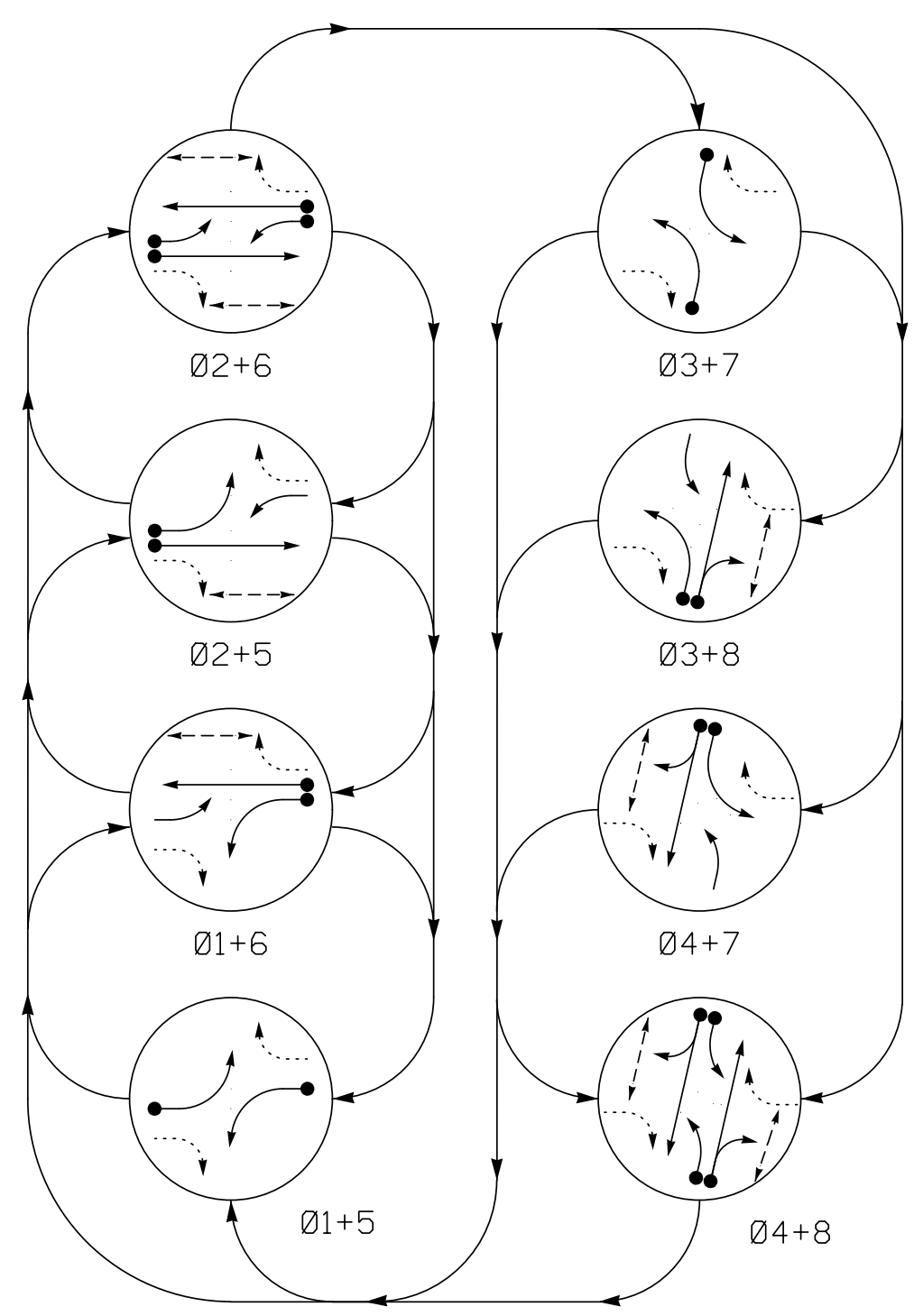


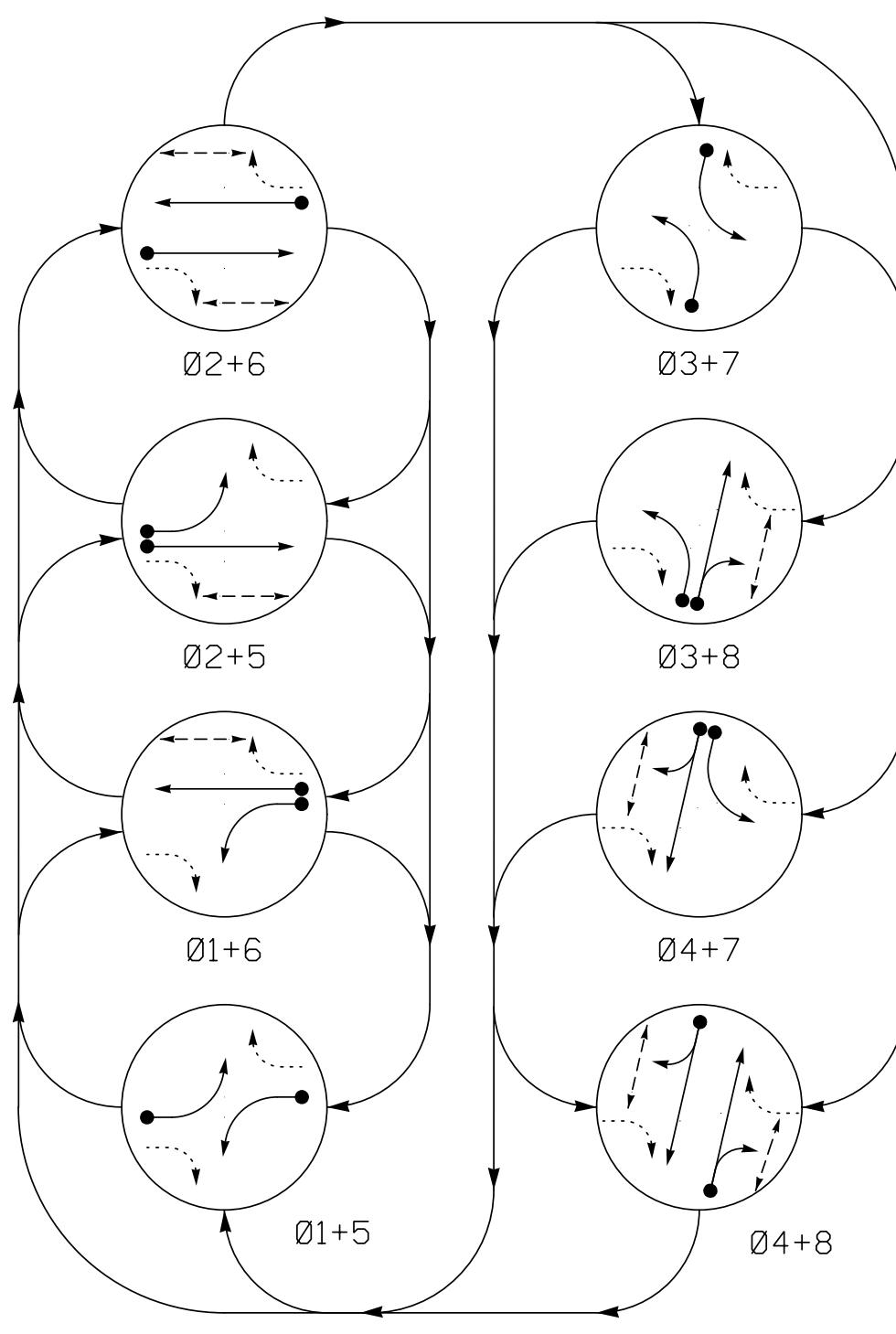
DEFAULT PHASING DIAGRAM



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE								FLIGHT
	Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø3+7	Ø3+8	Ø4+7	Ø4+8	
11	←	←	←	←	←	←	←	←	Y
21, 22, 23	R	R	G	G	R	R	R	R	Y
31	←	←	←	←	←	←	←	←	Y
41, 42	R	R	R	R	R	R	G	G	R
51	←	←	←	←	←	←	←	←	Y
61, 62, 63	R	G	R	G	R	R	R	R	Y
71	←	←	←	←	←	←	←	←	Y
81, 82	R	R	R	R	R	G	R	G	R
P21, P22	DW	DW	W	W	DW	DW	DW	DW	DRK
P41, P42	DW	DW	DW	DW	DW	DW	W	W	DRK
P61, P62	DW	W	DW	W	DW	DW	DW	DW	DRK
P81, P82	DW	DW	DW	DW	DW	W	W	W	DRK

ALTERNATE PHASING DIAGRAM



ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE								FLIGHT
	Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø3+7	Ø3+8	Ø4+7	Ø4+8	
11	←	←	←	←	←	←	←	←	Y
21, 22, 23	R	R	G	G	R	R	R	R	Y
31	←	←	←	←	←	←	←	←	Y
41, 42	R	R	R	R	R	R	G	G	R
51	←	←	←	←	←	←	←	←	Y
61, 62, 63	R	G	R	G	R	R	R	R	Y
71	←	←	←	←	←	←	←	←	Y
81, 82	R	R	R	R	R	G	R	G	R
P21, P22	DW	DW	W	W	DW	DW	DW	DW	DRK
P41, P42	DW	DW	DW	DW	DW	DW	W	W	DRK
P61, P62	DW	W	DW	W	DW	DW	DW	DW	DRK
P81, P82	DW	DW	DW	DW	W	W	W	W	DRK

MAXTIME DETECTOR INSTALLATION CHART

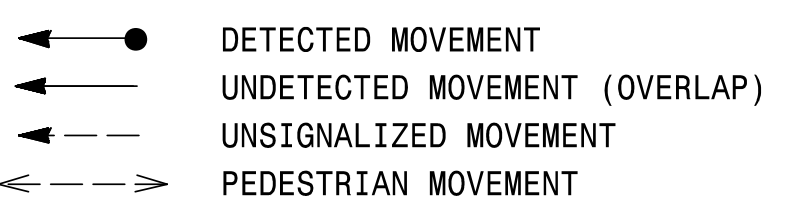
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A	6X40	0	2-4-2	X	1	15.0*	-	X	-	X	-	X
2A	6X6	300	6	X	2	-	-	X	-	X	-	X
3A	6X40	0	2-4-2	X	3	15.0*	-	X	-	X	-	X
4A	6X40	0	2-4-2	X	4	5.0	2.0	X	-	X	-	X
4B	6X6	300	6	X	4	-	-	X	-	X	-	X
5A	6X40	0	2-4-2	X	5	15.0*	-	X	-	X	-	X
6A	6X6	300	6	X	6	-	-	X	-	X	-	X
7A	6X40	0	2-4-2	X	7	15.0*	-	X	-	X	-	X
8A	6X40	0	2-4-2	X	8	5.0	2.0	X	-	X	-	X
8B	6X6	300	6	X	8	-	-	X	-	X	-	X

* Reduce Delay to 3 seconds during Alternate Phasing operation.
Disable Phase call for loop during Alternate Phasing operation.

8 Phase Fully Actuated w/ Alternate Phasing Isolated

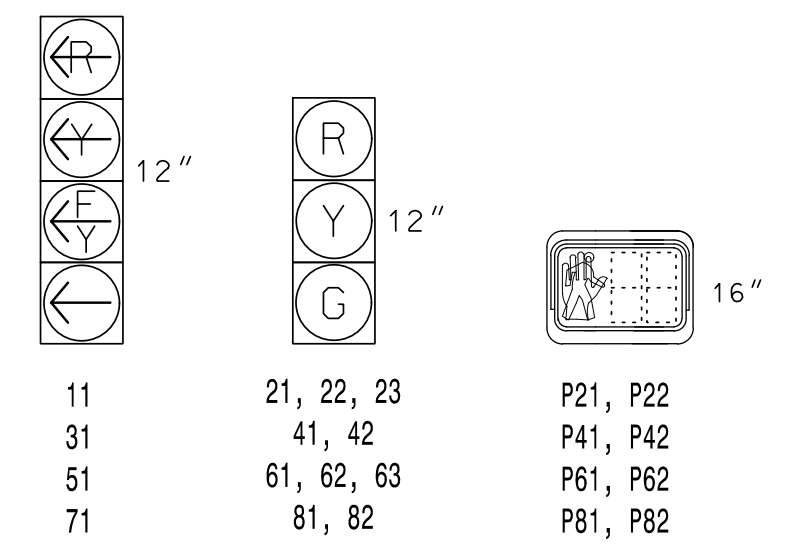
- NOTES**
- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
 - Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
 - Phase 1 and/or phase 5 may be lagged.
 - Phase 3 and/or phase 7 may be lagged.
 - Set all detector units to presence mode.
 - Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
 - Program pedestrian heads to countdown the flashing "Don't Walk" time only.
 - Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
 - The Division Traffic Engineer will determine the hours of use for each phasing plan.
 - Suppress FYA for signal head 11 during first 4 seconds of phase 2 ped.
 - Suppress FYA for signal head 51 during first 5 seconds of phase 6 ped.

PHASING DIAGRAM DETECTION LEGEND



SIGNAL FACE I.D.

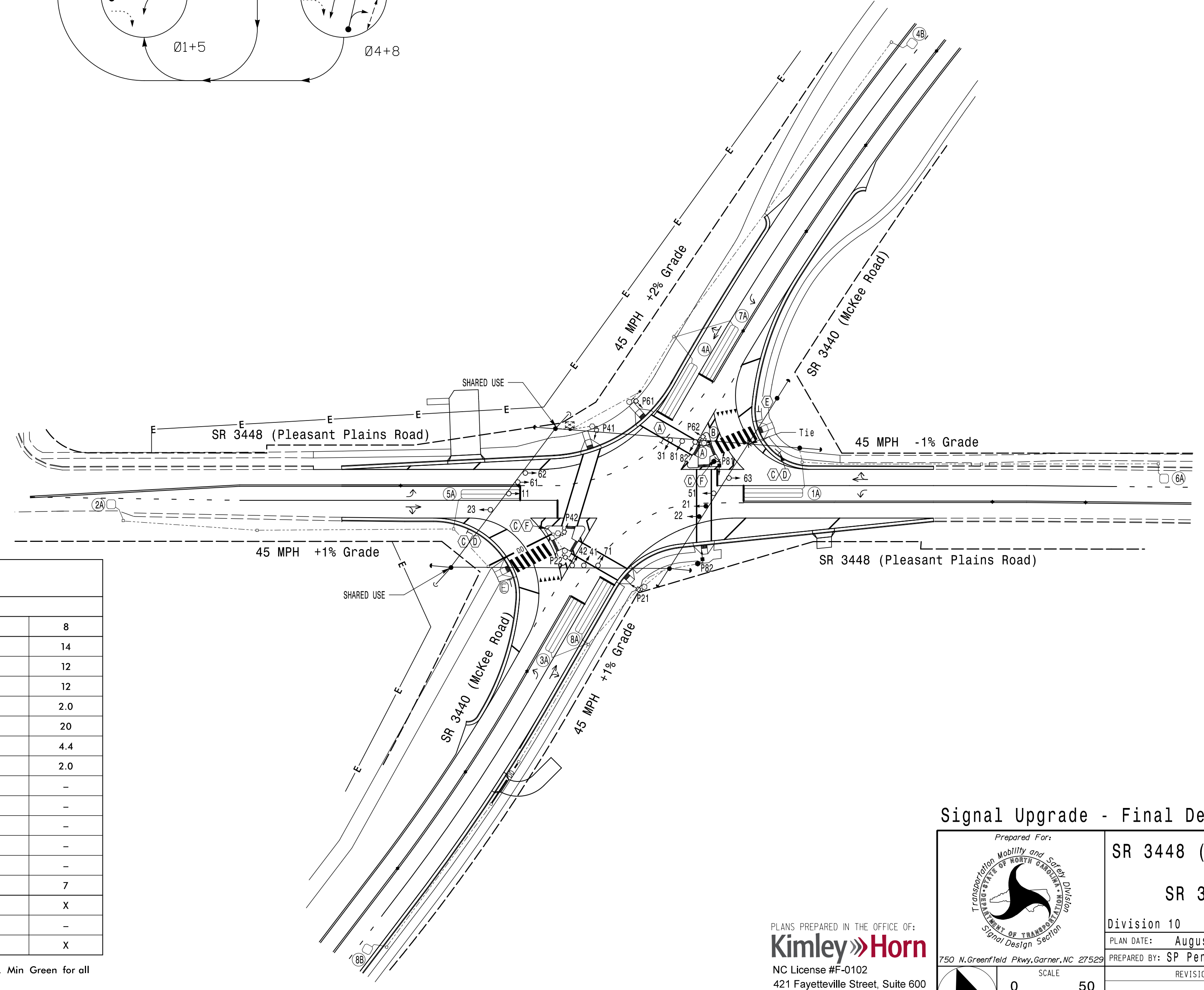
All Heads L.E.D.



MAXTIME TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Walk *	-	7	-	14	-	7	-	14
Ped Clear	-	8	-	12	-	9	-	12
Min Green *	7	12	7	7	7	12	7	12
Passage *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max 1 *	20	60	20	20	20	60	20	20
Yellow Change	3.0	4.6	3.0	4.4	3.0	4.6	3.0	4.4
Red Clear	3.4	2.1	3.1	2.0	3.5	2.1	3.3	2.0
Added Initial *	-	2.5	-	-	-	2.5	-	-
Maximum Initial *	-	34	-	-	-	34	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduce *	-	30	-	-	-	30	-	-
Minimum Gap	-	3.0	-	-	-	3.0	-	-
Advance Walk	-	-	-	7	-	-	-	7
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.
Do not adjust walk times lower than what is shown.

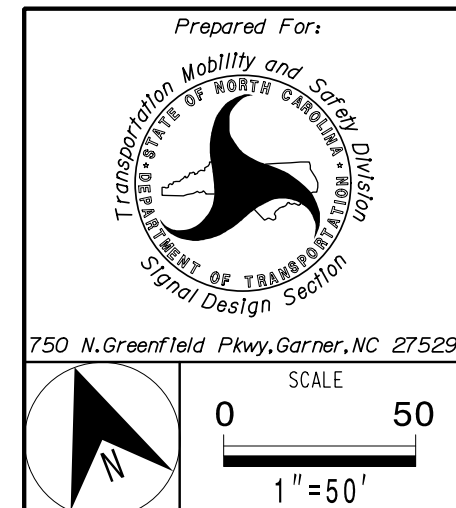


LEGEND

PROPOSED	EXISTING
	N/A
	N/A
	N/A
N/A	Right of Way
	N/A
N/A	Curb Ramp

Signal Upgrade - Final Design

PLANS PREPARED IN THE OFFICE OF:
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Raleigh, NC 27601
(919) 617-2000



SR 3448 (Pleasant Plains Road) at SR 3440 (McKee Road)

Division 10 Mecklenburg County Matthews

PLAN DATE: August 2023 REVIEWED BY: SL Phillips

PREPARED BY: SP Pennington REVIEWED BY:

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

4/29/2024
DATE
4/29/2024
DATE
SIG. INVENTORY NO. 10-1325

4/25/2024 7:40:26 AM G:\p1\101036\026 - McKee Rd EXH15\SIGNAL M54 - Signal Design\m54_0 10-1325_2023.dgn