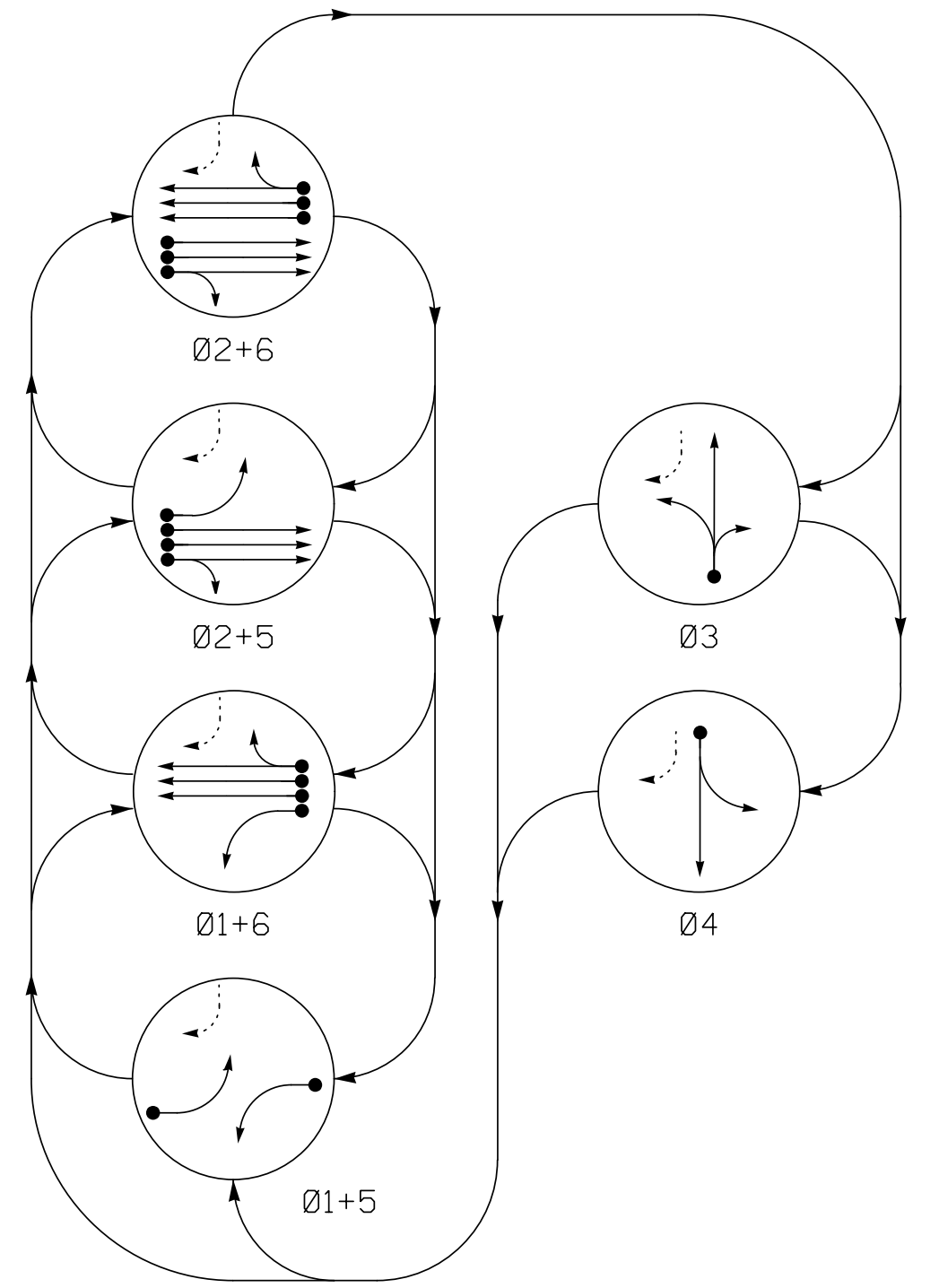


PHASING DIAGRAM



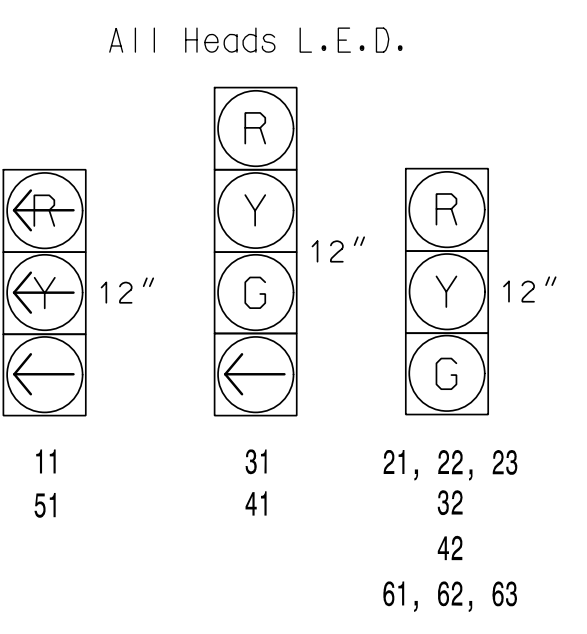
PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- ⇌ PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE					
	Ø 1+5	Ø 1+6	Ø 2+5	Ø 2+6	Ø 3	Ø 4
11	←	→	→	→	→	→
21,22,23	R	R	G	G	R	R
31	R	R	R	R	G	R
32	R	R	R	R	G	R
41	R	R	R	R	R	C
42	R	R	R	R	G	R
51	←	→	→	→	→	→
61,62,63	R	G	R	G	R	Y

SIGNAL FACE I.D.



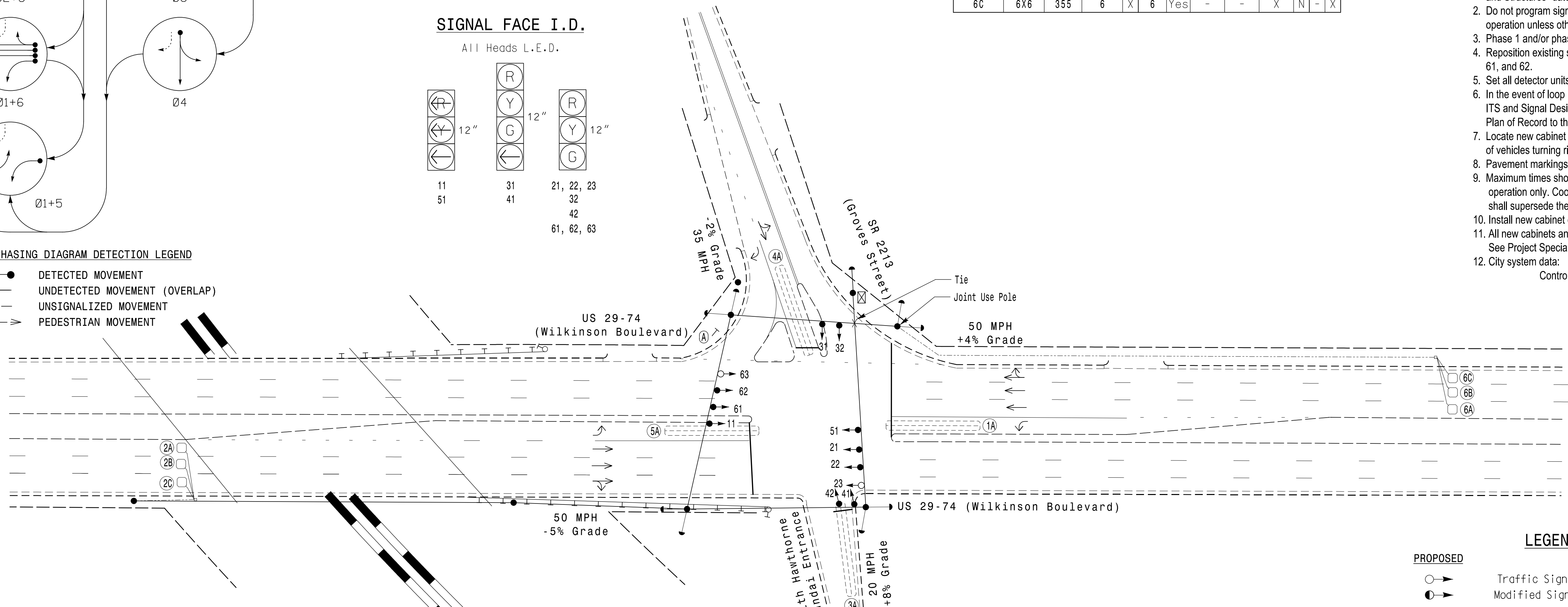
DETECTOR INSTALLATION CHART

DETECTOR				PROGRAMMING								
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
1A	6X60	+5	2-4-2	-	1	Yes	-	-	-	N	-	X
2A	6X6	355	6	X	2	Yes	-	-	X	N	-	X
2B	6X6	355	6	X	2	Yes	-	-	X	N	-	X
2C	6X6	355	6	X	2	Yes	-	-	X	N	-	X
3A	6X60	+5	2-4-2	-	3	Yes	-	10	-	N	-	X
4A	6X60	+5	2-4-2	-	4	Yes	-	-	-	N	-	X
5A	6X60	+5	2-4-2	-	5	Yes	-	-	-	N	-	X
6A	6X6	355	6	X	6	Yes	-	-	X	N	-	X
6B	6X6	355	6	X	6	Yes	-	-	X	N	-	X
6C	6X6	355	6	X	6	Yes	-	-	X	N	-	X

6 Phase Fully Actuated Gastonia Signal System

NOTES

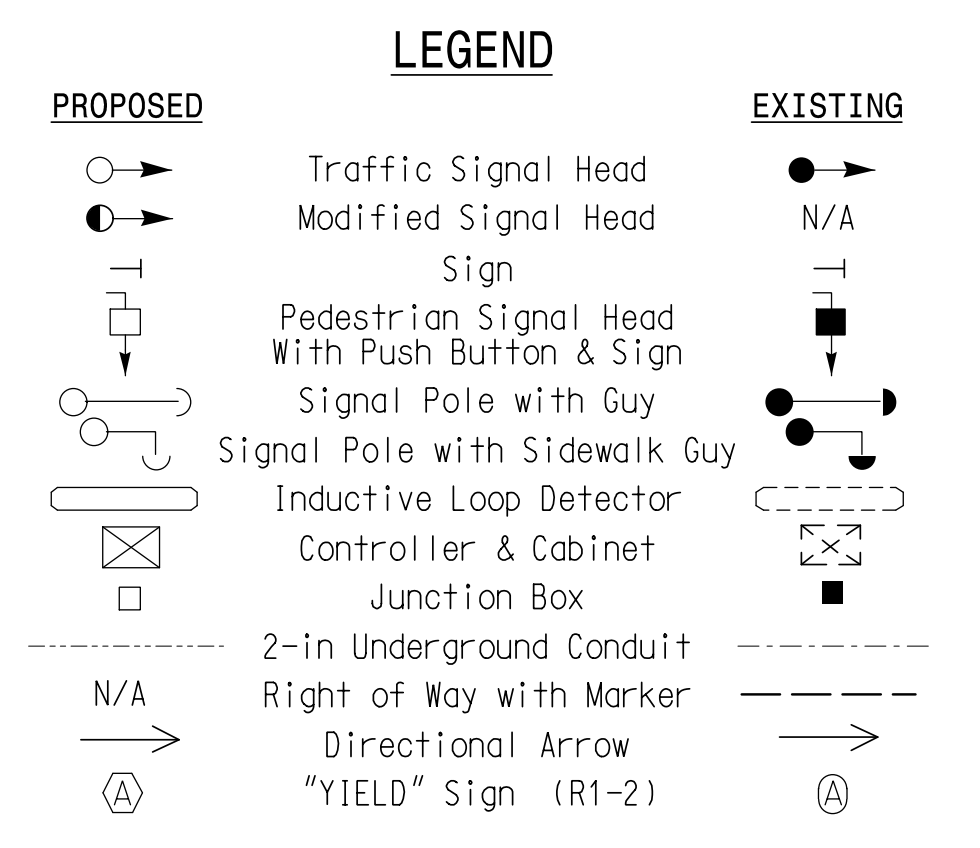
- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Reposition existing signal heads numbered 21, 22, 61, and 62.
- 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.
- 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.
- City system data: Controller Asset #0080



TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Min Green *	7	14	7	7	7	14
Walk *	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-
Veh. Extension *	1.0	6.0	2.0	1.0	1.0	6.0
Max 1 *	20	70	25	25	20	70
Yellow	3.0	5.4	3.0	4.0	3.1	4.5
Red Clear	2.3	1.9	3.2	2.4	2.6	1.9
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 *	-	40	-	-	-	40
Time Before Reduction *	-	15	-	-	-	15
Time To Reduce *	-	30	-	-	-	30
Minimum Gap	-	3.1	-	-	-	3.1
Locking Detector	-	X	-	-	-	X
Recall Position	-	MIN RECALL	-	-	-	MIN RECALL
Dual Entry	-	-	-	-	-	-
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.



Signal Upgrade

Prepared For:
Kimley-Horn

PLANS PREPARED IN THE OFFICE OF:
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US 29-74 (Wilkinson Blvd.) at SR 2213 (Groves St.)/Keith Hawthorne Hyundai Entrance

Division 12 Gaston County Gastonia

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

REVISIONS: _____ INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

3/11/2022

SIGNATURE: _____ DATE: _____
SIG. INVENTORY NO. 12-0080