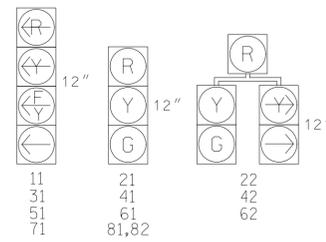


DEFAULT PHASING DIAGRAM

ALTERNATE PHASING DIAGRAM

SIGNAL FACE I.D.

All Heads L.E.D.



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE										
	Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø3+7	Ø3+8	Ø4+7	Ø4+8	FLASH	FL	FSH
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	R	R	R	R	←	←	←	←	←	←	←
41	R	R	R	R	R	R	G	G	R	R	R
42	R	R	R	R	R	R	G	G	R	R	R
51	←	←	←	←	←	←	←	←	←	←	←
61	R	G	R	G	R	R	R	R	R	R	R
62	R	G	R	G	R	R	R	R	R	R	R
71	R	R	R	R	←	←	←	←	←	←	←
81.82	R	R	R	R	R	G	R	G	R	R	R

ALTERNATE PHASING TABLE OF OPERATION

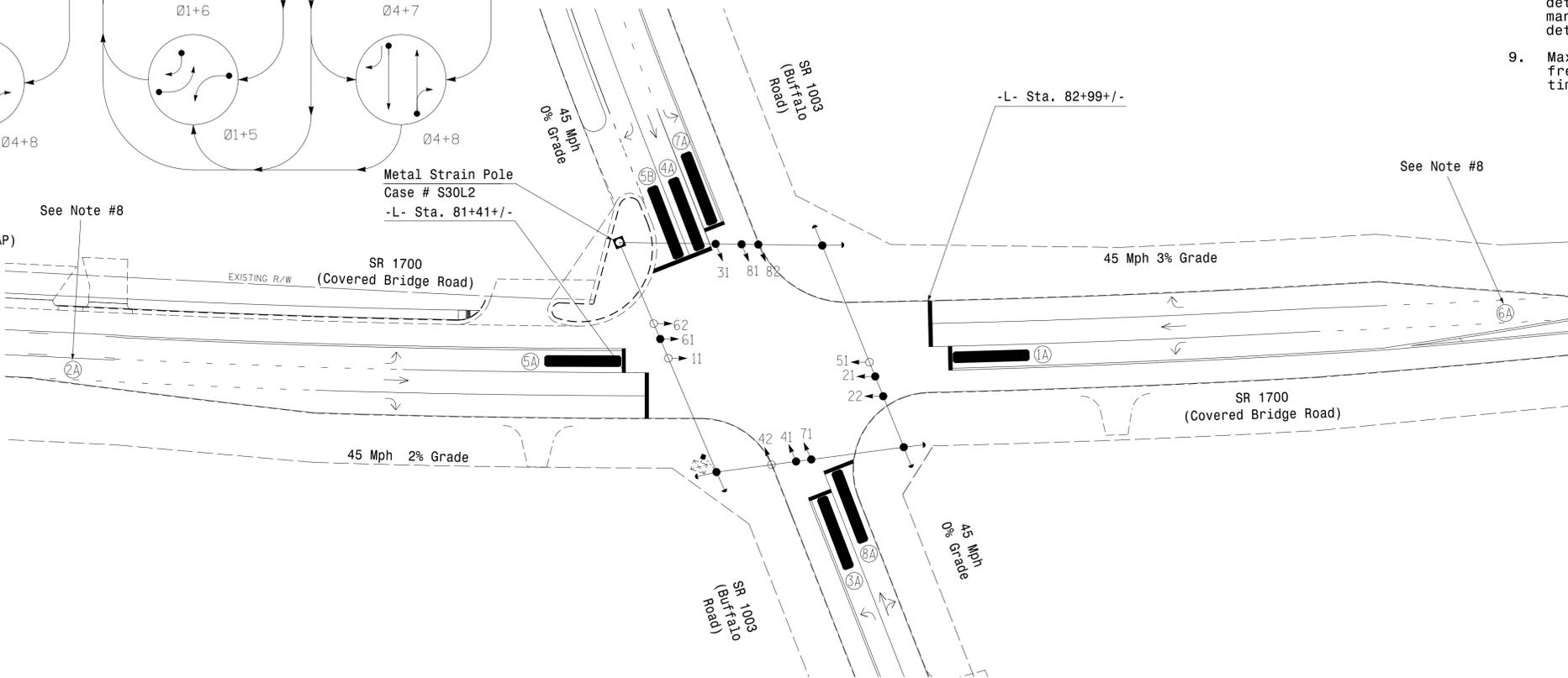
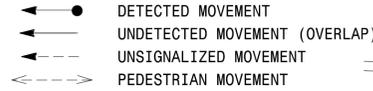
SIGNAL FACE	PHASE										
	Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø3+7	Ø3+8	Ø4+7	Ø4+8	FLASH	FL	FSH
11	←	←	←	←	←	←	←	←	←	←	←
21	R	R	G	G	R	R	R	R	R	R	R
22	R	R	G	G	R	R	R	R	R	R	R
31	R	R	R	R	←	←	←	←	←	←	←
41	R	R	R	R	R	R	G	G	R	R	R
42	R	R	R	R	R	R	G	G	R	R	R
51	←	←	←	←	←	←	←	←	←	←	←
61	R	G	R	G	R	R	R	R	R	R	R
62	R	G	R	G	R	R	R	R	R	R	R
71	R	R	R	R	←	←	←	←	←	←	←
81.82	R	R	R	R	R	G	R	G	R	R	R

8 PHASE FULLY ACTUATED SR 1700 (COVERED BRIDGE ROAD) CLOSED LOOP SYSTEM

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
- Do not program signal for late night 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.
- Reposition existing signal head 61.
- Set all detector units to presence mode.
- The Division Traffic Engineer will determine the hours of use for each phasing plan.
- This intersection features multizone microwave detection. Install detectors according to the manufacturers instructions to achieve the desired detection scheme.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

PHASING DIAGRAM DETECTION LEGEND



MAXTIME TIMING CHART

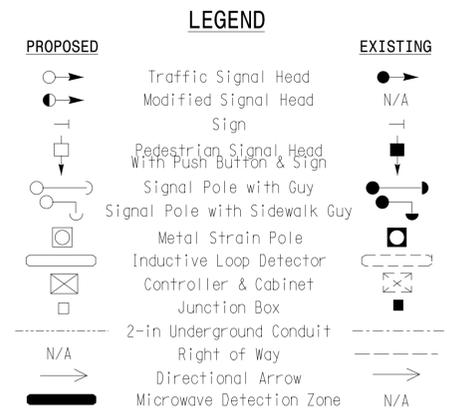
FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Walk *	0	0	0	0	0	0	0	0
Ped Clear *	0	0	0	0	0	0	0	0
Min Green *	7	12	7	7	7	12	7	7
Passage *	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Max I *	15	50	15	40	15	50	15	40
Yellow Change	3.0	4.3	3.0	4.5	3.0	4.3	3.0	4.5
Red Clear	3.3	2.2	3.4	1.9	2.8	2.2	3.3	1.9
Added Initial *	-	-	-	-	-	-	-	-
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	-	-	-	X

MAXTIME DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	PROGRAMMING								
				NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND INITIAL	ADDED INITIAL	CALL DELAY DURING GREEN	NEW CARD	
1A	*	0	*	*	1	15.0*	-	X	-	X	-	*
					6#	3.0	-	X	-	X	-	*
3A	*	0	*	*	3	15.0*	-	X	-	X	-	*
					8#	3.0	-	X	-	X	-	*
4A	*	0	*	*	4	-	-	X	-	X	-	*
5A	*	0	*	*	5	15.0*	-	X	-	X	-	*
					2#	3.0	-	X	-	X	-	*
5B	*	0	*	*	5	-	-	X	-	X	-	*
7A	*	0	*	*	7	15.0*	-	X	-	X	-	*
					4#	3.0	-	X	-	X	-	*
8A	*	0	*	*	8	10.0	-	X	-	X	-	*

RADAR DETECTION SYSTEM

FUNCTION	Sensor 1 (2A)	Sensor 2 (6A)
Channel	1	2
Phase	2	6
Direction of Travel	EB	WB
Detection Zone (ft)	500-100	500-100
Enable Speed	Y	Y
Speed Range (mph)	35-100	35-100
Enable Estimated Time of Arrival	Y	Y
Estimated Time of Arrival (sec)	2.5-6.5	2.5-6.5



* 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.

* Multizone Microwave Detection Zone
 * Reduce Delay to 3 seconds during Alternate Phasing Operation.
 # Disable Phase Calls for Loop during Alternate Phasing Operation.

Signal Upgrade - Final Design

SR 1700 (Covered Bridge Road) at SR 1003 (Buffalo Road)

Division 4 Johnston County Archer Lodge

PLAN DATE: February 2025 REVIEWED BY: M.L. Stygles

PREPARED BY: L. Gottlieb REVIEWED BY: J. Ma/J.L. Lewis

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 046057 MATTHEW L. STYGLES

2/4/2025

