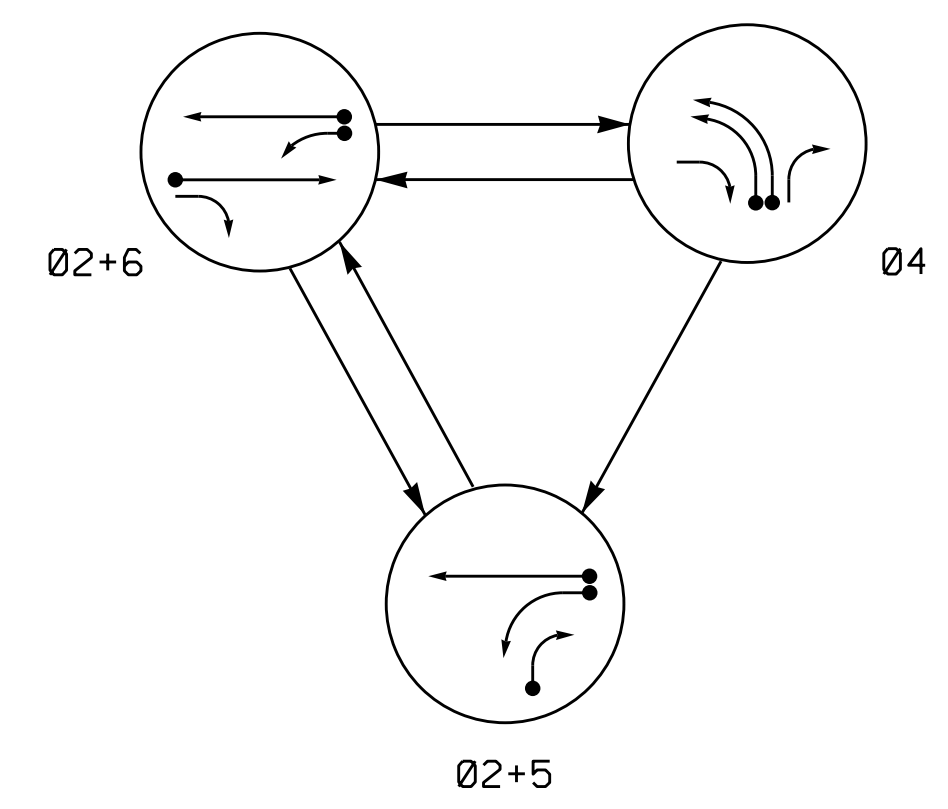
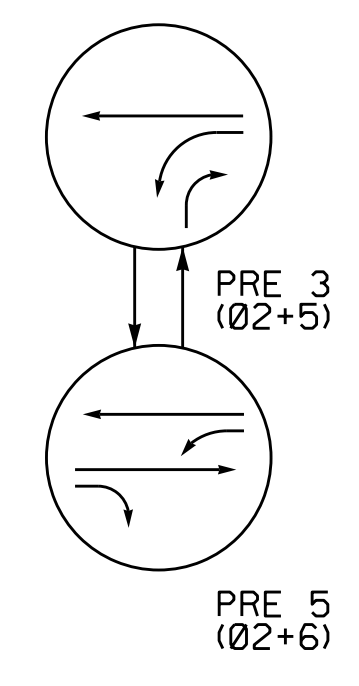


**PHASING DIAGRAM**



**PHASING DIAGRAM DETECTION LEGEND**  
 ● DETECTED MOVEMENT  
 ○ UNDETECTED MOVEMENT (OVERLAP)  
 - - - UNSIGNALIZED MOVEMENT

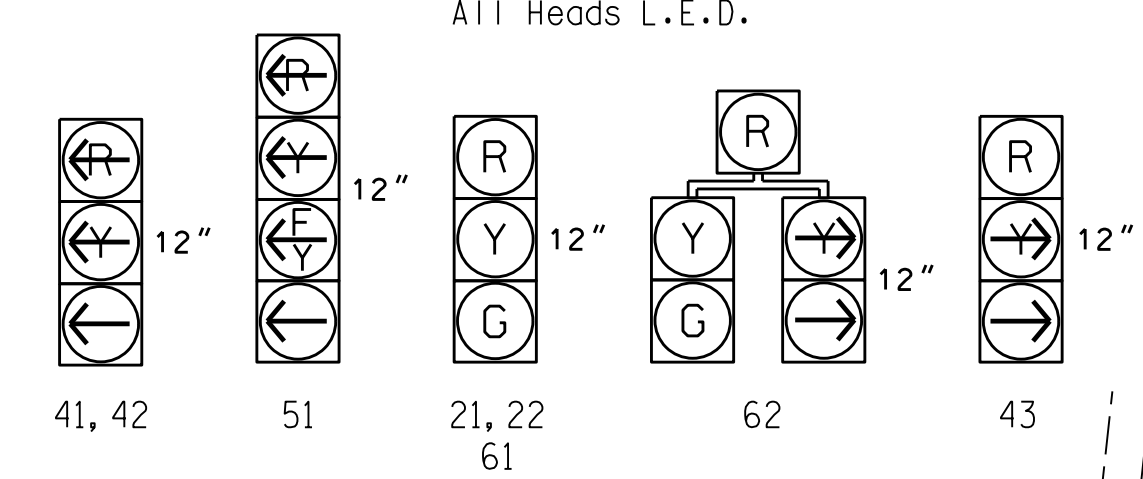
**EV PREEMPT PHASES**  
(Medium Priority)



**TABLE OF OPERATION**

SIGNAL FACE	PHASE					
	02+5	02+6	04	PRE 3	PRE 5	FLASH
21, 22	G	G	R	G	G	Y
41, 42	R	R	-	R	R	-
43	-	R	-	-	R	R
51	-	R	R	-	R	Y
61	R	G	R	R	G	Y
62	R	G	R	R	G	Y

**SIGNAL FACE I.D.**



**ASC/3 DETECTOR INSTALLATION CHART**

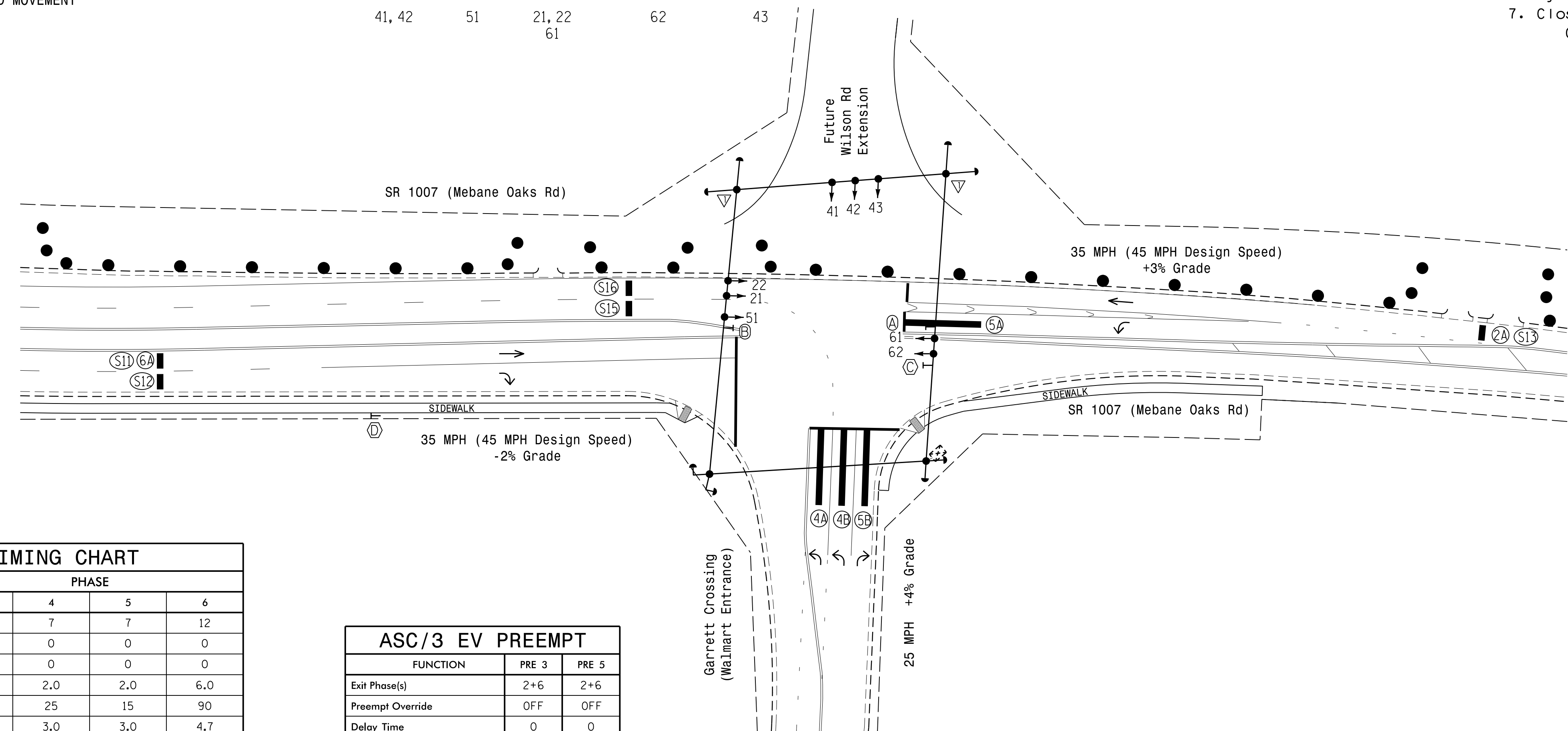
ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
2A/S13	6X6	300	*	*	2	Yes	-	-	X	N	X	*
4A	6X40	0	*	*	4	Yes	-	3	-	S	-	*
4B	6X40	0	*	*	4	Yes	-	-	-	S	-	*
5A	6X40	0	*	*	5	Yes	-	15	-	S	-	*
5B	6X40	0	*	*	2	Yes	-	3	-	G	-	*
6A/S11	6X6	300	*	*	6	Yes	-	-	X	N	X	*
S12	6x6	300	*	*	-	No	-	-	-	N	X	*
S15	6x6	+145	*	*	-	No	-	-	-	N	X	*
S16	6x6	+145	*	*	-	No	-	-	-	N	X	*

\* Video Detection Zone

3 Phase Fully Actuated w/ Emergency Vehicle Preemption  
 SR 1007 (Mebane Oaks Rd) CLS  
 Signal System #: 10705

**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 5 may be lagged.
- Set all detector units to presence mode.
- This intersection features a GPS Emergency Vehicle Preemption system.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data:  
Controller Asset #: 2060.



**ASC/3 TIMING CHART**

FEATURE	PHASE			
	2	4	5	6
Min Green *	12	7	7	12
Walk *	0	0	0	0
Ped Clear	0	0	0	0
Veh. Extension *	6.0	2.0	2.0	6.0
Max I *	90	25	15	90
Yellow	4.7	3.0	3.0	4.7
Red Clear	1.3	2.9	2.3	1.3
Red Revert	2.0	2.0	2.0	2.0
Actuations B4 Add *	0	-	-	0
Seconds /Actuation *	2.5	-	-	2.5
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

\* 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	PRE 5
Exit Phase(s)	2+6	2+6
Preempt Override	OFF	OFF
Delay Time	0	0
Ped Clear Through Yellow	N	N
Terminate Phases	N	N
Entrance Walk	255*	255*
Entrance Ped Clear	255*	255*
Entrance Min Green	1	1
Entrance Yellow Clear	25.5*	25.5*
Entrance Red Clear	25.5*	25.5*
Min Dwell Time	7	7
Preempt Input Extension Time	2	2
Preempt Max Time	120	120
Exit Yellow Clear	25.5*	25.5*
Exit Red Clear	25.5*	25.5*

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

**LEGEND**

PROPOSED	EXISTING
○ Traffic Signal Head	● Traffic Signal Head
- Sign	- Sign
○ Signal Pole with Guy	● Signal Pole with Guy
○ Signal Pole with Sidewalk Guy	● Signal Pole with Sidewalk Guy
⊠ Controller & Cabinet Junction Box	⊠ Controller & Cabinet Junction Box
□ 2-in Underground Conduit	□ 2-in Underground Conduit
N/A Right of Way	- - - Right of Way
→ Directional Arrow	→ Directional Arrow
▬ Construction Zone Drums	▬ Construction Zone Drums
▬ Construction Zone	▬ Construction Zone
▬ Video Detection Area	▬ Video Detection Area
N/A Curb Ramp	▬ Curb Ramp
Ⓐ No U Turn Sign (R3-4)	Ⓐ No U Turn Sign (R3-4)
Ⓑ Left Arrow "ONLY" Sign (R3-5L)	Ⓑ Left Arrow "ONLY" Sign (R3-5L)
Ⓒ Right Arrow "ONLY" Sign (R3-5R)	Ⓒ Right Arrow "ONLY" Sign (R3-5R)
Ⓓ "RIGHT LANE MUST TURN RIGHT" Sign (R3-7R)	Ⓓ "RIGHT LANE MUST TURN RIGHT" Sign (R3-7R)

Signal Upgrade - Temporary Design 2 (TMP Phase II)

SR 1007 (Mebane Oaks Rd) at Garrett Crossing (Walmart Entrance)

Division 7 Alamance County Mebane

PLAN DATE: November 2019 REVIEWED BY: Z. "Gavin" Teng

PREPARED BY: Z. "Gavin" Teng REVIEWED BY:

REVISIONS

REVISED POLE LOCATIONS FOR WILSON RD EXT

DATE: 6/10/21

SCALE: 1" = 40'

DATE: 6/10/2021

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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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SIG. INVENTORY NO. 07-2060T2

10-1116-2017, 12-52, 4/20/2017, 8/19-rev-20210610-dgn, rz1:erbo

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REVISION SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 026486

ROBERT J. ZIEGLER

6/10/2021

TRANSPORTATION MOBILITY AND SAFETY SECTION

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