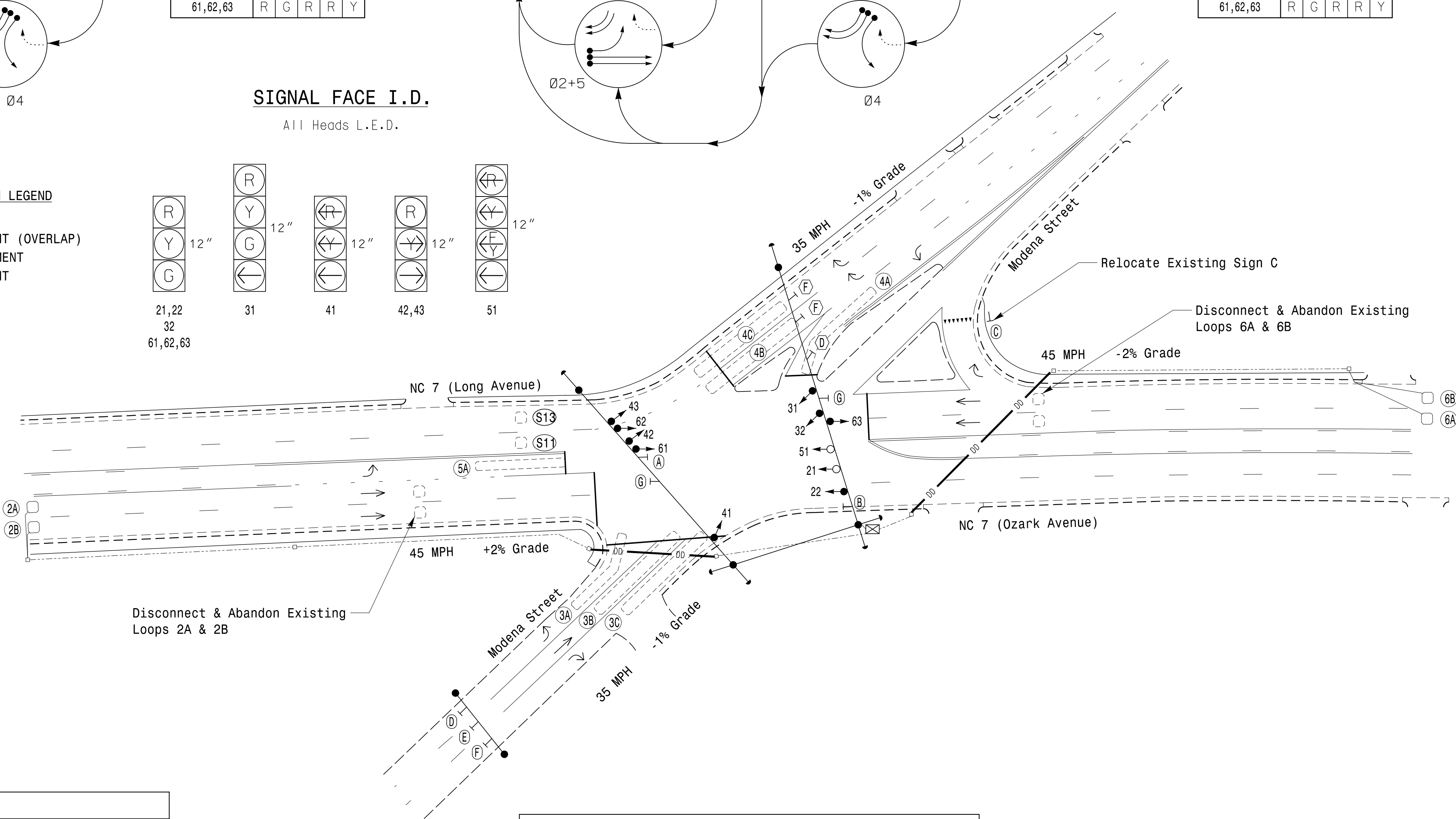
SIGNAL FACE	PHASE				
	Ø 2+5	Ø 2+6	Ø 3	Ø 4	F L T S H
21,22	G	G	R	R	Y
31	R	R	G	R	R
32	R	R	G	R	R
41	←	←	←	←	←
42,43	→	R	R	→	R
51	←	←	←	←	←
61,62,63	R	G	R	R	Y

SIGNAL FACE I.D.
All Heads L.E.D.



PHASING DIAGRAM DETECTION LEGEND

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

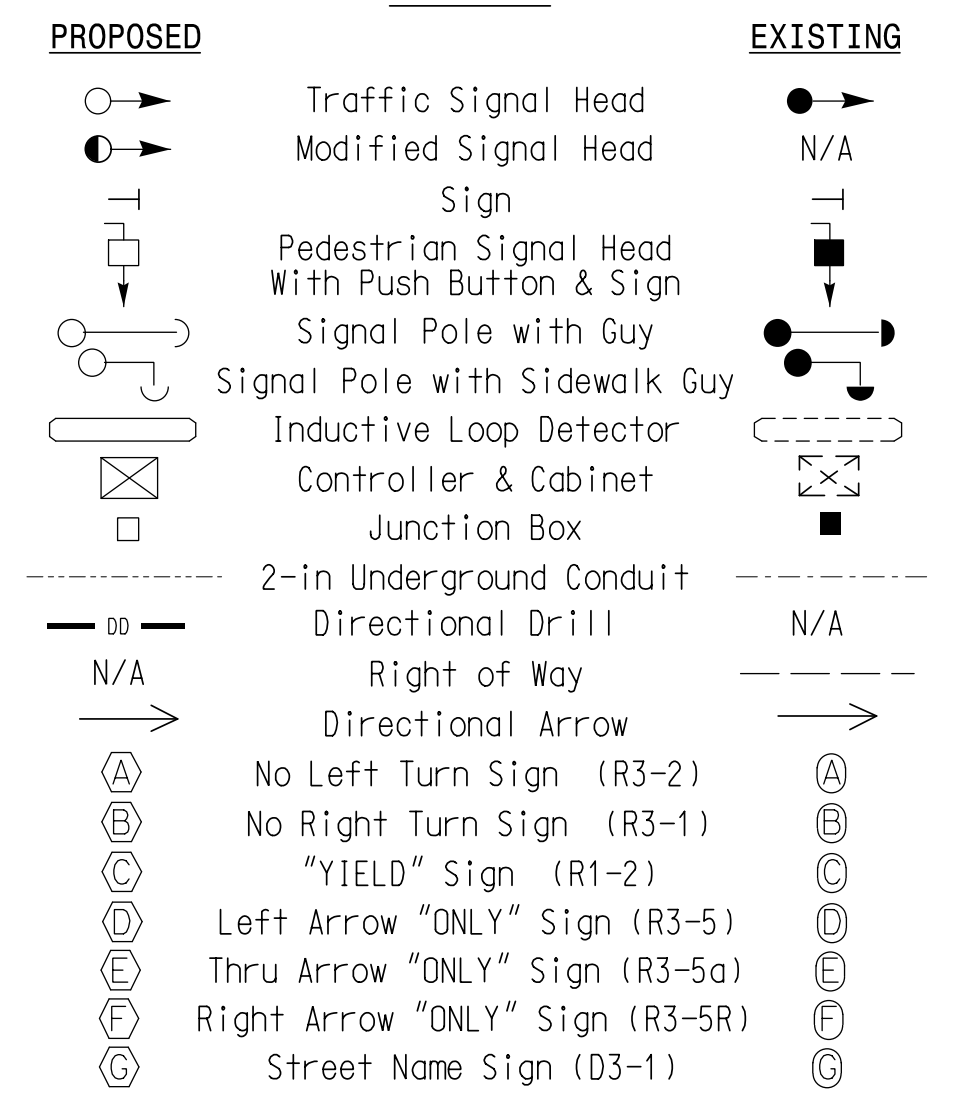


4 Phase Fully Actuated w/ Alternate Phasing Operation Gastonia Signal System

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 5 may be lagged.
4. Reposition existing signal head numbered 22.
5. Set all detector units to presence mode.
6. 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.
7. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
8. Pavement markings are existing.
9. The City Engineer or their representative will determine the hours of use for each phasing plan.
10. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
11. Install new cabinet on the existing cabinet foundation.
12. All new cabinets and base extenders shall be black in color. See Project Special Provisions for details.
13. City of system data: Controller Asset #0331.

LEGEND



TIMING CHART

FEATURE	PHASE				
	2	3	4	5	6
Min Green *	12	7	7	7	12
Walk *	-	-	-	-	-
Ped Clear	-	-	-	-	-
Veh. Extension *	6.0	1.0	1.0	1.0	6.0
Max 1 *	60	25	20	15	60
Yellow	4.7	3.9	3.0	3.0	4.7
Red Clear	2.6	2.8	1.8	3.9	2.6
Red Revert	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	-	-	-	15
Time To Reduce *	30	-	-	-	30
Minimum Gap	3.0	-	-	-	3.0
Locking Detector	X	-	-	-	X
Recall Position	MIN RECALL	-	-	-	MIN RECALL
Dual Entry	-	-	-	-	-
Simultaneous Gap	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.

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	300	5	X	2	Yes	-	-	X	N	-	X
2B	6X6	300	5	X	2	Yes	-	-	X	N	-	X
3A	6X60	+5	EXIST	-	3	Yes	-	-	-	N	-	X
3B	6X60	+5	EXIST	-	3	Yes	-	-	-	N	-	X
3C	6X60	+5	EXIST	-	3	Yes	-	10	-	N	-	X
4A	6X60	0	EXIST	-	4	Yes	-	-	-	N	-	X
4B	6X60	+10	EXIST	-	4	Yes	-	5	-	N	-	X
4C	6X60	+10	EXIST	-	4	Yes	-	10	-	N	-	X
5A	EXIST	0	EXIST	-	5	Yes	-	5*	-	N	-	X
6A	6X6	300	5	X	6	Yes	-	-	X	N	-	X
6B	6X6	300	5	X	6	Yes	-	-	X	N	-	X
S11	6X6	+200	EXIST	-	-	No	-	-	-	N	X	X
S13	6X6	+200	EXIST	-	-	No	-	-	-	N	X	X

* Reduce Delay to 3 seconds during Alternate Phasing operation.
Disable Phase call for loop during Alternate Phasing operation.

Signal Upgrade

Prepared For:

 TRANSPORTATION MOBILITY AND SAFETY SOLUTIONS, INC.
 ENGINEERS
 750 N. Greenfield Pkwy, Garner, NC 27529
 (919) 677-2000

NC 7 (Long Avenue / Ozark Avenue) at Modena Street

Division 12 Gaston County Gastonia

PLAN DATE: May 2021 REVIEWED BY: SL Phillips
 PREPARED BY: CF Davis REVIEWED BY: KP Baumann

REVISIONS: _____ INIT: _____ DATE: _____

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

 KEVIN P. BAUMANN
 ENGINEER
 3/11/2022
 DATE: _____
 SIGNATURE: _____
 SIG. INVENTORY NO. 12-0331

3/9/2022 11:15:35 AM D:\h1\116.Cur11 ***K:\miley-horn.com\SE_RAL\MRAL_TIP\DK-115\011036569_Gastonia Signal System\Signal Design Section - Signal Design\ME120331-2021.dgn