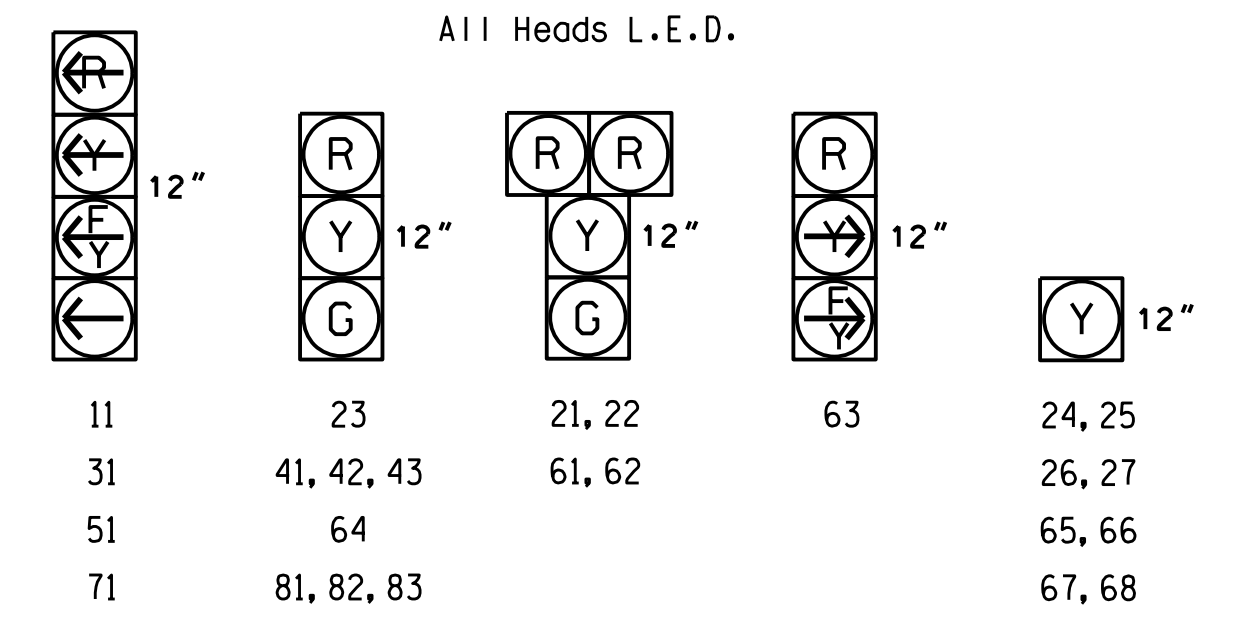


LONG VEHICLE OVERSPEED DETECTION SYSTEM LOOP & DETECTION INSTALLATION CHART

INDUCTIVE LOOPS				DETECTOR UNITS										
LOOP NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	EXISTING	NEW	SPACING TO STOPBAR	LANE NO.	POLE-TYPE	CHANNEL	NEMA PHASE	FEATURE	TIME	PLACE CALL DURING PHASE	INHIBIT DELAY DURING GREEN?
LV1	6'X6'	4	1015'	X		①	1	1	2	2*	NONE	- SEC.	2	NO
LV2	6'X6'	4	999'	X		①	1	1	2	2*	NONE	- SEC.	2	NO
LV3	6'X6'	4	1015'	X		①	2	2	2	2*	NONE	- SEC.	2	NO
LV4	6'X6'	4	999'	X		①	2	2	2	2*	NONE	- SEC.	2	NO
LV5	6'X6'	4	1015'	X		②	1	1	1	6*	NONE	- SEC.	6	NO
LV6	6'X6'	4	999'	X		②	1	1	1	6*	NONE	- SEC.	6	NO
LV7	6'X6'	4	1015'	X		②	2	2	1	6*	NONE	- SEC.	6	NO
LV8	6'X6'	4	999'	X		②	2	2	2	6*	NONE	- SEC.	6	NO
LVODS THRESHOLD SPEED (MPH)				55				2		6				
SET LENGTH (FT)				22				2		6				
LVODS EXTEND TIME				12 SEC.				2		6				

① Phase hold output to controller

SIGNAL FACE I.D.



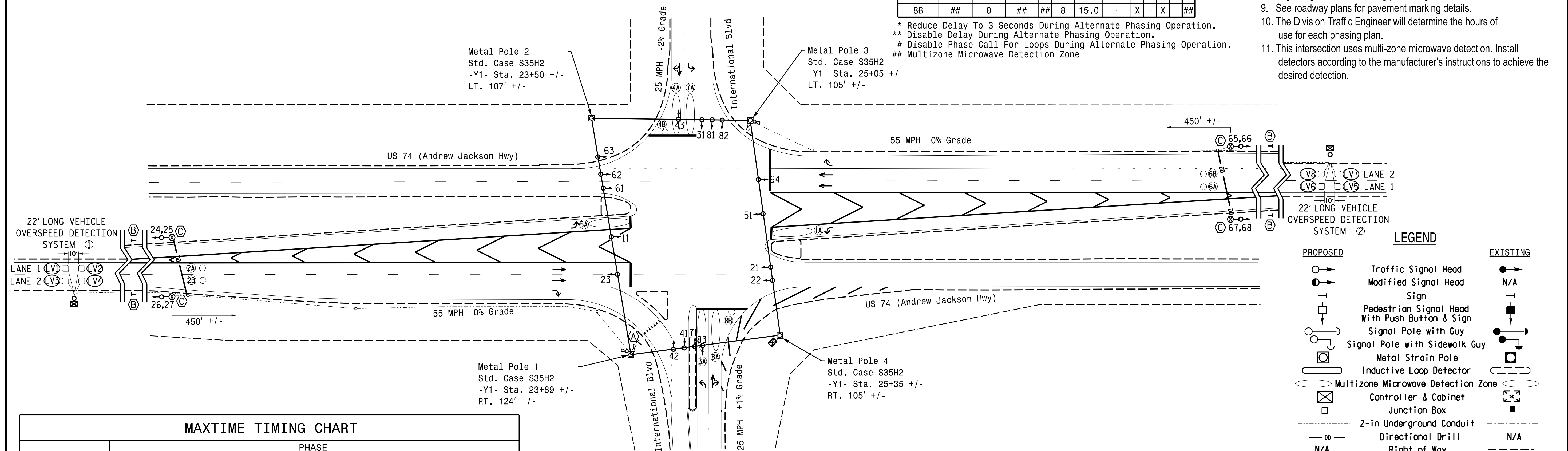
MAXTIME DETECTOR INSTALLATION CHART

DETECTOR				PROGRAMMING								
LOOP/ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A	##	0	##	##	1	15.0**	-	X	-	X	-	##
2A	##	420	##	##	2	-	-	X	X	X	-	##
2B	##	420	##	##	2	-	-	X	X	X	-	##
3A	##	0	##	##	3	15.0*	-	X	-	X	-	##
4A	##	0	##	##	4	10.0	-	X	-	X	-	##
4B	##	0	##	##	4	15.0	-	X	-	X	-	##
5A	##	0	##	##	5	15.0**	-	X	-	X	-	##
6A	##	420	##	##	6	-	-	X	X	X	-	##
6B	##	420	##	##	6	-	-	X	X	X	-	##
7A	##	0	##	##	7	15.0*	-	X	-	X	-	##
8A	##	0	##	##	8	10.0	-	X	-	X	-	##
8B	##	0	##	##	8	15.0	-	X	-	X	-	##

* Reduce Delay To 3 Seconds During Alternate Phasing Operation.
 ** Disable Delay During Alternate Phasing Operation.
 # Disable Phase Call For Loops During Alternate Phasing Operation.
 ## Multizone Microwave Detection Zone

8 Phase Fully Actuated w/ Alternate Phasing Isolated 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 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.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Activate beacons 24, 25, 26, and 27 to flash three seconds prior to the end of phase 2. These beacons shall remain flashing until the beginning of the succeeding phase 2 green.
- Activate beacons 65, 66, 67, and 68 to flash three seconds prior to the end of phase 6. These beacons shall remain flashing until the beginning of the succeeding phase 6 green.
- See roadway plans for pavement marking details.
- The Division Traffic Engineer will determine the hours of use for each phasing plan.
- This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.



LEGEND

PROPOSED	EXISTING
	N/A
	N/A

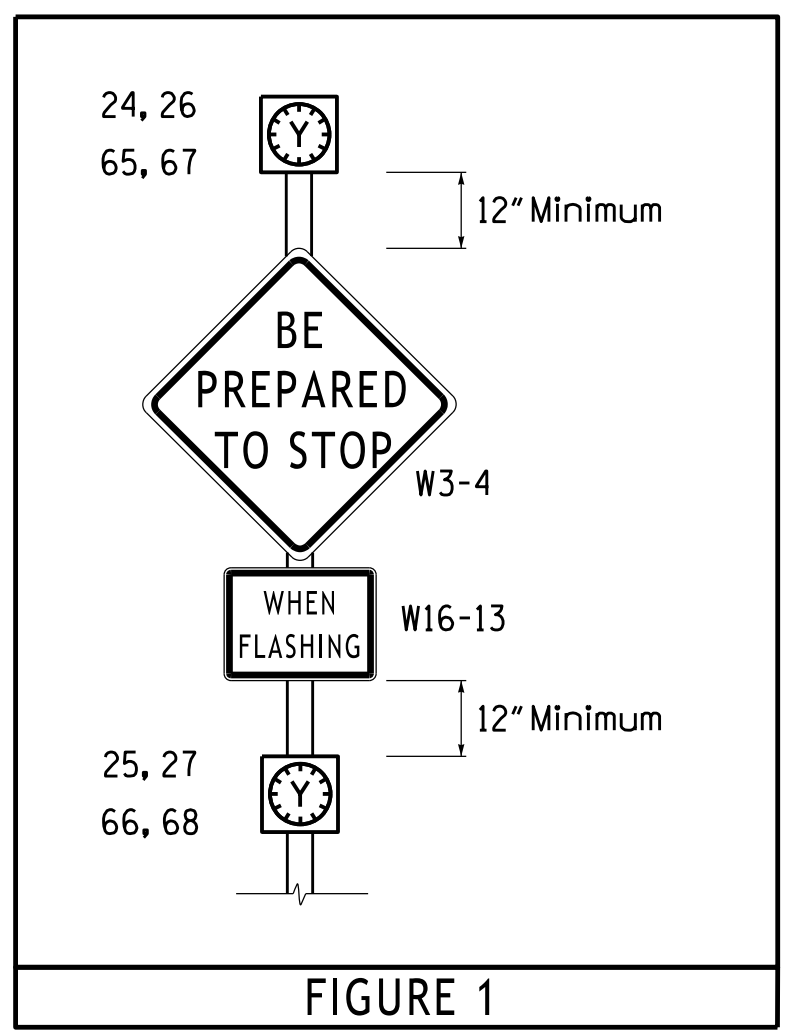
MAXTIME TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Walk *	-	-	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-	-	-
Min Green *	7	14	7	7	7	14	7	7
Passage *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max 1 *	25	90	25	30	25	90	25	30
Yellow Change	3.0	5.2	3.0	3.3	3.0	5.2	3.0	3.3
Red Clear	3.3	1.9	3.9	3.8	3.2	1.9	4.1	3.8
Added Initial *	-	1.5	-	-	-	1.5	-	-
Maximum Initial *	-	4.6	-	-	-	4.6	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduce *	-	30	-	-	-	30	-	-
Minimum Gap	-	3.0	-	-	-	3.0	-	-
Advance Walk	-	-	-	-	-	-	-	-
Non Lock Detector	X	-	X	X	X	-	X	X
Vehicle Recall	-	MIN RECALL	-	-	-	MIN RECALL	-	-
Dual Entry	-	-	-	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.

TABLE OF OPERATION

SIGNAL FACE	INTERVAL	
	1	2
24,26	ON	OFF
25,27	OFF	ON
65,67	ON	OFF
66,68	OFF	ON



This plan supersedes the plan sealed on 08/30/2024.

EXULT ENGINEERING
 304-F W. Millbrook Rd
 Raleigh, NC 27609
 984.500.5426
 www.exultengineering.com

New Installation - Sheet 1 of 2

750 N. Greenfield Pkwy, Garner, NC 27529
 SCALE 1"=50'
 NC License #C-4445

US 74 (Andrew Jackson Hwy) at International Blvd
 Division 3 Brunswick County Northwest
 PLAN DATE: February 2025 EXULT PROJ. NO: 143001
 PREPARED BY: SD Wilder REVIEWED BY: WJ Hamilton

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 032396
 William J. Hamilton
 02/04/2025
 SIGNATURE DATE
 SIG. INVENTORY NO. 03-1238