

PHASING DIAGRAM

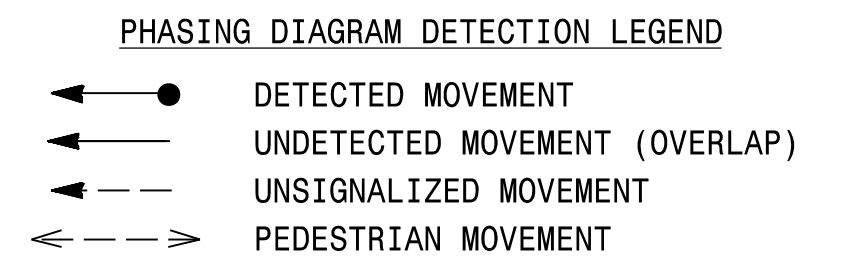
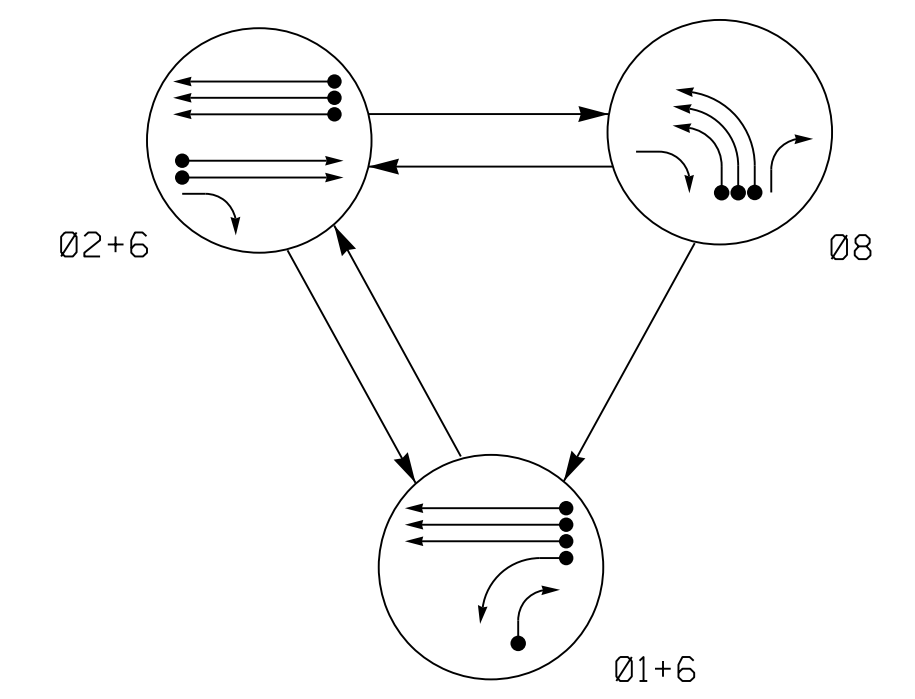
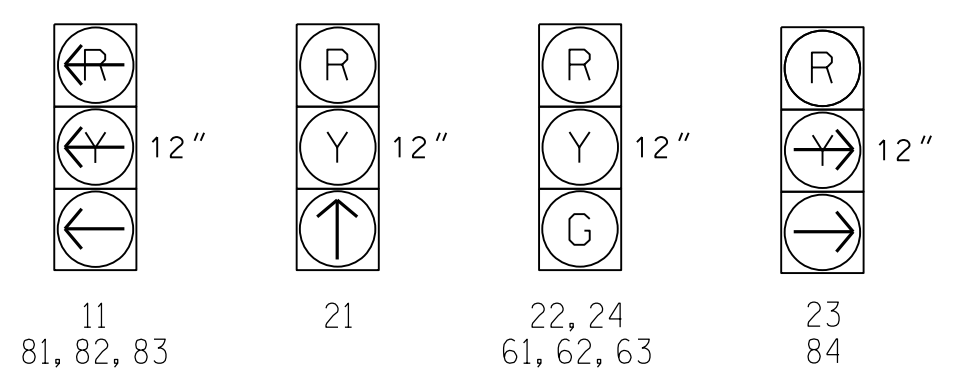


TABLE OF OPERATION

SIGNAL FACE	PHASE			
	Ø 1 + 6	Ø 2 + 6	Ø 8	FLASH
11	→	→	→	→
21	R	↑	R	Y
22, 24	R	G	R	Y
23	R	→	→	Y
61, 62, 63	G	G	R	Y
81, 82, 83	→	→	→	→
84	→	R	→	R

SIGNAL FACE I.D.

All Heads L.E.D.



SE-PAC 2070 LOOP & DETECTOR UNIT INSTALLATION CHART

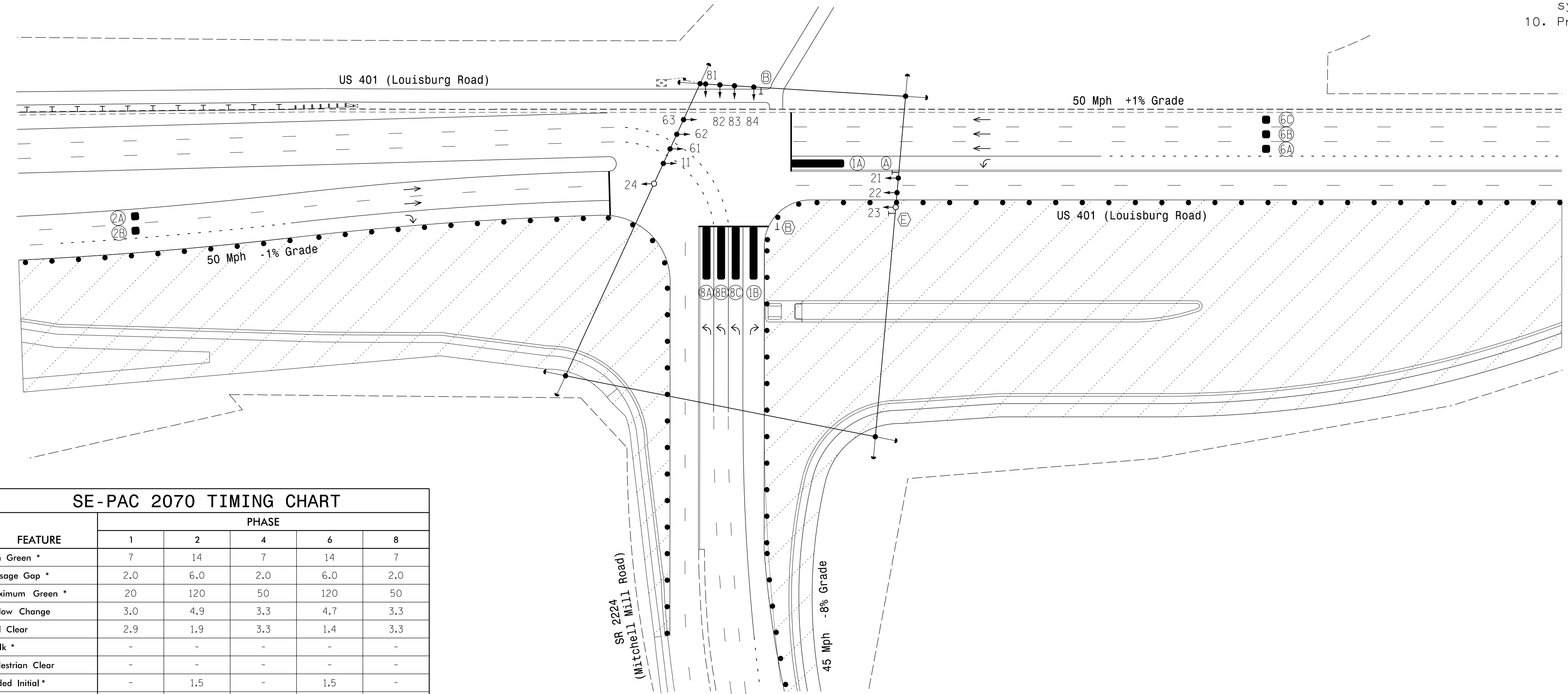
ZONE NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW	EXISTING	ASSIGNED PHASE	DETECTOR PROGRAMMING													
							TIMING		OPERATION MODE							STATUS				
							DELAY	EXTEND (STRETCH)	VEHICLE	PEDESTRIAN	1 CALL	STOP A	STOP B	PROTIFER	LEFT TURN	THROUGH	AND	SWITCH	SYSTEM LOOPS	NEW
1A*	6X40	*	0	*	-	1	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
1B*	6X40	*	0	*	-	1	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
2A*	6X6	*	355	*	-	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
2B*	6X6	*	355	*	-	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
6A*	6X6	*	355	*	-	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
6B*	6X6	*	355	*	-	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
6C*	6X6	*	355	*	-	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
8A*	6X40	*	0	*	-	8	3 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
8B*	6X40	*	0	*	-	8	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-
8C*	6X40	*	0	*	-	8	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	*	-

* Video Detection Zone

3 Phase Fully Actuated (Raleigh Signal System)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 may be lagged.
4. Reposition all existing signal heads as shown.
5. Reposition existing signs (A) and (B).
6. Remove existing R10-16 and W4-3 signs.
7. Set all detector units to presence mode.
8. This intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
10. Program phase 4 as a dummy phase for Ring 1.



SE-PAC 2070 TIMING CHART

FEATURE	PHASE				
	1	2	4	6	8
Min Green *	7	14	7	14	7
Passage Gap *	2.0	6.0	2.0	6.0	2.0
Maximum Green *	20	120	50	120	50
Yellow Change	3.0	4.9	3.3	4.7	3.3
Red Clear	2.9	1.9	3.3	1.4	3.3
Walk *	-	-	-	-	-
Pedestrian Clear	-	-	-	-	-
Added Initial *	-	1.5	-	1.5	-
Maximum Initial *	-	40	-	40	-
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	LOCK	NON-LOCK
Dual Entry	-	-	-	-	-
Simultaneous Gap	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.

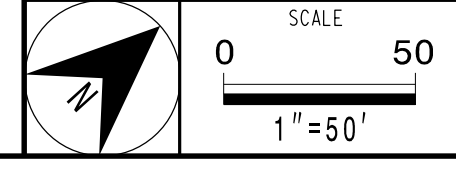
LEGEND

PROPOSED	EXISTING
	Traffic Signal Head
	Modified Signal Head
	Sign
	Pedestrian Signal Head
	Signal Pole with Guy
	Signal Pole with Sidewalk Guy
	Inductive Loop Detector
	Controller & Cabinet
	Junction Box
	2-in Underground Conduit
N/A	Right of Way
	Directional Arrow
	Video Detection Zone
	Construction Zone
	Construction Zone Drums
(A)	"NO U-TURN/NO LEFT TURN" Sign (R3-18)
(B)	"NO TURN ON RED" Sign (R10-11)
(E)	Right Arrow "ONLY" Sign (R3-5R)

Signal Upgrade - Temp Design 2 (TMP Phase III)

<p>Prepared for the Offices of:</p>	<p>US 401 (Louisburg Road) at SR 2224 (Mitchell Mill Road)</p>	<p>SEAL</p>						
	<p>Division 5 Wake County Raleigh</p>	<p>SEAL</p>	<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>					
	<p>PLAN DATE: Jan 2023 REVIEWED BY: F.A. Campbell</p> <p>PREPARED BY: H.M. Surti REVIEWED BY:</p>	<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>INIT.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	NO.	INIT.	DATE			
NO.	INIT.	DATE						

AECOM
 NC Firm License No.: F-0342
 701 Corporate Center Drive
 Suite 475 Raleigh, NC 27607
 Phone: 919-854-6200



1/24/2023
 p:\24\2023\01\24\000-na-pw-bentl\ey-com-ae-com-0521_NA_2020\0000\Documents\60609754-U-5748_L1\p.dwg
 MICHAEL J. COVINOUGH