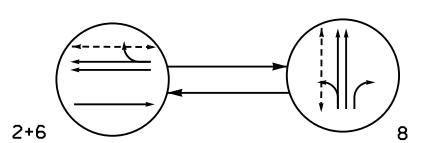
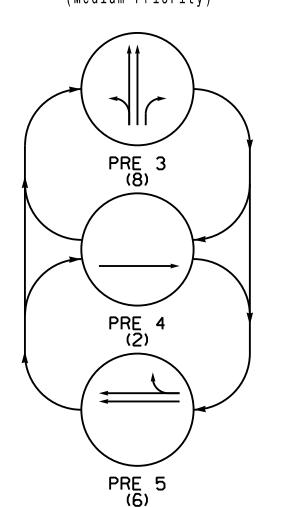
PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

DETECTED MOVEMENT UNDETECTED MOVEMENT (OVERLAP) UNSIGNALIZED MOVEMENT PEDESTRIAN MOVEMENT

EV PREEMPT PHASES (Medium Priority)



SIGNAL FACE I.D. TABLE OF OPERATION All Heads L.E.D.

PRE 5	トレロのエ	
R	R	
1	R	
G	R	2
ר		

PHASE

SIGNAL

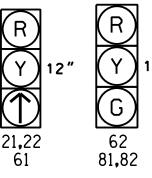
FACE

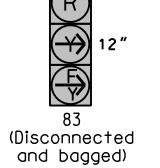
21,22

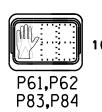
81,82

P61**,**P62

P83,P84 DW W DW DW DW DR







P21,P22 P81,P82 (Disconnected and bagged)

NOTES

2 Phase with EVP

Pre-Timed

Hickory City Signal System

PROJECT REFERENCE NO.

U-5777

- 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. Reposition existing signal heads numbered 21, 22, 61, 62, PRE 4 and 5, and existing signs \mathbb{A} and \mathbb{B} .
- 4. Remove existing signal head numbered 63
- 5. Disconnect and bag existing signal head numbered 83 and pedestrian heads numbered P21, P22, P81, and P82.
- 6. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- 7. This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
- 8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- 9. Program phase 4 as a dummy phase for Ring 1.

LEGEND

Traffic Signal Head Modified Signal Head

Pedestrian Signal Head With Push Button & Sign

Signal Pole with Guy Signal Pole with Sidewalk Guy

Out of Pavement Detector

Controller & Cabinet

Junction Box 2-in Underground Conduit

Right of Way

Barrier

Directional Arrow Directional Drill

Construction Zone Drums Construction Zone

Wedge/Widen

Curb Ramp

Pedestrian Barricade

Type | | Signal Pedestal

Curb Ramp

No Left Turn Sign (R3-2)

No Right Turn Sign (R3-1)

<u>EXISTING</u>

N/A

₩ × ¾

— · · uc · · —

N/A \longrightarrow

N/A

N/A / /

N/A

 \triangle

10. Hickory Signal System Data: Controller Asset #0316.

<u>PROPOSED</u>

 \bigcirc

 \boxtimes

N/A

N/A

NC 127 SE — Disconnect and Bag 35 MPH +1% Grade NC 127 SE 35 MPH -1% Grade Disconnect and Bag —

HNTB

SE-PAC 2070 TIMING CHART								
SE-PAL	2070	ITMTING	i CHAR					
	PHASE							
FEATURE	2	4	6	8				
Min Green *	10	7	10	7				
Passage Gap *	-	-	-	-				
Maximum Green *	40	40	40	40				
Yellow Change	3.9	3.8	3.9	3.8				
Red Clear	1.4	2.8	1.4	2.8				
Walk *	-	-	14	14				
Pedestrian Clear	-	-	9	33				
Advance Walk *	-	-	7	7				
Added Initial *	-	-	-	-				
Maximum Initial *	-	-	-	-				
Fime Before Reduction *	-	-	-	-				
Time To Reduce *	=	-	-	-				
Minimum Gap	-	-	-	-				
Recall Mode	MAX RECALL	MAX RECALL	MAX/PED RECALL	MAX/PED RECALL				
Vehicle Call Memory	NON-LOCK	NON-LOCK	NON-LOCK	NON-LOCK				
Dual Entry	-	-	-	-				
a: I:								

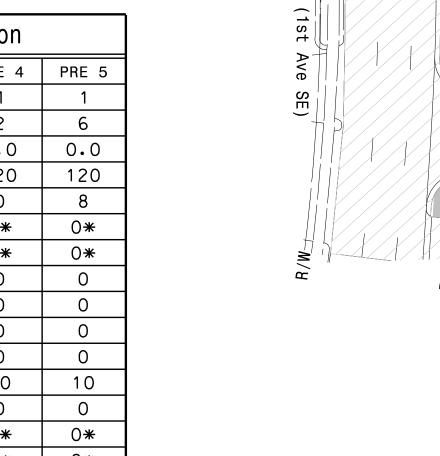
phases 2 and 6 lower than what is shown. Min Green for all other phases should not be

ON

SE-PAC Preemption						
FUNCTION	PRE 3	PRE 4	PRE 5			
MIN GRN / WLK	1	1	1			
EXIT PHASES	8	2	6			
DELAY	0.0	0.0	0.0			
MXCALL	120	120	120			
SEL PED CLR	32	0	8			
SEL YEL / 10	0*	0*	0*			
SEL RED / 10	0*	0*	0*			
TRACK GREEN	0	0	0			
TRK PED CLR	0	0	0			
TRK YEL / 10	0	0	0			
TRK RED / 10	0	0	0			
DWELL GRN	7	10	10			
RET PED CLR	0	0	0			
RET YEL / 10	0*	0*	0*			
RET RED / 10	0*	0*	0*			
PREEMPT EXTEND**	2.0	2.0	2.0			

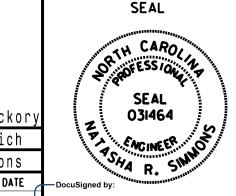
* Time defaults to time used for phase during normal operation.

** Program Timing on Optical Detection Unit.



Signal Upgrade -Temporary Design 3 (Construction Phase 2)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED NC 127 SE SR 1692 (1st Ave SE) Division 12 Catawba County October 2023 REVIEWED BY: N.K. Vlanich



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REVIEWED BY: N.R. Simmons REVISIONS INIT. DATE Matasha R. Simmons 9/6/2024 SIG. INVENTORY NO. 12-0954T3