PHASING DIAGRAM

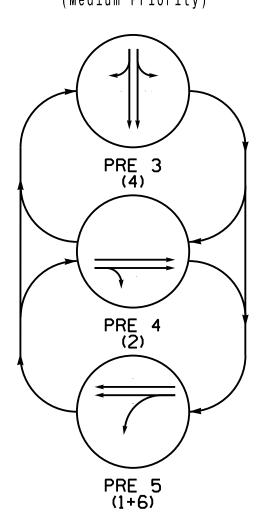
2+6

PHASING DIAGRAM DETECTION LEGEND

DETECTED MOVEMENT UNDETECTED MOVEMENT (OVERLAP) UNSIGNALIZED MOVEMENT

→---- PEDESTRIAN MOVEMENT

EV PREEMPT PHASES (Medium Priority)



SIGNAL FACE I.D.

All Heads L.E.D.

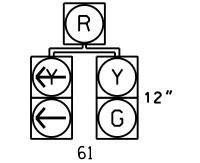


TABLE OF OPERATION

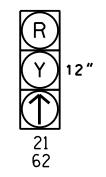
FACE

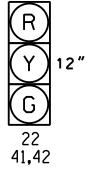
22

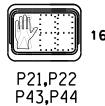
41,42

P43,P44

PHASE







NOTES

3 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. Phase 1 may be lagged.
- 4. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- 5. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- 6. This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
- 7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

<u>LEGEND</u>

Traffic Signal Head

Modified Signal Head

Sign

Pedestrian Signal Head With Push Button & Sign

Signal Pole with Guy

Signal Pole with Sidewalk Guy Out of Pavement Detector

Controller & Cabinet

Junction Box

Right of Way Barrier

Directional Arrow Type II Signal Pedestal Construction Zone

Wedge/Widen

Temporary Pavement

Curb Ramp Pedestrian Barricade No Right Turn Sign (R3-1) No Left Turn Sign (R3-2) "NO TURN ON RED" Sign (R10-11)

2-in Underground Conduit

<u>EXISTING</u>

-

N/A

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— · · uc · · —

N/A

 \longrightarrow

N/A

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

<u>PROPOSED</u>

 \boxtimes

— x-uc —

N/A

-L- STA. 14+31 +/-___-L- STA. 15+20 +/-LT 77' +/-LT 67' +/-NC 127 SE 4 > 35 MPH +3% Grade -L- STA. 14+52 +/ RT 71' +/-

HNTB

	PHASE			
FEATURE	1	2	4	6
Min Green *	7	10	7	10
Passage Gap *	-	-	-	-
Maximum Green *	40	40	40	40
Yellow Change	3.0	3.7	4.0	3.7
Red Clear	1.6	1.1	1.4	1.1
Walk *	-	14	14	14
Pedestrian Clear	-	9	15	9
Advance Walk *	-	7	7	7
Added Initial *	-	-	-	-
Maximum Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Recall Mode	MAX RECALL	MAX/PED RECALL	MAX/PED RECALL	MAX/PED RECALL
Vehicle Call Memory	NON-LOCK	NON-LOCK	NON-LOCK	NON-LOCK

SE-PAC 2070 TIMING CHART

* 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

ON

ON

ON

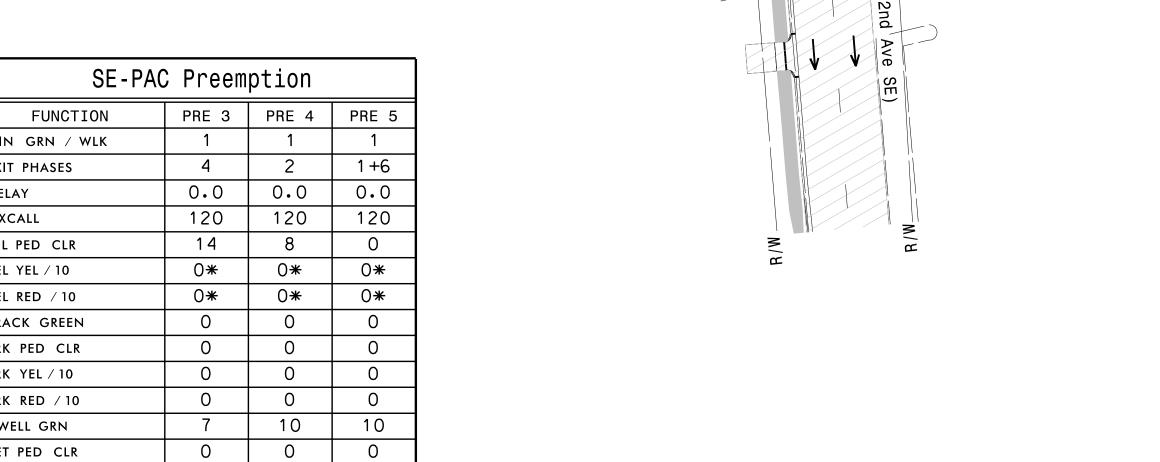
Dual Entry

Simultaneous Gap

SE-PAC Preemption					
FUNCTION	PRE 3	PRE 4	PRE 5		
MIN GRN / WLK	1	1	1		
EXIT PHASES	4	2	1+6		
DELAY	0.0	0.0	0.0		
MXCALL	120	120	120		
SEL PED CLR	14	8	0		
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.



HNTB NORTH CAROLINA, P.C. 4000 Center at North Hills St Suite 500

Raleigh, North Carolina 27609 NC License No: C-1554 (919) 546-8997

Signal Upgrade -Temporary Design 1 (Construction Phase 1)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED NC 127 SE SR 2231 (2nd Ave SE)

Division 12 Catawba County October 2023 REVIEWED BY: N.K. Vlanich 750 N.Greenfleid Pkwy.Garner.NC 27529 PREPARED BY: E.E. Tiller REVIEWED BY: N.R. Simmons

INIT. DATE REVISIONS

031464 Matasha R. Simmons 9/6/2024

SIG. INVENTORY NO. 12-0945T

SEAL

TH CARO