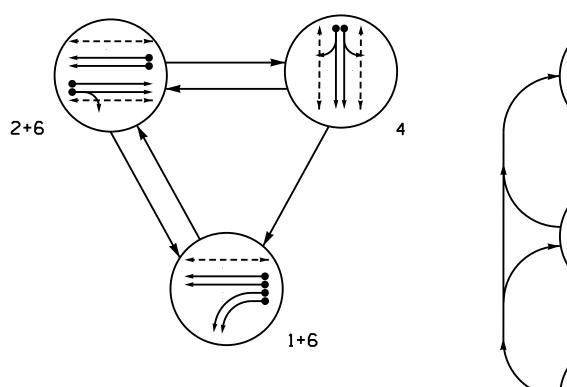
PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

DETECTED MOVEMENT UNDETECTED MOVEMENT (OVERLAP) UNSIGNALIZED MOVEMENT

→---- PEDESTRIAN MOVEMENT

EV	PREEMPT	PHASES
	(Medium Pri	ority)

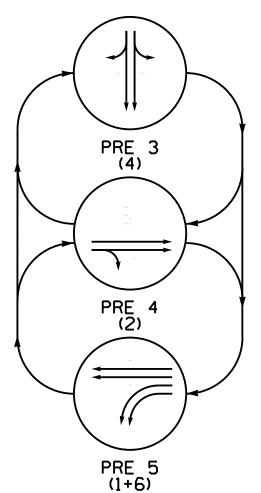


TABLE OF OPERATION											
	PHASE										
SIGNAL FACE	1+6	2+6	4	екш о	ዑድሠ 4	PRU 15	FLASI				
11,12	ļ	#	#	#	#	—	-R				
21	R	1	R	R	1	R	R				
22	R	G	R	R	G	R	R				
41,42	R	R	G	G	R	R	R				
61	G	G	R	R	R	G	R				
62	1	1	R	R	R	1	R				
P21,P22	DW	W	DW	DW	DW	DW	DRK				
P41,P42	D₩	D₩	W	DW	DW	DW	DRK				
P43,P44	D₩	D₩	W	DW	DW	DW	DRK				
P61,P62	W	W	DW	DW	DW	DW	DRK				

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	24	10	12						
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.

SE-PA	C 2070	TIMIN	G CHAR	Т
		PHA	ASE	
FEATURE	1	2	4	6
Min Green *	7	10	7	10
Passage Gap *	2.0	3.0	2.0	3.0
Maximum Green *	40	40	40	40
Yellow Change	3.0	3.8	4.0	3.8
Red Clear	3.3	2.2	2.7	2.2
Walk *	-	7	7	7
Pedestrian Clear	-	12	25	14
Advance Walk *	-	7	6	7
Added Initial *	-	1.5	-	1.5
Maximum Initial *	-	11	-	11
Time Before Reduction *	-	15	-	15
Time To Reduce *	-	30	-	30
Minimum Gap	-	3.0	-	3.0
Recall Mode	-	MIN RECALL	-	MIN RECALL
Vehicle Call Memory	NON-LOCK	LOCK	NON-LOCK	LOCK
Dual Entry	-	-	-	-
Simultaneous Gap	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.

										DET	EC1	OR	PR	OGF	RAMI	MIN	G				
	INDUCII	IVE LOO	PS					41)	NC				OPE	RATI	ON	MODE				LOOPS	L
LOOP NO.	SIZE (ft)	TURNS	DIST. FROM STOP LINE (ft)	NEW	EXISTING	ASSIGNED PHASE	DELAY	_	EXTEN (STRET)		VEHICLE	PEDESTRIAN	1 CALL	STOP A	STOP B	PROT/PER 5	PROT/PER THROUGH	7 QNA	SWITCH	SYSTEM LOC	
1A	6×40	2-4-2	Ö	X	-	i	- SEC	;	- (SEC.	X	-	-	-	-	-	-	-	-	-	T
1B	6×40	2-4-2	Ö	X	-	i	- SEC	;,	- (SEC.	Χ	-	-	-	-	-	-	-	-	-	Ī
2·A	6×6	3	70	Х	-	2	- SEC	;	- (SEC.	Χ	-	-	-	-	-	-	-	-	-	Ī
2B	6×6	3	70	Х	-	2	- SEC	;	- (SEC.	Χ	-	-	-	-	-	-	-	-	-	ſ
4·A	6x:40	2-4-2	0	Х	-	4	- SEC	;	- 9	SEC.	Χ	-	-	-	-	_	-	-	-	-	Ī
4B	6x40	2-4-2	0	Х	-	4	10 SEC	;	- (SEC.	Χ	-	-	-	-	-	-	-	-	-	Ī
4C	6×6	3	0	Х	-	4	15 SEC		- (SEC.	Х	-		-	-	-	-	-	-	-	ſ
6·A	6×6	3	70	Х	-	6	- SEC	;	- (SEC.	Χ	-	-	-	-	_	-	-	-	-	Ī
6B	6×6	3	70	Х	-	6	- SEC	:	- 9	SEC.	Χ	-	-	-	-	-	-	-	-	-	Ī

	Z & W	
3		
$oldsymbol{\omega}_{ au}$		
MPH		
	Sidewalk Sidewalk Sidewalk	
		$R^{ M }$
Metal Pole #2		
R/W LT 66' +/-	35 MPH +1% Grade	Sidewalk
No. 45	P61	
Sidewalk NC 127 SE	P62	
P42	A) P44 6A	
	IPRE 5	
	- 61 12	
PB46		
PB45 88		
	21 8	Sidewalk
Sidewalk 2B	PRF 4 DO	
	D421 7 1 E P43 NC	127 SE KI.
35 MPH +1% Grade	D21	
	P21	
Metal Pole #1	Metal Pole -L- STA. 1	
-L- STA. 14+40 +/-	RT 56' +/-	
RT 55' +/-		
		OTOMAL FACE TO
ACCESSIBLE PEDESTRIAN SIGNAL OPERATION		SIGNAL FACE I.D.

SIGNAL FACE	VOICE	TONES	INTERVAL	SPEECH MESSAGE
501	Х	-	Walk	(Percussive Tone)
P21	X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Second Ave SE.
P22	-	Χ	Walk	(Percussive Tone)
PZZ	X		Flashing Don't Walk / Don't Walk	Wait. Wait to cross Second Ave SE.
541	-	Х	Walk	(Percussive Tone)
P41	Х	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross NC 127 SE.
D42	Х	-	Walk	NC 147. Walk sign is on to cross NC 127 SE.
P42	X	ı	Flashing Don't Walk / Don't Walk	Wait. Wait to cross NC 127 SE.
P43	Χ	•	Walk	(Percussive Tone)
P43	X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross NC 127 SE.
P44	-	X	Walk	(Percussive Tone)
744	Χ	1	Flashing Don't Walk / Don't Walk	Wait. Wait to cross NC 127 SE.
PB45	-	Χ	Walk	(Percussive Tone)
СРОЭ	X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross NC 127 SE.
PB46	-	Χ	Walk	(Percussive Tone)
F 040	Х	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross NC 127 SE.
DC1	Х	-	Walk	Second Ave SE. Walk sign is on to cross Second Ave SE
P61	Х	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Second Ave SE.
DCO	-	Х	Walk	(Percussive Tone)
P62	Х	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Second Ave SE.

Signal Upgrade - Final Design

P41,P42 P43.P44 P61,P62

Accessible Pedestrian

Signal

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



22 41**,**42

All Heads L.E.D.

Y) 12"

NC 127 SE SR 2231 (2nd Ave SE)

Division 12 October 2023 REVIEWED BY: N.K. Vlanich 750 N.Greenfield Pkwy.Garner.NC 27529 PREPARED BY: E.E. Tiller REVIEWED BY: N.R. Simmons INIT. DATE

031464 MOINEER.

3 Phase with EVP Fully Actuated Hickory City Signal System

PROJECT REFERENCE NO.

U-5777

NOTES

- 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. Set all detector units to presence
- 5. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- 6. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- 7. This intersection features accessible pedestrian signals utilizing percussive tone walk indications and/or speech messages.
- 8. This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
- 9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- 10. Hickory Signal System Data: Controller Asset #0316.

PROPOSED

LEGEND

<u>EXISTING</u>

 \bigcirc Traffic Signal Head **—** Modified Signal Head N/A Sign Pedestrian Signal Head With Push Button & Sign Signal Pole with Guy Signal Pole with Sidewalk Guy Inductive Loop Detector Out of Pavement Detector K×3 \boxtimes Controller & Cabinet Junction Box Right of Way ____ Directional Arrow Directional Drill 2-in Underground Conduit Type I Pushbutton Post € Metal Pole with Mastarm Type II Signal Pedestal Curb Ramp No Right Turn Sign (R3-1) No Left Turn Sign (R3-2) "NO TURN ON RED" Sign (R10-11) Right "TURNING VEHICLES" Yield "TO" Pedestrians Sign (R10-15R) Left "TURNING VEHICLES" Yield "TO" Pedestrians Sign (R10-15L)

TH CAROL

HNTB NORTH CAROLINA, P.C. 4000 Center at North Hills St Suite 500 HNTB Raleigh, North Carolina 27609 NC License No: C-1554 (919) 546-8997

Natasha R. Simmons 9/6/202 SIG. INVENTORY NO. 12-0945