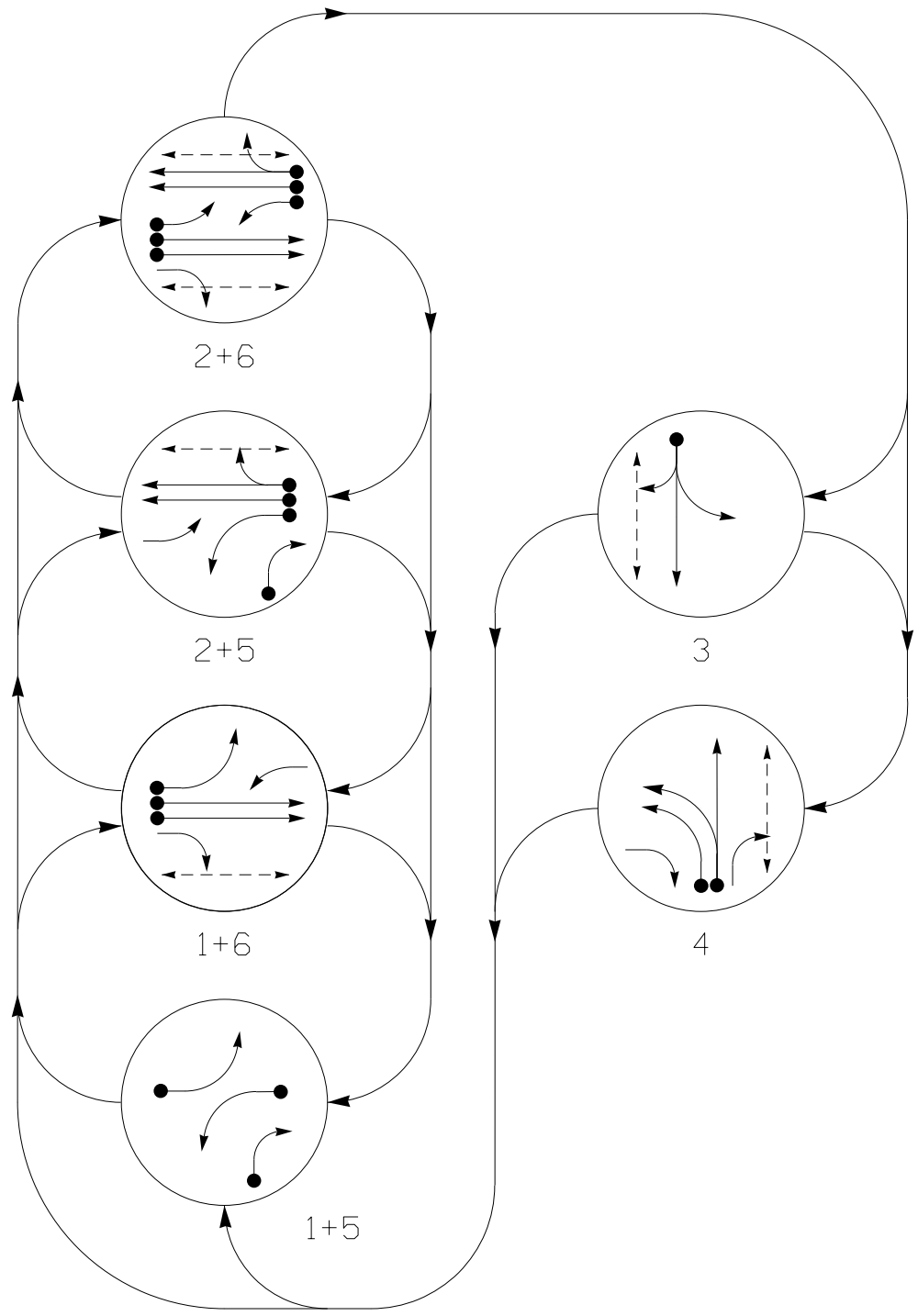
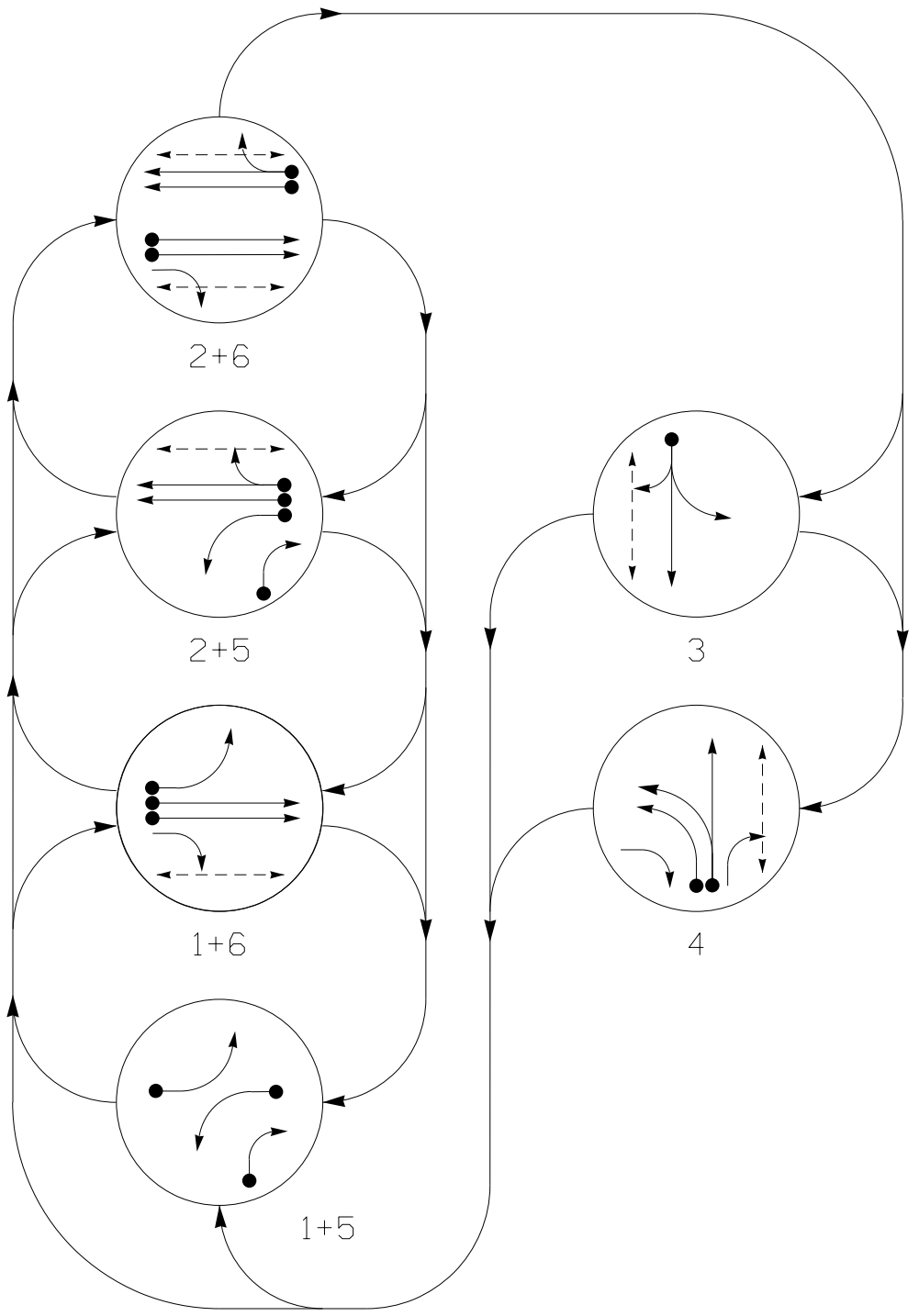


26-AUG-2025, 12:22
D:\w\j\w\dr\usgs01-HDR_US_Egs+01\Documents\NCDOT\NCDOT_Western_D1\w-Dn-Cat I.M.\NCDOT_6170-US23BUS\6-0_CAD_BIM\6.2_Work\In-Progress\R-5600_NCDOT File Structure\Traffic\Signal Design\Signal Design\2025mdd.dgn
Fernando Vazquez AT CHA-FAZ02E

DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM

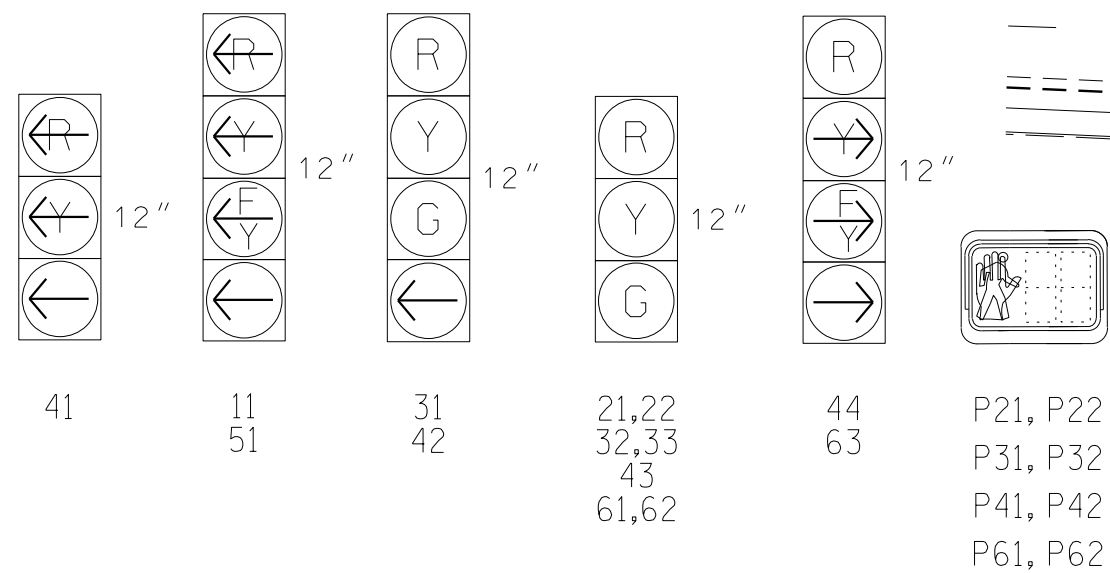


PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Walk *	-	14	14	14	-	14
Ped Clear *	-	15	25	26	-	20
Min Green	7	12	7	7	7	12
Passage *	2.0	2.0	2.0	2.0	2.0	2.0
Max 1 *	45	90	30	40	45	90
Yellow Change	3.0	4.6	4.2	3.8	3.0	4.6
Red Clear	3.1	2.5	3.3	2.8	3.3	2.5
Added Initial *	-	-	-	-	-	-
Maximum Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Advance Walk	-	7	7	**	-	***
Non Lock Detector	X	-	X	X	X	-
Vehicle Recall	-	MIN RECALL	-	-	-	MIN RECALL
Dual Entry	-	-	-	-	-	-

* 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 be lower than 4 seconds.
** See note 10.
*** See note 11

DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE					
	1 + 5	1 + 6	2 + 5	2 + 6	3	4
11	←	←	←	←	←	←
21,22	R	R	G	G	R	R
31	R	R	R	R	G	R
32,33	R	R	R	R	G	R
41	←	←	←	←	←	←
42	R	R	R	R	G	R
43	R	R	R	R	G	R
44	→	→	→	→	→	→
51	←	←	←	←	←	←
61,62	R	G	R	G	R	R
63	R	←	R	←	→	R
P21, P22	DW	DW	W	W	DW	DRK
P31, P32	DW	DW	DW	DW	W	DRK
P41, P42	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DRK

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE					
	1 + 5	1 + 6	2 + 5	2 + 6	3	4
11	←	←	←	←	←	←
21, 22	R	R	G	G	R	R
31	R	R	R	R	G	R
32,33	R	R	R	R	G	R
41	←	←	←	←	←	←
42	R	R	R	R	G	R
43	R	R	R	R	G	R
44	→	→	→	→	→	→
51	←	←	←	←	←	←
61,62	R	G	R	G	R	R
63	R	←	R	←	→	R
P21, P22	DW	DW	W	W	DW	DRK
P31, P32	DW	DW	DW	DW	W	DRK
P41, P42	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DRK

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 DELAY DURING GREEN	NEW CARD
1A	*	0	*	-	1 15.0**	-	-	X	-	*
3A	*	0	*	-	6# 3 5.0	-	-	X	-	*
4A	*	0	*	-	4 3.0	-	-	X	-	*
4B	*	0	*	-	4 -	-	-	X	-	*
5A	*	0	*	-	5 15.0**	-	-	X	-	*
5B	*	0	*	-	2# 5 15.0	-	-	X	-	*

* Multi-Zone Microwave Detection Zone
** Disable delay during Alternate Phase Operation.
Disable Phase call for loop during Alternate Phasing Operation.

6 Phase Fully Actuated w/ Alternate Phasing Operation (Time Based Coordination)

NOTES

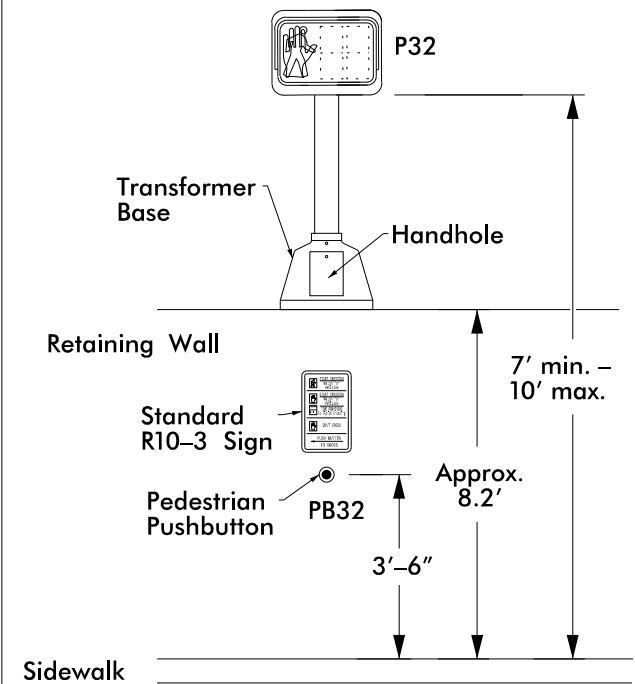
- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Install foundation of Type I pedestal for PB21 flush with curb.
- Install pedestrian head and pushbutton for P32 as shown in detail.
- Uncover and reconnect pedestrian heads and pushbuttons for P22 and P31.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- To provide a leading pedestrian interval on phase 4 program FYA head numbered 44 to delay for 7 seconds after the start of the phase 4 walk interval. See Electrical Details for programming.
- To provide a leading pedestrian interval on phase 6, program FYA heads numbered 51 and 63 to delay for 7 seconds after the start of the phase 6 walk interval. See Electrical Details for programming.
- 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.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

LEGEND

PROPOSED	EXISTING

PEDESTRIAN DETAIL

Detail for installation of P32 head and pushbutton



See additional information in -WALL 20- details.

Microwave Detection

FUNCTION	Sensor 1		Sensor 2	
	2A	6A	2A	6A
Channel	1	1	1	1
Phase	2	6	6	6
Direction of Travel	NB	SB	SB	SB
Type	Priority	Priority	Priority	Priority
Level	2	2	2	2
Detection Zone (ft)	<750	<750	<750	<750
Range (ft)	600-100	150-100	600-100	150-100
Enable Speed	Y	Y	Y	Y
Speed Range (mph)	35-100	1-35	35-100	1-35
Enable Estimated Time of Arrival	Y	N	Y	N
Estimated Time of Arrival (sec)	2.5-6.5	-	2.5-6.5	-

Plans Prepared By:



DRMP, INC.
8210 UNIVERSITY EXECUTIVE PARK DR.
SUITE 200
CHARLOTTE, NC 28262
NC LICENSE NO. F-1524 (704) 549-4260

Signal Upgrade

Temporary Design 5 - TMP Ph2, S1, Part 2

Prepared for:
TRANSPORTATION MOBILITY AND SAFETY DIVISION
NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
Signal Design Section

750 N. Greenfield Pkwy, Garner, NC 27529

NC 107 (E Main Street)
at
NC 116 (Webster Road) /
Alexander Street

Division 14 Jackson County Sylva

PLAN DATE: August 2025
PREPARED BY: DS Griffith

REVIEWED BY: ZM Esposito
REVIEWED BY: BN Groome

REVISIONS

INIT. DATE

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

SEAL

SEAL
052936
ENGINEER
BRITANNY N. GROOM

Signed by:
Brittany Groom
8/26/2025
DATE

SIG. INVENTORY NO. 14-0411T5