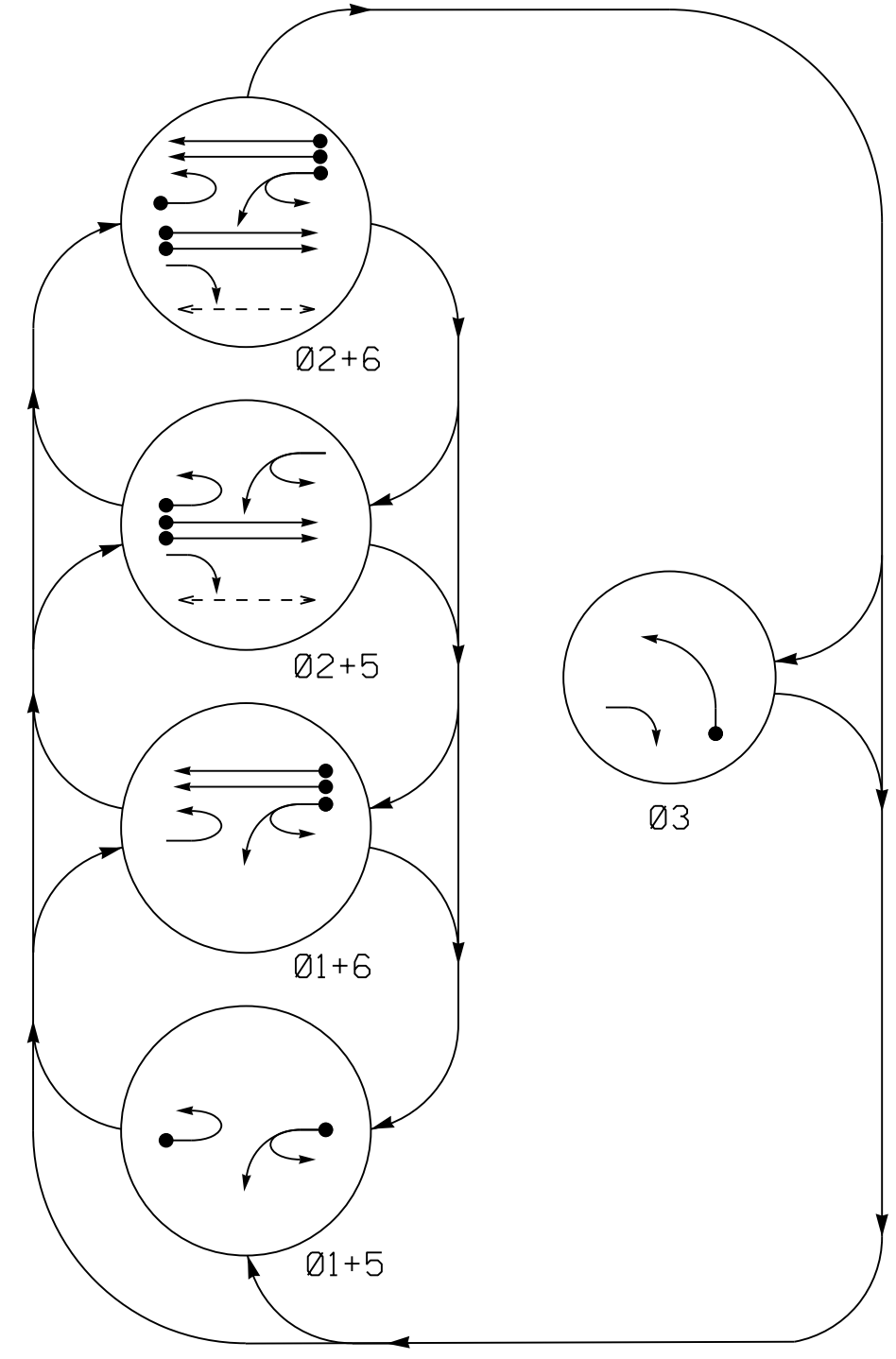
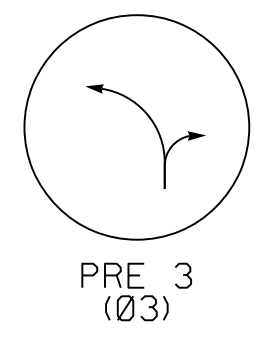


DEFAULT PHASING DIAGRAM



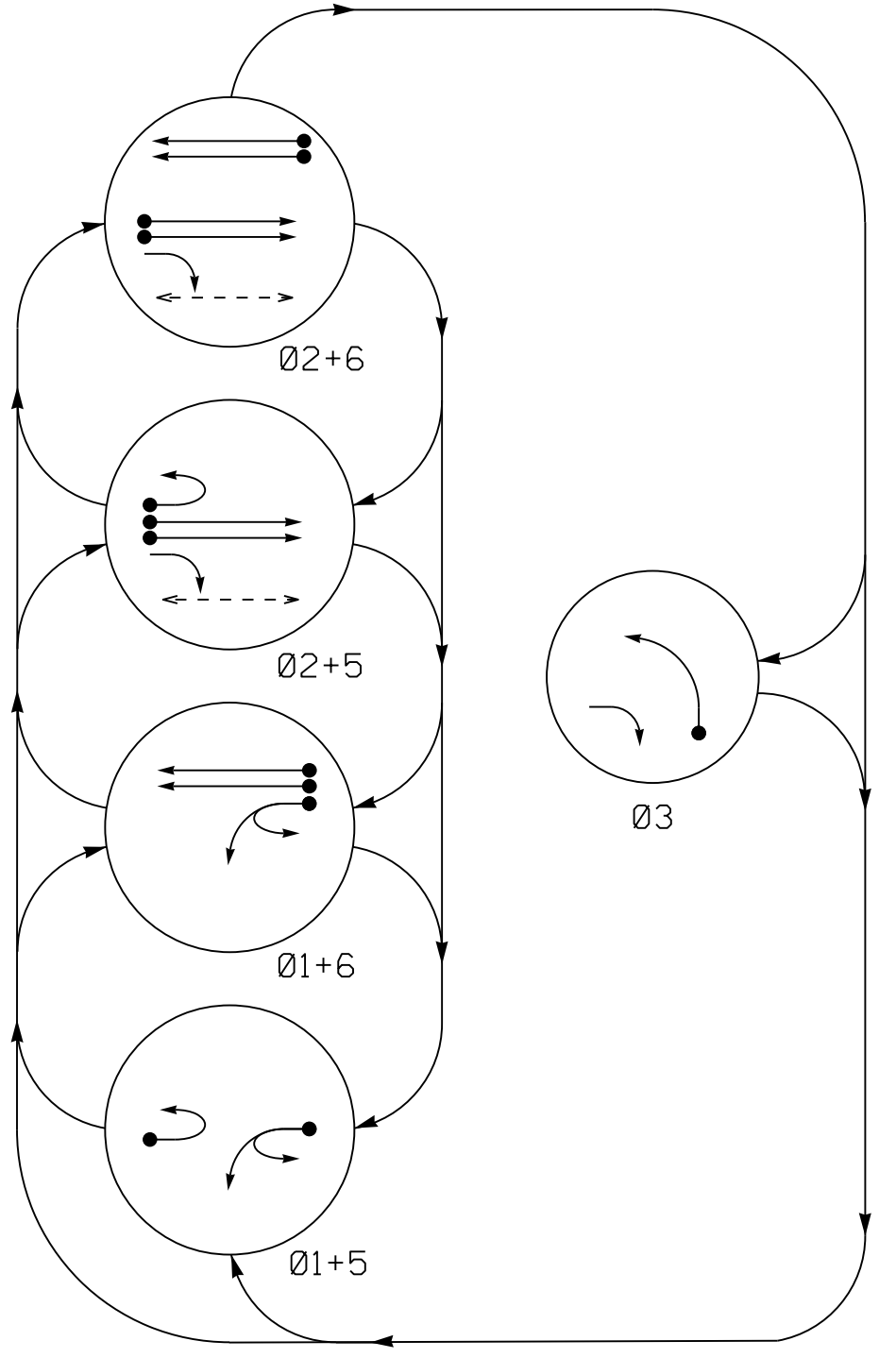
DEFAULT PHASING EV PREEMPT PHASES (Medium Priority)



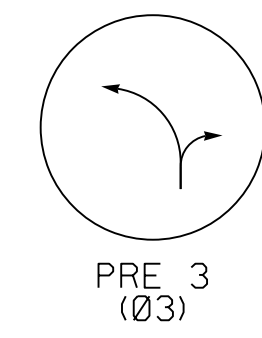
DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE						
	01+5	02+5	02+6	03	PRE 3	FLASH	DRK
11	←	←	←	←	←	←	←
21,22	R	R	G	G	R	R	Y
23	R	R	F	F	F	R	Y
31,32	R	R	R	R	G	G	R
51	←	←	←	←	←	←	←
61,62	R	G	R	G	R	R	Y
P21,P22	DW	DW	W	W	DW	DW	DRK

ALTERNATE PHASING DIAGRAM



ALTERNATE PHASING EV PREEMPT PHASES (Medium Priority)



ALTERNATE PHASING TABLE OF OPERATION

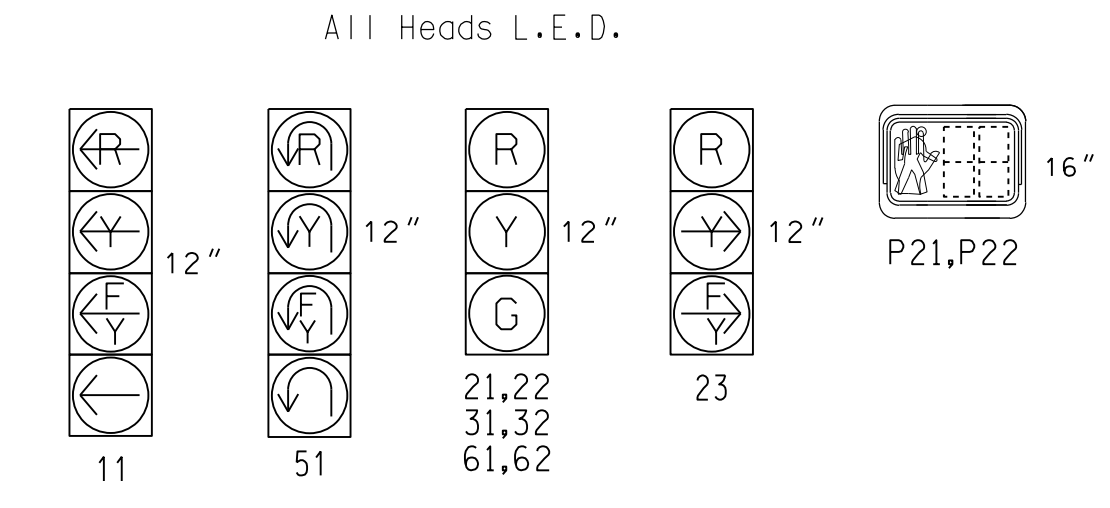
SIGNAL FACE	PHASE						
	01+5	02+5	02+6	03	PRE 3	FLASH	DRK
11	←	←	←	←	←	←	←
21,22	R	R	G	G	R	R	Y
23	R	R	F	F	F	R	Y
31,32	R	R	R	R	G	G	R
51	←	←	←	←	←	←	←
61,62	R	G	R	G	R	R	Y
P21,P22	DW	DW	W	W	DW	DW	DRK

ASC/3 DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	X	1	Yes	-	15*	-	N	-	X
					6#	Yes	-	-	-	G	-	X
2A	6X6	300	5	X	2	Yes	-	-	X	N	-	X
2B	6X6	300	5	X	2	Yes	-	-	X	N	-	X
3A	6X40	0	2-4-2	X	3	Yes	-	3	-	N	-	X
					5	Yes	-	15*	-	N	-	X
5A	6X40	0	2-4-2	X	2#	Yes	-	-	-	G	-	X
6A	6X6	300	5	X	6	Yes	-	-	X	N	-	X
6B	6X6	300	5	X	6	Yes	-	-	X	N	-	X

* Disable delay during Alternate Phasing operation.
 # Disable phase call for loop during Alternate Phasing operation.

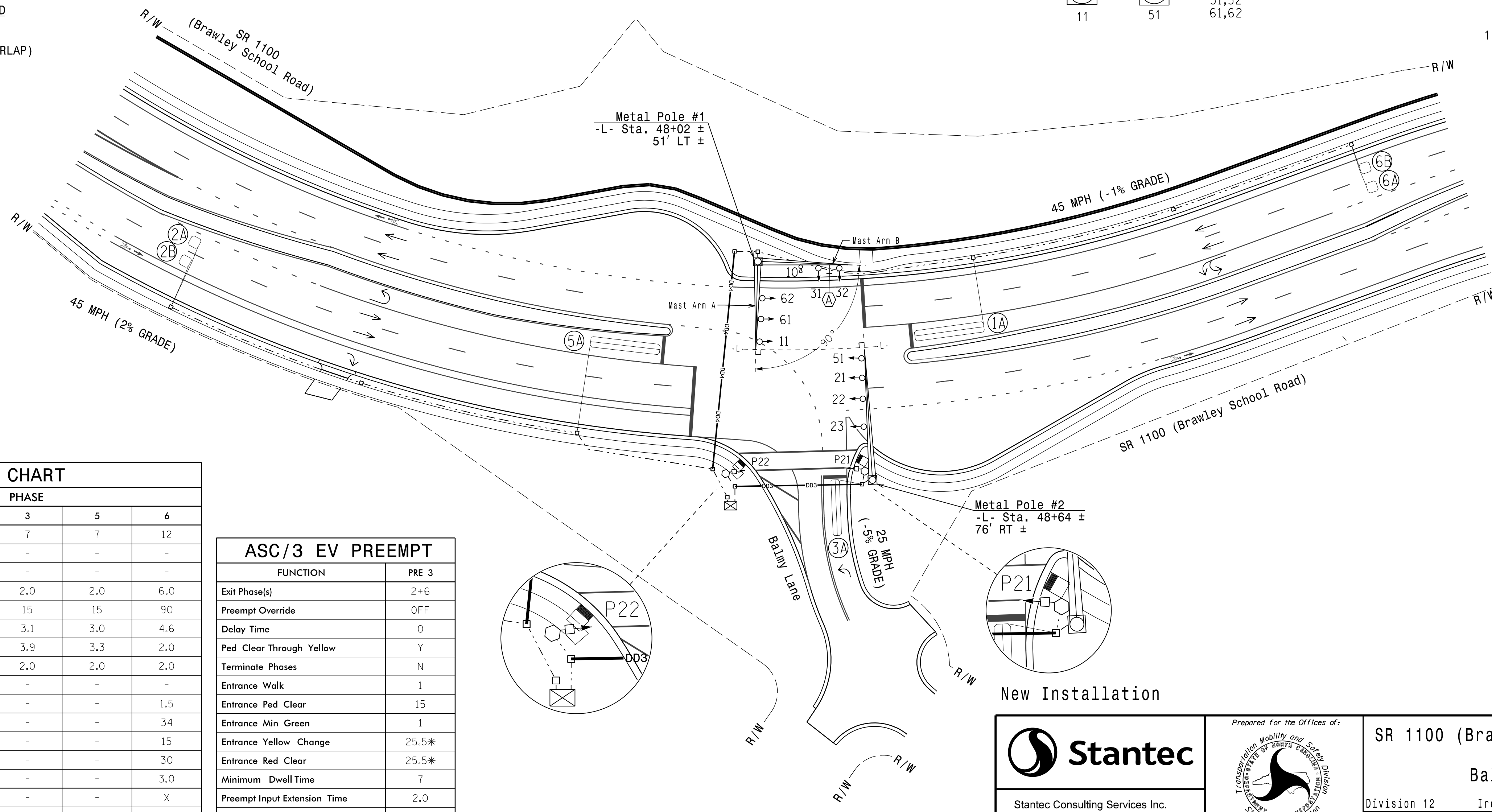
SIGNAL FACE I.D.



PHASING DIAGRAM DETECTION LEGEND

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

- NOTES**
- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
 - Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
 - Phase 1 and/or 5 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.
 - Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
 - Program pedestrian heads to countdown the flashing "Don't Walk" time only.
 - This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
 - Optical detector 10 calls PRE 3.
 - The Division Traffic Engineer will determine the hours of use for each phasing plan.
 - Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



ASC/3 TIMING CHART

FEATURE	PHASE					
	1	2	3	5	6	
Min Green *	7	12	7	7	12	
Walk *	-	7	-	-	-	
Ped Clear	-	15	-	-	-	
Veh. Extension *	2.0	6.0	2.0	2.0	6.0	
Max 1 *	15	90	15	15	90	
Yellow	3.0	4.6	3.1	3.0	4.6	
Red Clear	3.3	2.0	3.9	3.3	2.0	
Red Revert	2.0	2.0	2.0	2.0	2.0	
Actuations B4 Add *	-	-	-	-	-	
Seconds / Actuation *	-	1.5	-	-	1.5	
Max Initial *	-	34	-	-	34	
Time Before Reduction *	-	15	-	-	15	
Time To Reduce *	-	30	-	-	30	
Minimum Gap	-	3.0	-	-	3.0	
Locking Detector	-	X	-	-	X	
Recall Position	-	VEH. RECALL	-	-	VEH. RECALL	
Dual Entry	-	-	-	-	-	
Simultaneous Gap	X	X	X	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.

ASC/3 EV PREEMPT

FUNCTION	PRE 3
Exit Phase(s)	2+6
Preempt Override	OFF
Delay Time	0
Ped Clear Through Yellow	Y
Terminate Phases	N
Entrance Walk	1
Entrance Ped Clear	15
Entrance Min Green	1
Entrance Yellow Change	25.5*
Entrance Red Clear	25.5*
Minimum Dwell Time	7
Preempt Input Extension Time	2.0
Preempt Max Time	120
Exit Yellow Change	25.5*
Exit Red Clear	25.5*

* Time defaults to time used for phase during normal operation.

LEGEND

PROPOSED	EXISTING
○ Traffic Signal Head	● N/A
○ Modified Signal Head	○ N/A
○ Sign	○ N/A
○ Pedestrian Signal Head With Push Button & Sign	○ N/A
○ Signal Pole with Guy	○ N/A
○ Signal Pole with Sidewalk Guy	○ N/A
○ Inductive Loop Detector	○ N/A
○ Controller & Cabinet	○ N/A
○ Junction Box	○ N/A
○ 2-in Underground Conduit	○ N/A
○ Right of Way	○ N/A
○ Directional Arrow	○ N/A
○ Metal Pole with Mastarm	○ N/A
○ Directional Drill	○ N/A
○ Type II Signal Pedestal	○ N/A
○ Optical EVP Detector	○ N/A
○ Curb Ramps	○ N/A
○ Left Arrow "ONLY" Sign (R3-5L)	○ N/A

New Installation

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Prepared for the Offices of:
 Transportation Mobility and Safety Division
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 SIGNAL DESIGN SECTION
 750 N. Greenfield Pkwy, Garner, NC 27526

SR 1100 (Brawley School Road) at Balmy Lane
 Division 12 Iredell County Mooresville
 PLAN DATE: May 2022 REVIEWED BY: E D Harris
 PREPARED BY: J. Hambright REVIEWED BY: R M Nuncney

SEAL
 PROFESSIONAL ENGINEER
 SEAL 042678
 DERRICK A. WALLER

3/22/2023
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 User: dawall118r

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DocuSigned by:
 Derrick Waller 3/22/2023
 DATE
 SIG. INVENTORY NO. 12-1897