

8 Phase  
Fully Actuated  
(Cary Signal System)

NOTES

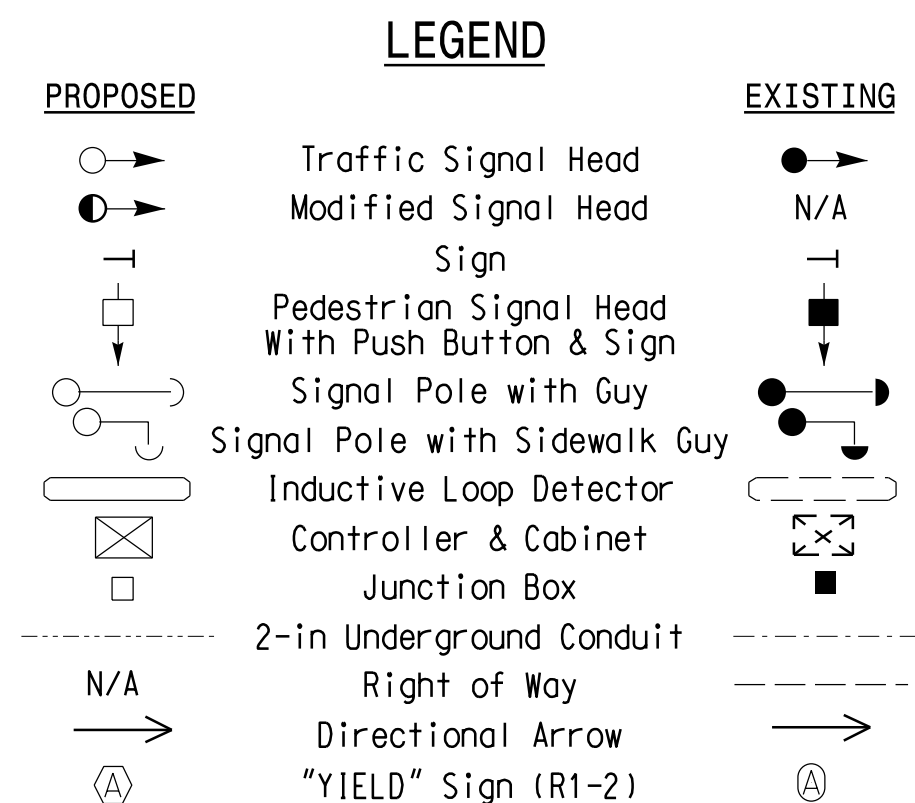
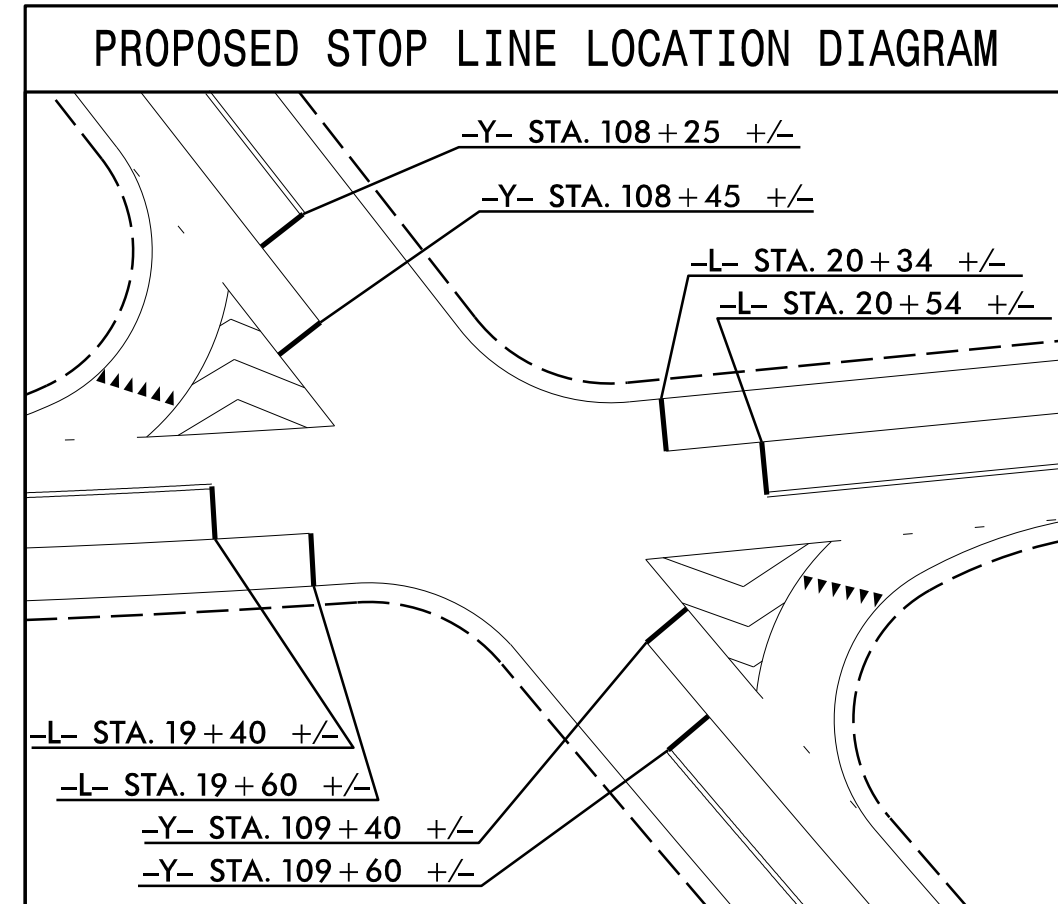
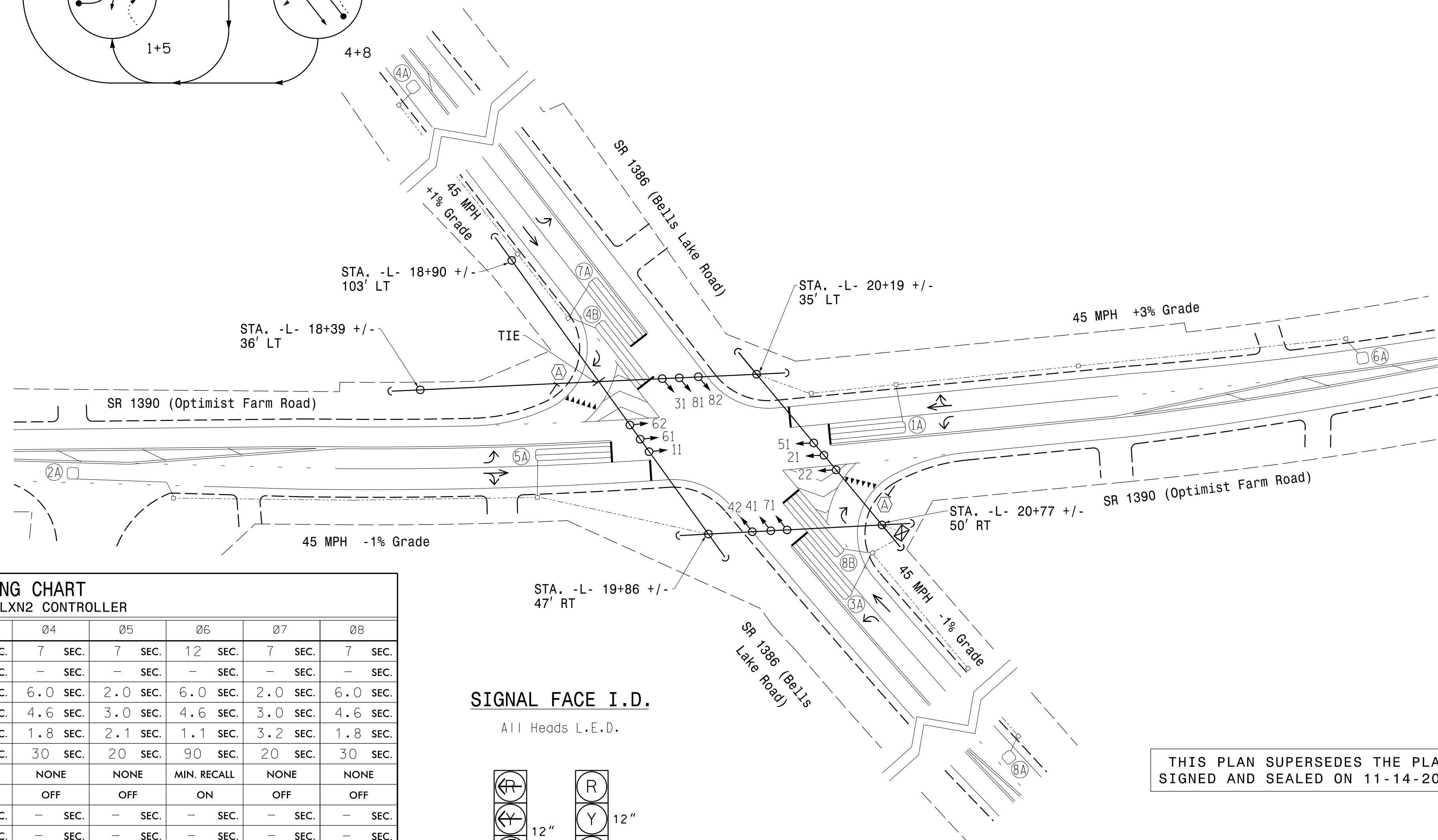
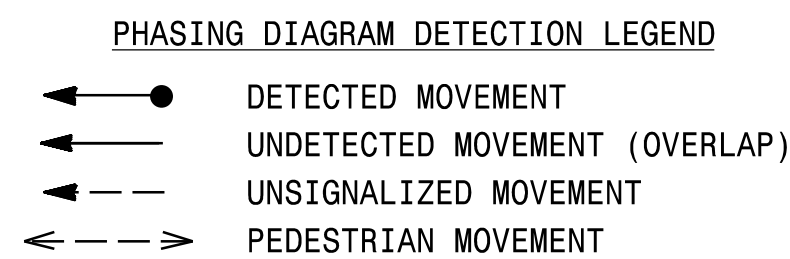
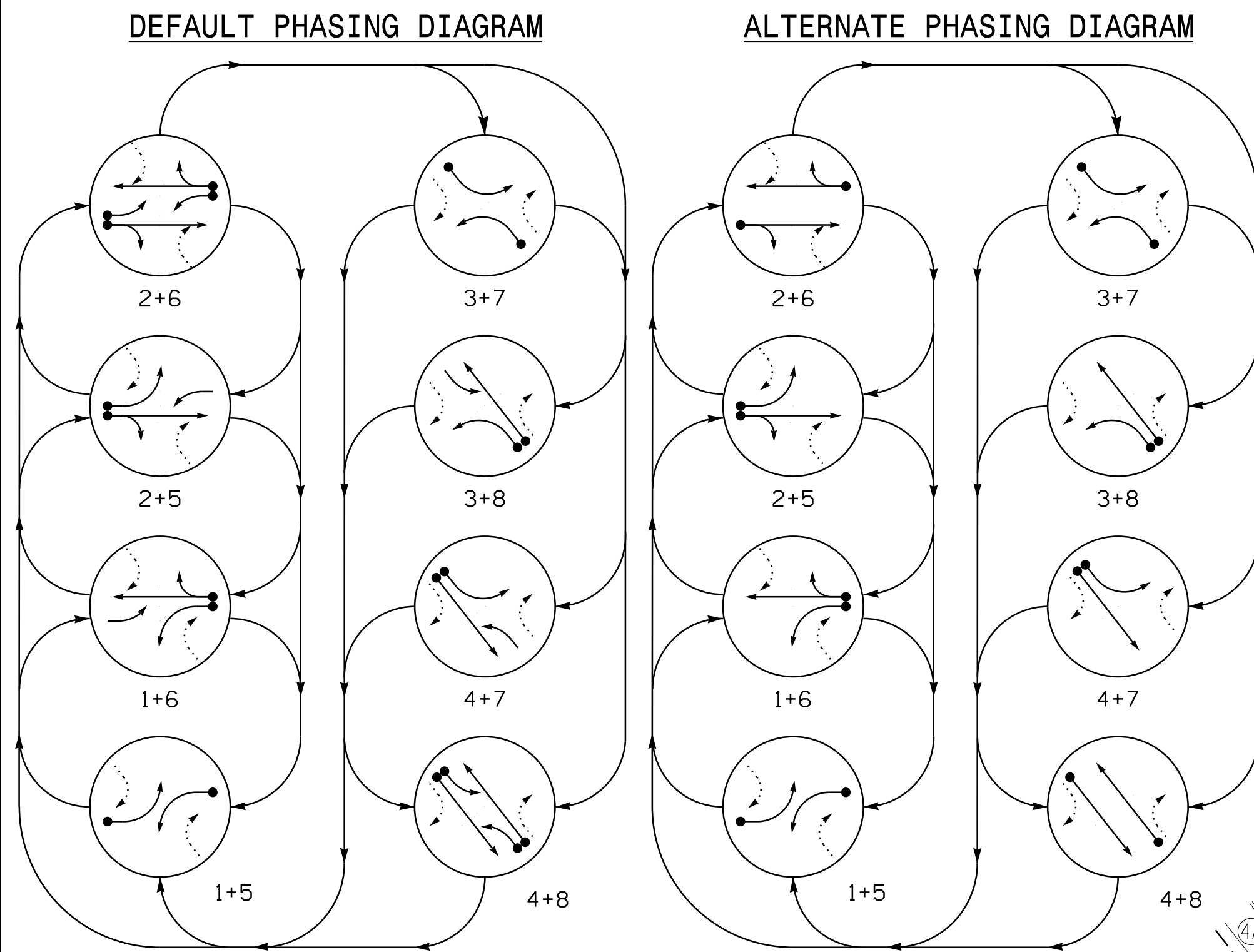
1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. Phase 3 and/or phase 7 may be lagged.
5. Set all detector units to presence mode.
6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
7. The City Traffic Engineer will determine the hours of use for each phasing plan.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

LOOP & DETECTOR INSTALLATION CHART											
INDUCTIVE LOOPS						DETECTOR UNITS					
LOOP NO.	SIZE (ft)	DIST. FROM STOPBAR (ft)	TURNS	NEW EXISTING	NEMA PHASE	NEW EXISTING	TIMING		ADDED INITIAL	DET. TYPE	
							FEATURE	TIME			
1A	6X40	0	2-4-2	X -	1	X -	DELAY	15*	-	N	
2A	6X6	300	5	X -	6#	X -	DELAY	3	-	G	
3A	6X40	0	2-4-2	X -	3	X -	DELAY	15*	-	N	
4A	6X6	300	5	X -	8#	X -	DELAY	3	-	N	
4B	6X40	0	2-4-2	X -	4	X -	DC/EC	5/2	-	N	
5A	6X40	0	2-4-2	X -	5	X -	DELAY	15*	-	N	
6A	6X6	300	5	X -	2#	X -	DELAY	3	-	G	
7A	6X40	0	2-4-2	X -	7	X -	DELAY	15*	-	N	
8A	6X6	300	5	X -	4#	X -	DELAY	3	-	N	
8B	6X40	0	2-4-2	X -	8	X -	DC/EC	5/2	-	N	

\* Reduce delay to 3 seconds during Alternate Phasing operation.  
# Disable phase call during Alternate Phasing operation.

DEFAULT PHASING TABLE OF OPERATION									
SIGNAL FACE	PHASE								FLASH
	1 + 5	1 + 6	2 + 5	2 + 6	3 + 7	3 + 8	4 + 7	4 + 8	
11	←	←	←	←	←	←	←	←	
21, 22	R	R	G	G	R	R	R	R	
31	←	←	←	←	←	←	←	←	
41, 42	R	R	R	R	R	R	R	G	
51	←	←	←	←	←	←	←	←	
61, 62	R	G	R	G	R	R	R	R	
71	←	←	←	←	←	←	←	←	
81, 82	R	R	R	R	R	G	R	G	

ALTERNATE PHASING TABLE OF OPERATION									
SIGNAL FACE	PHASE								FLASH
	1 + 5	1 + 6	2 + 5	2 + 6	3 + 7	3 + 8	4 + 7	4 + 8	
11	←	←	←	←	←	←	←	←	
21, 22	R	R	G	G	R	R	R	R	
31	←	←	←	←	←	←	←	←	
41, 42	R	R	R	R	R	R	G	G	
51	←	←	←	←	←	←	←	←	
61, 62	R	G	R	G	R	R	R	R	
71	←	←	←	←	←	←	←	←	
81, 82	R	R	R	R	R	G	R	G	

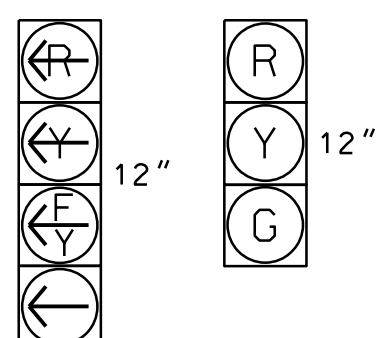


TIMING CHART								
ASC/3-2070LXN2 CONTROLLER								
PHASE	01	02	03	04	05	06	07	08
MINIMUM GREEN *	7 SEC.	12 SEC.	7 SEC.	7 SEC.	7 SEC.	12 SEC.	7 SEC.	7 SEC.
DELAYED GREEN *	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.
VEHICLE EXT. *	2.0 SEC.	6.0 SEC.	2.0 SEC.	6.0 SEC.	2.0 SEC.	6.0 SEC.	2.0 SEC.	6.0 SEC.
YELLOW CHANGE INT.	3.0 SEC.	4.6 SEC.	3.0 SEC.	4.6 SEC.	3.0 SEC.	4.6 SEC.	3.0 SEC.	4.6 SEC.
RED CLEARANCE	2.1 SEC.	1.1 SEC.	3.1 SEC.	1.8 SEC.	2.1 SEC.	1.1 SEC.	3.2 SEC.	1.8 SEC.
MAX. 1 *	20 SEC.	90 SEC.	20 SEC.	30 SEC.	20 SEC.	90 SEC.	20 SEC.	30 SEC.
RECALL POSITION	NONE	MIN. RECALL	NONE	NONE	NONE	MIN. RECALL	NONE	NONE
LOCK DET.	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
WALK *	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.
PED. CLEAR	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.
ACTUATION B4 ADD *	- VEH.	- VEH.	- VEH.	- VEH.	- VEH.	- VEH.	- VEH.	- VEH.
SEC. PER ACTUATION *	- SEC.	2.5 SEC.	- SEC.	- SEC.	- SEC.	2.5 SEC.	- SEC.	- SEC.
MAX. INITIAL *	- SEC.	34 SEC.	- SEC.	- SEC.	- SEC.	34 SEC.	- SEC.	- SEC.
TIME B4 REDUCTION *	- SEC.	15 SEC.	- SEC.	15 SEC.	- SEC.	15 SEC.	- SEC.	15 SEC.
TIME TO REDUCE *	- SEC.	45 SEC.	- SEC.	45 SEC.	- SEC.	45 SEC.	- SEC.	45 SEC.
MINIMUM GAP	- SEC.	3.0 SEC.	- SEC.	3.0 SEC.	- SEC.	3.0 SEC.	- SEC.	3.0 SEC.
DUAL ENTRY	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
SIMULTANEOUS GAP	ON	ON	ON	ON	ON	ON	ON	ON

\* 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.

SIGNAL FACE I.D.

All Heads L.E.D.



11  
31  
51  
71

21, 22  
41, 42  
61, 62  
81, 82

THIS PLAN SUPERSEDES THE PLAN  
SIGNED AND SEALED ON 11-14-2023



New Installation		DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
		SEAL	
Prepared for: SR 1390 (Optimist Farm Road) at SR 1386 (Bells Lake Road)		Division 5 Wake County Cary	
PLAN DATE: March 2025		REVIEWED BY: ZM Esposito	
PREPARED BY: AW Poole		DRMP PROJ. NO.: 22242 (040)	
REVISIONS		INIT. DATE	
0 40		1"=40'	
SIGNED BY:		DATE: 3/21/2025	
SIC. INVENTORY NO. 05-0882			