

8 Phase
Fully Actuated
Isolated

NOTES

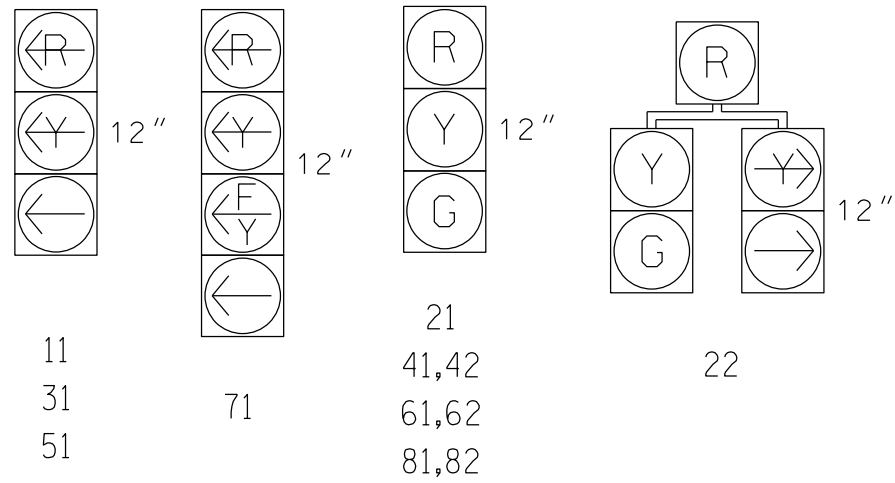
- Refer to "Roadway Standard Drawings NCDOT" dated January 2024, "Standard Specifications for Roads and Structures" dated January 2024, and all applicable sections of the latest version of the generic Project Special Provisions.
- Do not program signal for late night flashing operation unless otherwise 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 TSMO Design Manual and submit a Plan of Record to the Signal Design Section.
- Reposition existing signal heads 51, 21 and 22.
- Install new controller in existing cabinet.
- Refer to Pavement Marking Plans for pavement markings.

MAXTIME DETECTOR INSTALLATION CHART											
DETECTOR						PROGRAMMING					
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	NEW CARD
1A	6X40	0	2-4-2	-	1	3.0	-	X	-	X	-
2A	6X40	0	2-4-2	X	2	-	-	X	-	X	-
3A	6X40	0	2-4-2	-	3	3.0	-	X	-	X	-
4A	6X40	0	2-4-2	-	4	10.0	-	X	-	X	-
5A	6X40	0	2-4-2	X	5	3.0	-	X	-	X	-
6A	6X40	0	2-4-2	-	6	-	-	X	-	X	-
6B	6X40	0	2-4-2	-	6	-	-	X	-	X	-
7A	6X40	0	2-4-2	-	7	15.0	-	X	-	X	-
8A	6X40	0	2-4-2	-	8	3.0	-	X	-	X	-

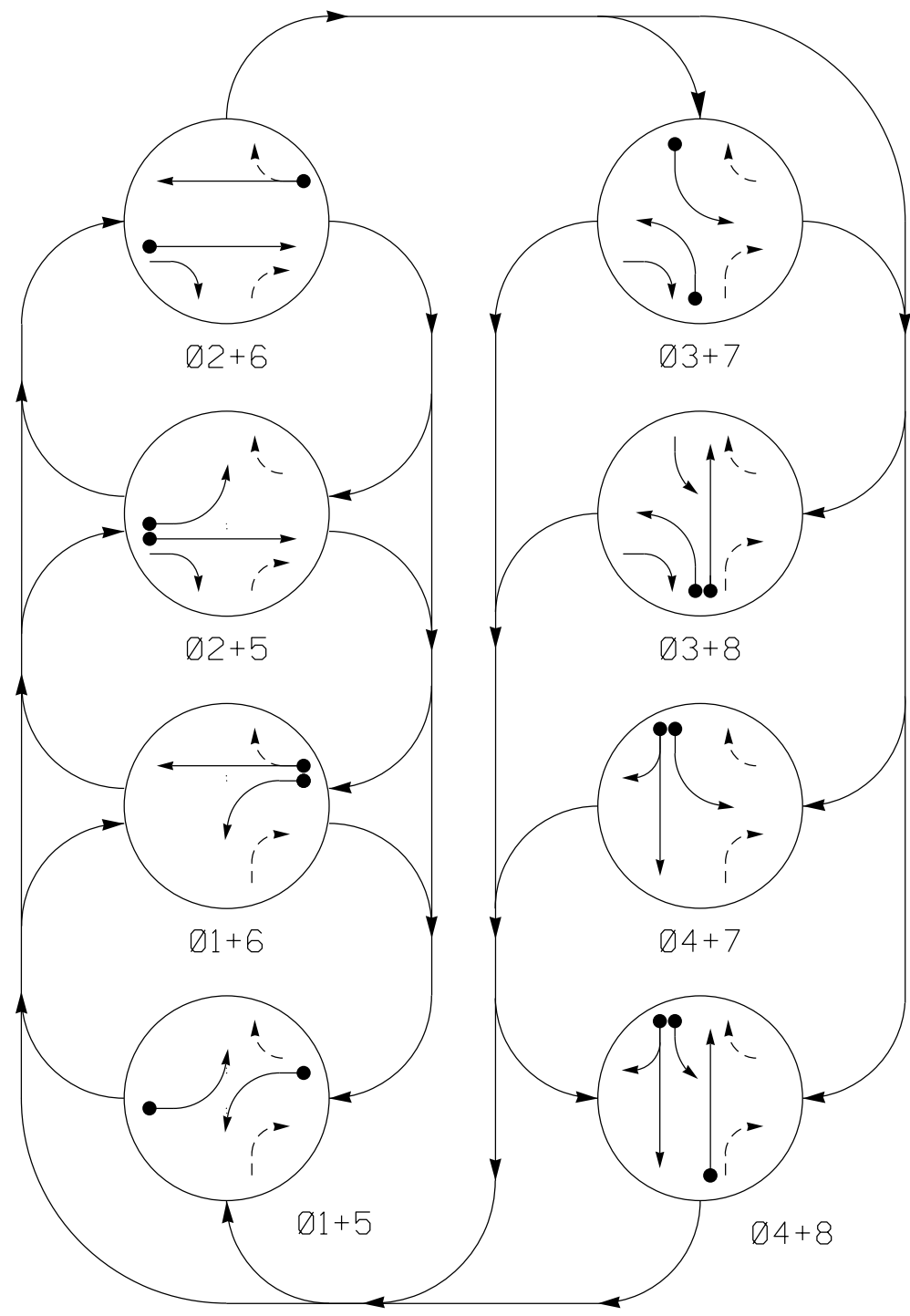
TABLE OF OPERATION											
SIGNAL FACE	PHASE										
	Ø 1 + 5	Ø 1 + 6	Ø 2 + 5	Ø 2 + 6	Ø 3 + 7	Ø 3 + 8	Ø 4 + 7	Ø 4 + 8	PEDESTAL	PEDESTAL	PEDESTAL
11	←	←	←	←	←	←	←	←	←	←	←
21	R	R	G	G	R	R	R	R	R	R	R
22	R	R	G	G	R	R	R	R	R	R	R
31	←	←	←	←	←	←	←	←	←	←	←
41,42	R	R	R	R	R	R	G	G	R	R	R
51	←	←	←	←	←	←	←	←	←	←	←
61,62	R	G	R	G	R	R	R	R	R	R	R
71	←	←	←	←	←	←	←	←	←	←	←
81,82	R	R	R	R	R	G	R	G	R	R	R

SIGNAL FACE I.D.

All Heads L.E.D.

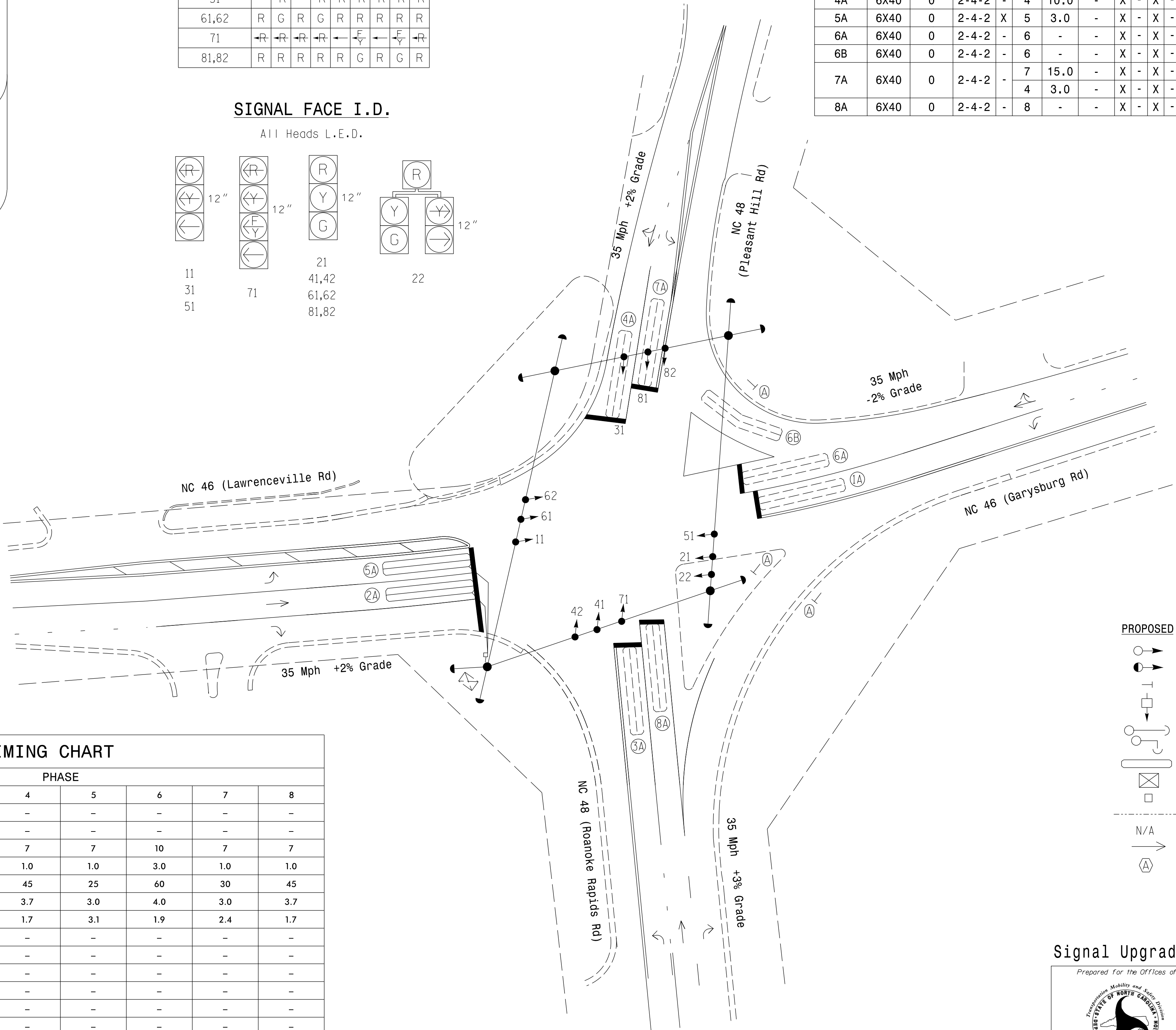


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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



LEGEND

- | PROPOSED | EXISTING |
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MAXTIME TIMING CHART									
FEATURE	PHASE								
	1	2	3	4	5	6	7	8	
Walk *	-	-	-	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-	-	-	-
Min Green *	7	10	7	7	7	10	7	7	-
Passage *	1.0	3.0	1.0	1.0	1.0	3.0	1.0	1.0	-
Max 1 *	25	60	30	45	25	60	30	45	-
Yellow Change	3.0	4.0	3.0	3.7	3.0	4.0	3.0	3.7	-
Red Clear	2.8	1.9	2.3	1.7	3.1	1.9	2.4	1.7	-
Added Initial *	-	-	-	-	-	-	-	-	-
Maximum Initial *	-	-	-	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-	-	-	-
Advance Walk	-	-	-	-	-	-	-	-	-
Non Lock Detector	X	-	X	X	X	-	X	X	-
Vehicle Recall	-	MIN RECALL	-	-	-	MIN RECALL	-	-	-
Dual Entry	-	-	-	-	-	-	-	X	-

* These values may be field adjusted. Do not adjust Min Green and Passage 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

750 N. Greenfield Pkwy, Garner, NC 27529

Prepared for the Offices of:

NC 46(Lawrenceville Rd /Garysburg Rd) at NC 48 (Pleasant Hill Rd /Roanoke Rapids Rd)

Division 1 Northampton County Gaston

PLAN DATE: October 2024 REVIEWED BY: J. L. Lewis

PREPARED BY: J. Ma REVIEWED BY:

REVISIONS

INIT. DATE

SCALE

0 30

1"=30'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

PROFESSIONAL ENGINEER

SEAL 033108

JIANXIN MA

10/28/2024

SIGNATURE

DATE

SIG. INVENTORY NO. 01-0129