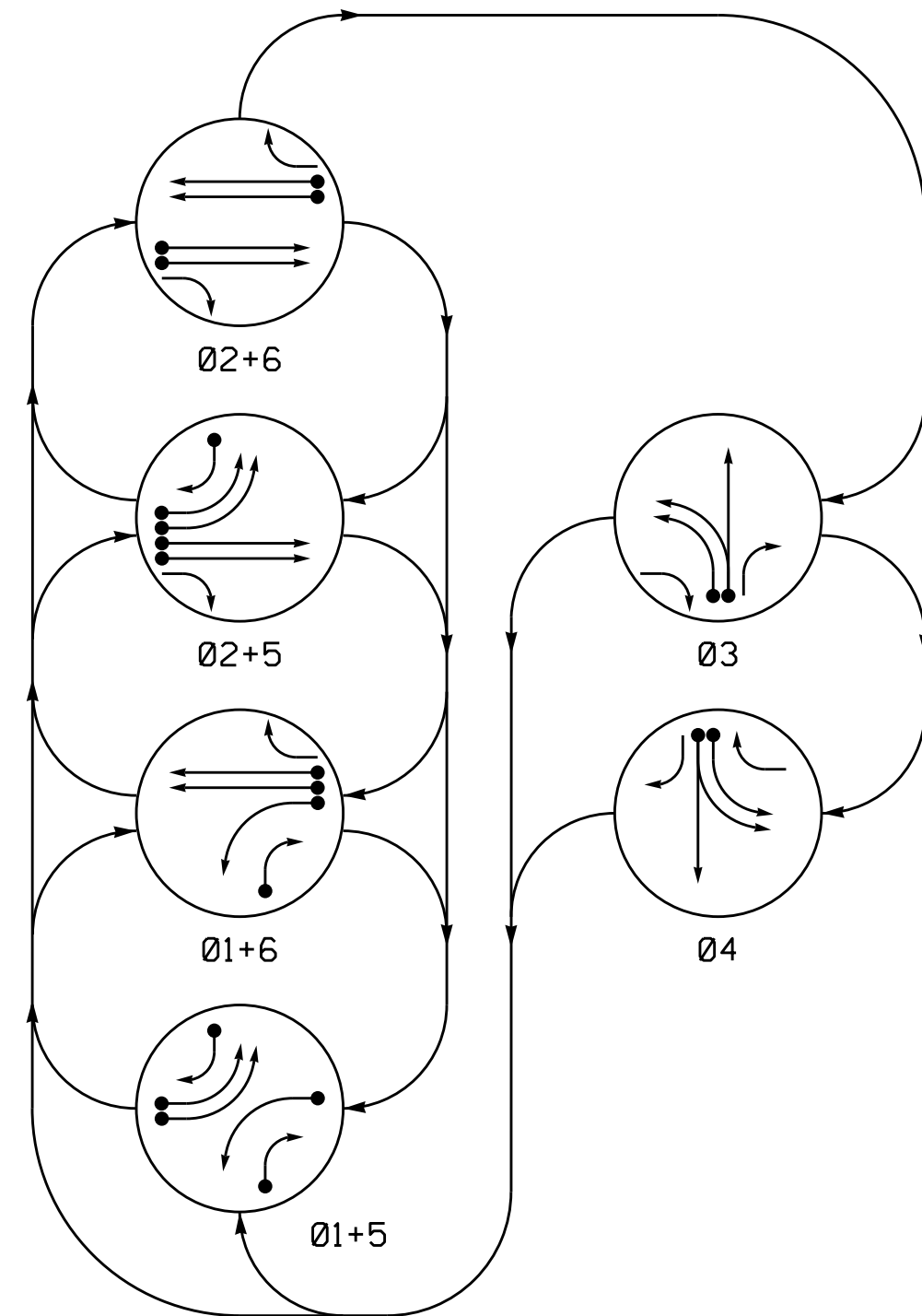
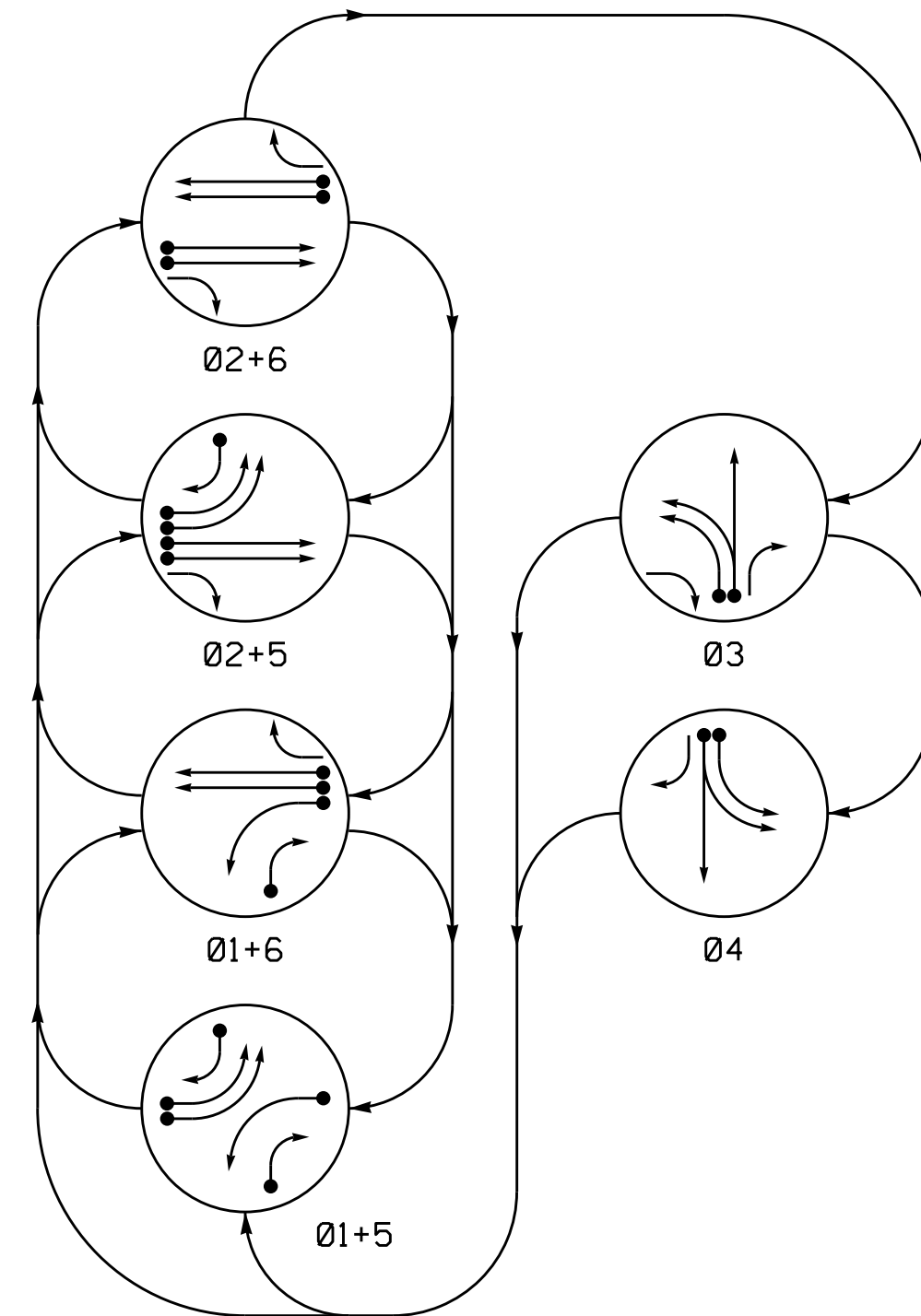


DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE					
	01+5	01+6	02+5	02+6	03	04
11	-	-	R	R	R	R
21	R	R	G	G	R	Y
22	R	R	G	G	R	Y
31	R	R	R	R	R	R
32	R	R	R	R	G	R
33	R	R	R	R	G	R
41	R	R	R	R	R	R
42	R	R	R	R	R	G
43	R	R	R	R	G	R
51, 52	-	R	-	R	R	R
61, 62	R	G	R	G	R	Y
63	R	R	R	R	R	Y
SIGN A	OFF	OFF	OFF	OFF	OFF	OFF

SE-PAC 2070 LOOP & DETECTOR UNIT INSTALLATION CHART

LOOP / ZONE NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW	EXISTING	DETECTOR PROGRAMMING																
						ASSIGNED PHASE	TIMING		OPERATION MODE							SWITCH		SYSTEM LOOPS		STATUS		
							DELAY	EXTEND (STRETCH)	VEHICLE	PEDESTRIAN	T CALL	STOP A	STOP B	PROTECT LEFT TURN THROUGH	AND	SWITCH	NEW	EXISTING				
1A	6X40	2-4-2	0	-	X	1	-	SEC.	-	SEC.	X	-	-	-	-	-	-	-	-	-	X	-
1B	6X40	2-4-2	0	-	X	1	15	SEC.	-	SEC.	X	-	-	-	-	-	-	-	-	-	X	-
2A	6X6	EXIST	300	-	X	2	-	SEC.	-	SEC.	X	-	-	-	-	-	-	-	-	-	X	-
2B	6X6	EXIST	300	-	X	2	-	SEC.	-	SEC.	X	-	-	-	-	-	-	-	-	-	X	-
3A	6X40	2-4-2	0	-	X	3	3	SEC.	-	SEC.	X	-	-	-	-	-	-	-	-	-	X	-
3B	6X40	2-4-2	0	-	X	3	-	SEC.	-	SEC.	X	-	-	-	-	-	-	-	-	-	X	-
4A	6X40	2-4-2	0	-	X	4	-	SEC.	-	SEC.	X	-	-	-	-	-	-	-	-	-	X	-
4B	6X40	2-4-2	0	-	X	4	-	SEC.	-	SEC.	X	-	-	-	-	-	-	-	-	-	X	-
5A	6X40	2-4-2	0	-	X	5	-	SEC.	-	SEC.	X	-	-	-	-	-	-	-	-	-	X	-
5B	6X40	2-4-2	0	-	X	5	-	SEC.	-	SEC.	X	-	-	-	-	-	-	-	-	-	X	-
5C	6X40	2-4-2	0	-	X	5	15	SEC.	-	SEC.	X	-	-	-	-	-	-	-	-	-	X	-
6A	6X6	EXIST	300	-	X	6	-	SEC.	-	SEC.	X	-	-	-	-	-	-	-	-	-	X	-
6B	6X6	EXIST	300	-	X	6	-	SEC.	-	SEC.	X	-	-	-	-	-	-	-	-	-	X	-
S1*	6X6	*	300	X	-	-	-	SEC.	-	SEC.	X	-	-	-	-	-	-	-	-	-	X	*
S2*	6X6	*	300	X	-	-	-	SEC.	-	SEC.	X	-	-	-	-	-	-	-	-	-	X	*
S3	6X6	4	+115*	X	-	-	-	SEC.	-	SEC.	X	-	-	-	-	-	-	-	-	-	X	X
S4	6X6	4	+115*	X	-	-	-	SEC.	-	SEC.	X	-	-	-	-	-	-	-	-	-	X	X
S5	6X6	5	300	X	-	-	-	SEC.	-	SEC.	X	-	-	-	-	-	-	-	-	-	X	X

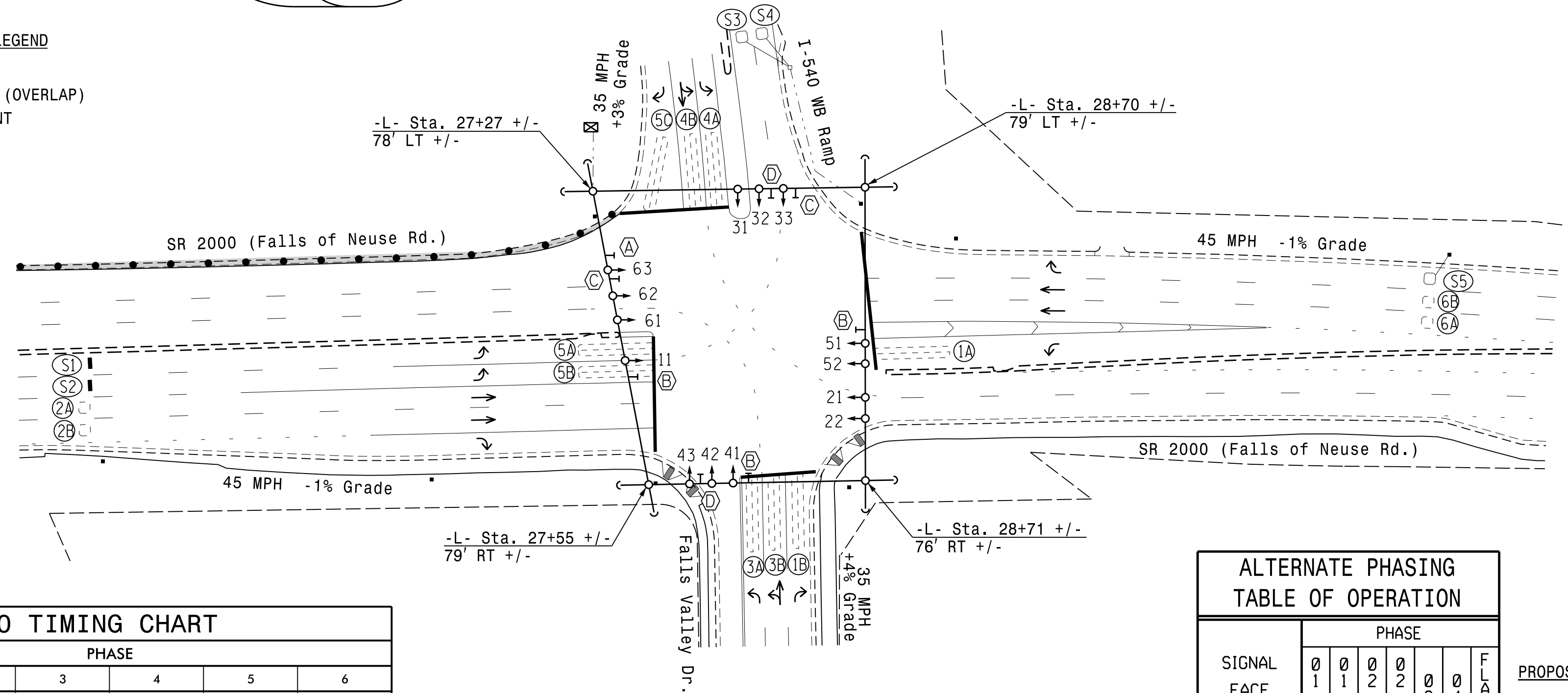
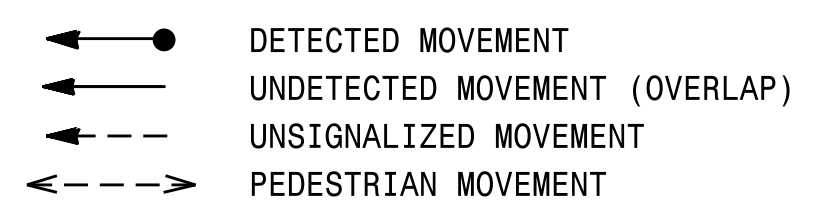
\* Video Detection Zone.  
# Measured from Extended Tangent on End of Ramp

6 Phase Fully Actuated (Raleigh Signal System)

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 phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- The cabinet should be designed to include an Auxiliary Output file for future use.
- The Division (City) Traffic Engineer will determine the hours of use for each phasing plan.
- During Alternate Phasing sign A will be on when phase 3, 4, or 5 is Green. It will also stay on when transitioning between these phases. It will not be on at any point in the Default Phasing.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal timing values supersede these values.
- This intersection features a video detection system. Shown locations of detectors are conceptual only. Refer to the manufacturer's guidelines for optimal detector placement.

PHASING DIAGRAM DETECTION LEGEND

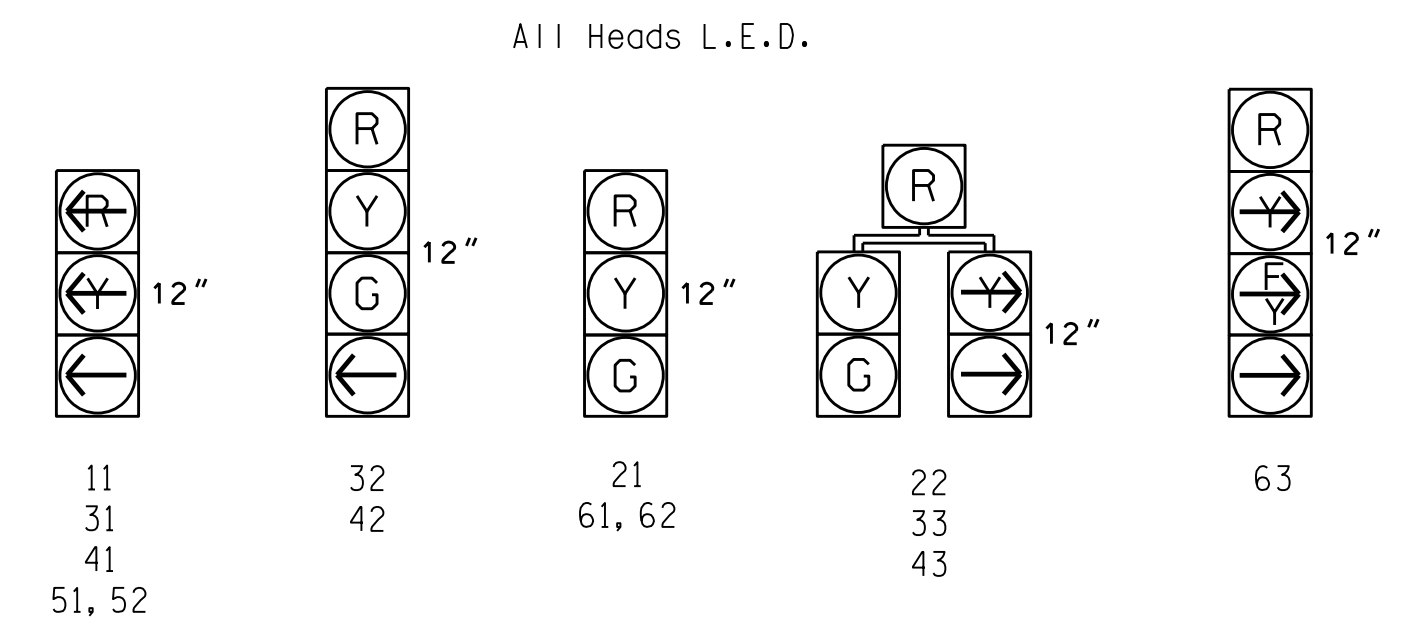


SE-PAC 2070 TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Min Green *	7	12	7	7	7	12
Passage Gap *	2.0	6.0	2.0	2.0	2.0	6.0
Maximum Green *	15	75	15	30	30	75
Yellow Change	3.0	4.6	3.6	3.7	3.0	4.6
Red Clear	3.2	1.3	2.9	2.9	3.2	1.8
Walk *	-	-	-	-	-	-
Pedestrian Clear	-	-	-	-	-	-
Added Initial *	-	1.5	-	-	-	1.5
Maximum Initial *	-	34	-	-	-	34
Time Before Reduction *	-	20	-	-	-	20
Time To Reduce *	-	40	-	-	-	40
Minimum Gap	-	3.0	-	-	-	3.0
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL
Vehicle Call Memory	NON-LOCK	LOCK	NON-LOCK	NON-LOCK	NON-LOCK	LOCK
Dual Entry	-	-	-	-	-	-
Simultaneous Gap	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.

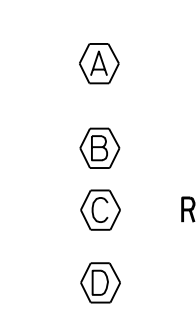
SIGNAL FACE I.D.



ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE					
	01+5	01+6	02+5	02+6	03	04
11	-	-	R	R	R	R
21	R	R	G	G	R	Y
22	R	R	G	G	R	Y
31	R	R	R	R	R	R
32	R	R	R	R	G	R
33	R	R	R	R	G	R
41	R	R	R	R	R	R
42	R	R	R	R	R	G
43	R	R	R	R	G	R
51, 52	-	R	-	R	R	R
61, 62	R	G	R	G	R	Y
63	R	R	R	R	R	Y
SIGN A	ON	OFF	ON	OFF	ON	OFF

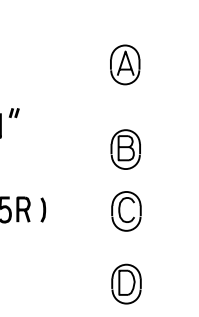
PROPOSED



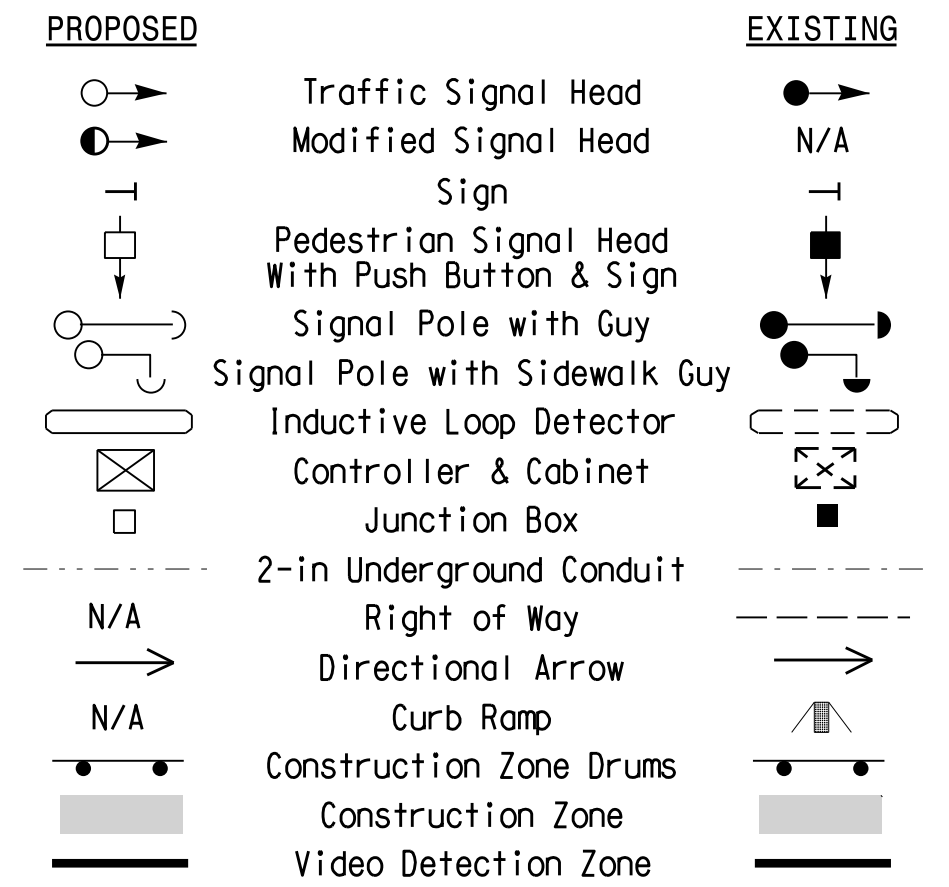
SIGNS

- A "NO TURN ON RED" L.E.D. Blankout Sign
- B "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)
- C Right Arrow "ONLY" Sign (R3-5R)
- D Combined Through and Left Arrow Sign (R3-6L)

EXISTING



LEGEND



Signal Upgrade - Temporary Design 1 (TMP Phase I)

Prepared in the Offices of:  
  
 SR 2000 (Falls of Neuse Rd.) at I-540 WB Ramps and Falls Valley Drive  
 Division 5 Wake County Raleigh  
 PLAN DATE: February 2022 REVIEWED BY:  
 PREPARED BY: J.A. Lohr REVIEWED BY:  
 SCALE: 1"=50'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 SEAL 026486  
 ROBERT J. TIEBER  
 ENGINEER  
 DATE: 02/22/2022  
 SIG. INVENTORY NO. 05-203611