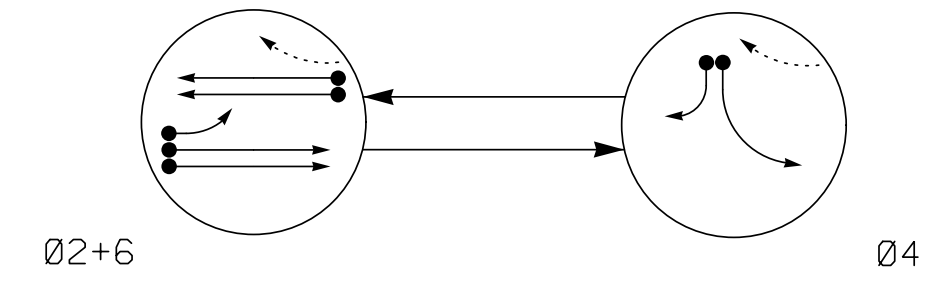


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

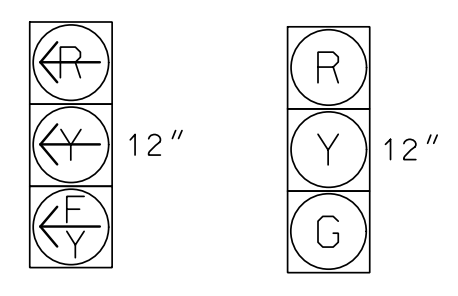
- ←●→ DETECTED MOVEMENT
- ←○→ UNDETECTED MOVEMENT (OVERLAP)
- ←...→ UNSIGNALIZED MOVEMENT
- ←- - -→ PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE		
	Ø2+6	Ø4	FLASH
21	F	R	Y
22,23	G	R	Y
41,42,43	R	G	R
61,62	G	R	Y

SIGNAL FACE I.D.

All Heads L.E.D.



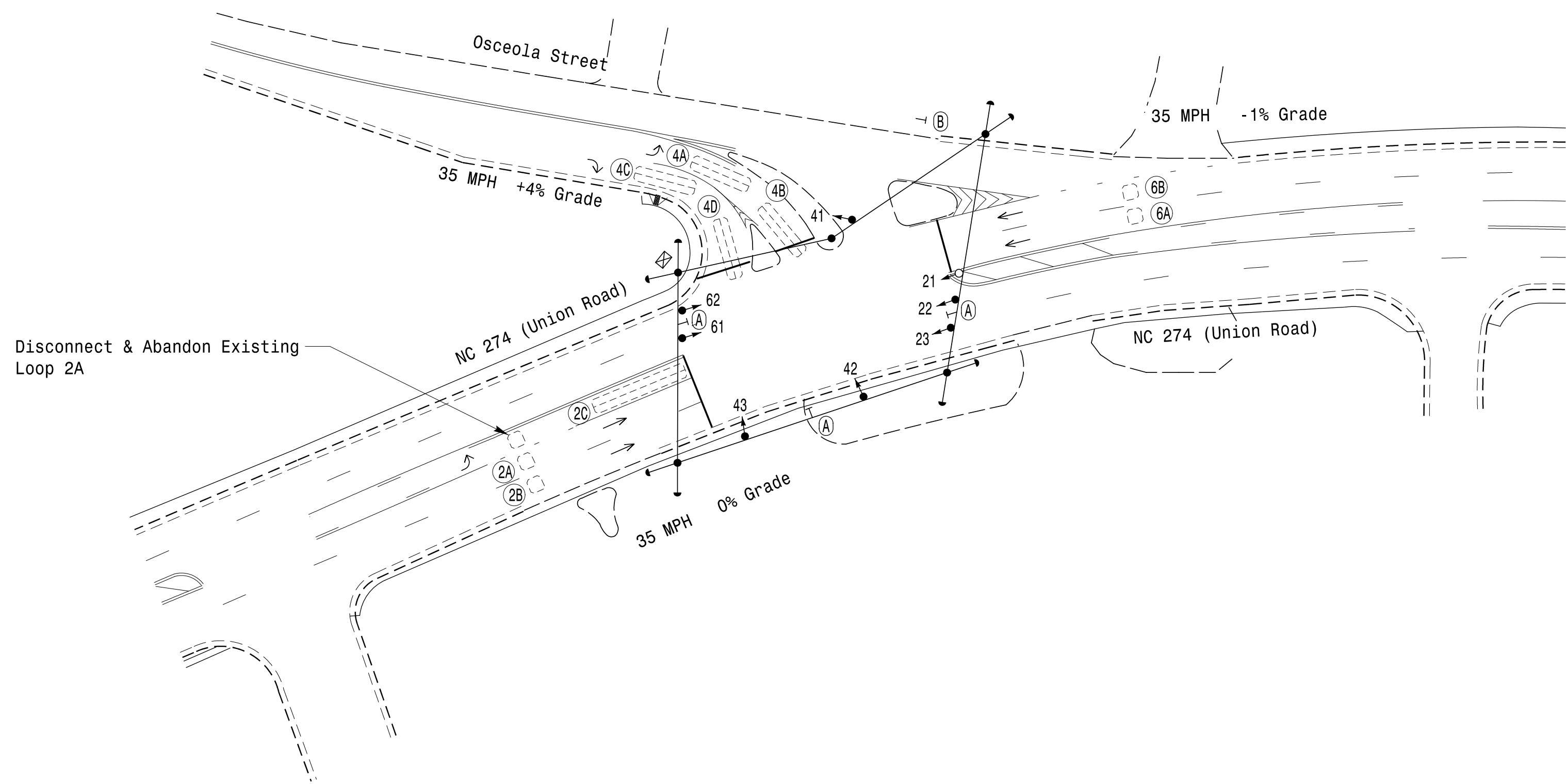
DETECTOR INSTALLATION CHART

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	70	EXIST	-	2	Yes	-	-	-	N	-	X
2B	6X6	70	EXIST	-	2	Yes	-	-	-	N	-	X
2C	6X40	0	2-4-2	-	2	Yes	-	-	-	N	-	X
4A	6X25	30	2-4-2	-	4	Yes	-	-	-	N	-	X
4B	6X25	+5	2-4-2	-	4	Yes	-	-	-	N	-	X
4C	6X25	30	2-4-2	-	4	Yes	-	10	-	N	-	X
4D	6X25	+5	2-4-2	-	4	Yes	-	15	-	N	-	X
6A	6X6	70	EXIST	-	6	Yes	-	-	-	N	-	X
6B	6X6	70	EXIST	-	6	Yes	-	-	-	N	-	X

2 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.
- Reposition existing signal heads numbered 22 & 23.
- 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.
- Existing loops 2B, 2C, & 2D have been relabeled to 2A, 2B, & 2C, respectively.
- Reconnect lead-in cable to separate loops 2A, 2B, 4A, 4B, 6A, & 6B, as shown.
- Existing signal heads 21 & 22 have been relabeled to 22 & 23, respectively.
- City system data:
Controller Asset #1358.

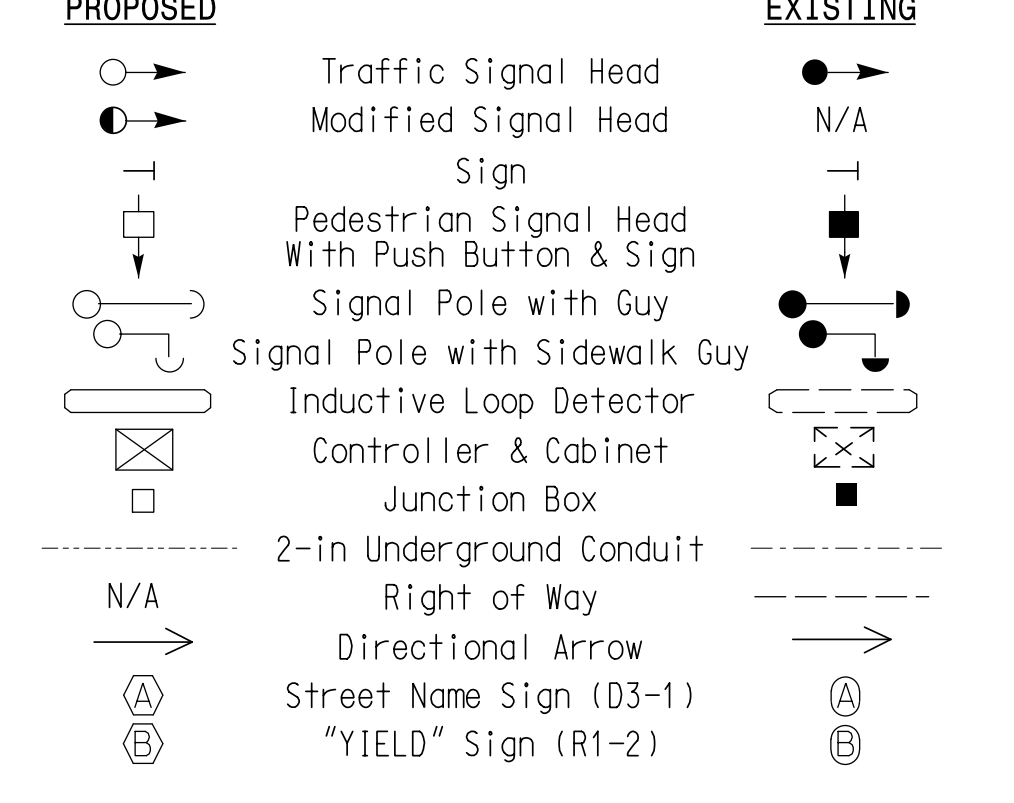


TIMING CHART

FEATURE	PHASE		
	2	4	6
Min Green *	10	7	10
Walk *	-	-	-
Ped Clear	-	-	-
Veh. Extension *	3.0	1.0	3.0
Max I *	45	25	45
Yellow	3.9	3.0	3.9
Red Clear	2.7	2.3	2.7
Red Revert	2.0	2.0	2.0
Actuations B4 Add *	-	-	-
Seconds /Actuation *	-	-	-
Max Initial *	-	-	-
Time Before Reduction *	-	-	-
Time To Reduce *	-	-	-
Minimum Gap	-	-	-
Locking Detector	X	-	X
Recall Position	MIN RECALL	-	MIN RECALL
Dual Entry	-	-	-
Simultaneous Gap	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:
Kimley-Horn

750 N. Greenfield Pkwy, Garner, NC 27529
NC License #0102
421 Fayetteville Street, Suite 600
Raleigh, NC 27601
(919) 677-2000

NC 274 (Union Road) at Osceola Street

Division 12 Gaston County Gastonia

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

SCALE: 1" = 40'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

3/11/2022

SIG. INVENTORY NO. 12-1358

3/9/2022 11:16:36 AM DanHelle.Cur1 ***K:\mley-horn.com\SE-RAL\MRAL_TPID-LT5\011036569_Gastonia Signal System9_Signal\KWS4 - Signal Design\F121358-2021.dgn