

PHASING DIAGRAM

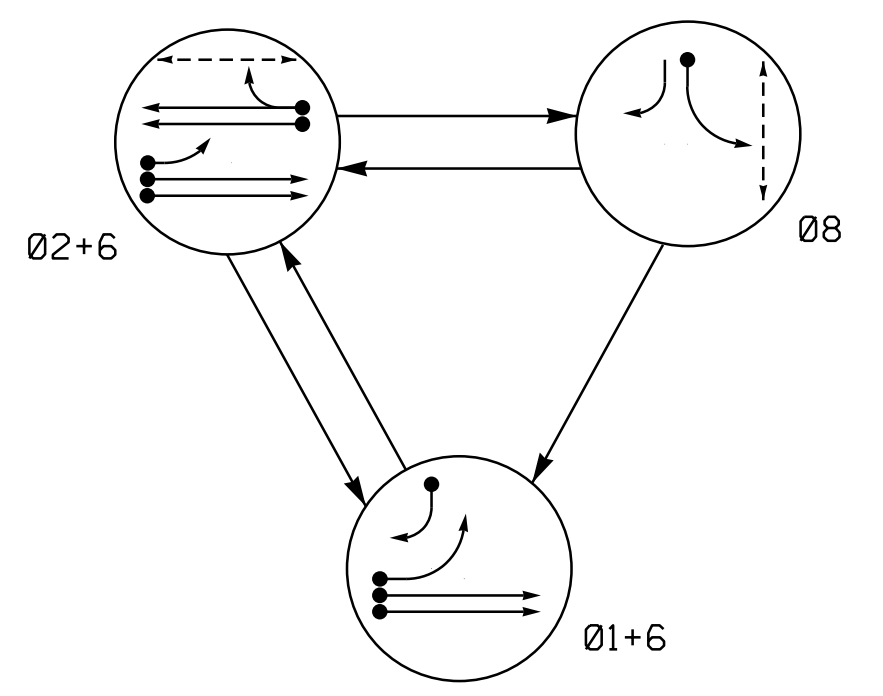
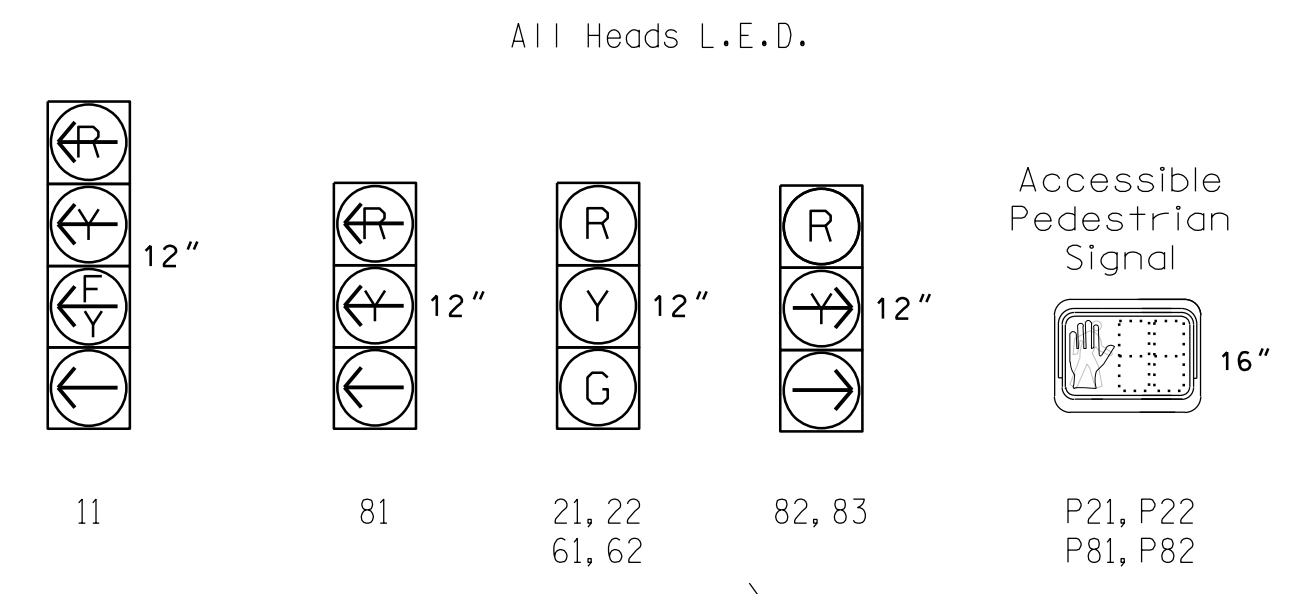


TABLE OF OPERATION

SIGNAL FACE	PHASE			FLASH
	01+6	02+6	08	
11	←	←	←	Y
21, 22	R	G	R	Y
61, 62	G	G	R	Y
81	←	←	←	Y
82, 83	→	R	→	R
P21, P22	DW	W	DW	DRK
P81, P82	DW	DW	W	DRK

SIGNAL FACE I.D.



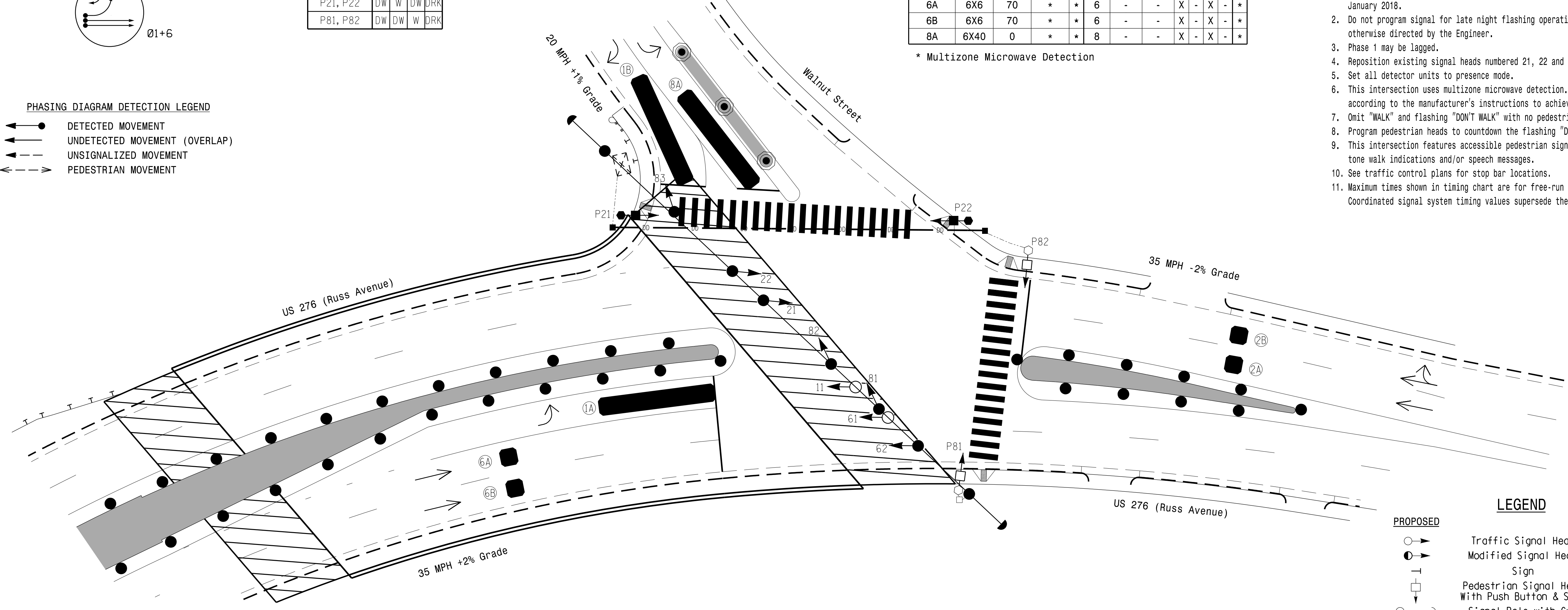
MAXTIME DETECTOR INSTALLATION CHART

ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL CALL	BEHOLD GREEN	NEW CARD	
1A	6X40	0	*	*	1	15	-	X	-	X	-	*
					6	-	-	X	-	X	-	*
1B	6X40	0	*	*	1	15	-	X	-	X	-	*
					6	-	-	X	-	X	-	*
2A	6X6	70	*	*	2	-	-	X	-	X	-	*
2B	6X6	70	*	*	2	-	-	X	-	X	-	*
6A	6X6	70	*	*	6	-	-	X	-	X	-	*
6B	6X6	70	*	*	6	-	-	X	-	X	-	*
8A	6X40	0	*	*	8	-	-	X	-	X	-	*

* Multizone Microwave Detection

PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT



3 Phase Fully Actuated D14-12_Waynesville

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 1 may be lagged.
- Reposition existing signal heads numbered 21, 22 and 62.
- Set all detector units to presence mode.
- This intersection uses multizone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- This intersection features accessible pedestrian signals utilizing percussive tone walk indications and/or speech messages.
- See traffic control plans for stop bar locations.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

LEGEND

PROPOSED	EXISTING
○ Traffic Signal Head	● Traffic Signal Head
○ Modified Signal Head	○ Modified Signal Head
○ Pedestrian Signal Head With Push Button & Sign	○ Pedestrian Signal Head With Push Button & Sign
○ Signal Pole with Guy	○ Signal Pole with Guy
○ Signal Pole with Sidewalk Guy	○ Signal Pole with Sidewalk Guy
○ Inductive Loop Detector	○ Inductive Loop Detector
○ Controller & Cabinet	○ Controller & Cabinet
○ Junction Box	○ Junction Box
○ 2-in Underground Conduit	○ 2-in Underground Conduit
○ Right of Way	○ Right of Way
○ Directional Arrow	○ Directional Arrow
○ Microwave Detection Zone	N/A
○ Construction Zone	N/A
○ Construction Zone Drums	N/A
○ Skinny Drums	N/A
○ Type II Signal Pedestal	○ Type II Signal Pedestal

MAXTIME TIMING CHART

FEATURE	PHASE			
	1	2	6	8
Walk *	-	7	-	7
Ped Clear *	-	25	-	16
Min Green	7	10	10	7
Passage *	2.0	3.0	3.0	2.0
Max I *	15	45	45	25
Yellow Change	3.0	4.0	3.7	3.0
Red Clear	2.6	2.1	1.9	3.4
Added Initial *	-	-	-	-
Maximum Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Advance Walk	-	-	-	-
Non Lock Detector	X	-	-	X
Vehicle Recall	-	MIN RECALL	MIN RECALL	-
Dual Entry	-	-	-	-

* 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.

ACCESSIBLE PEDESTRIAN SIGNAL OPERATION

SIGNAL FACE	VOICE TONES	INTERVAL	SPEECH MESSAGE
P21	- X	Walk	(Percussive Tone)
	X -	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Walnut.
P22	- X	Walk	Walnut. Walk sign is on to cross Walnut.
	X -	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Walnut.
P81	- X	Walk	(Percussive Tone)
	X -	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Russ.
P82	- X	Walk	Russ. Walk sign is on to cross Russ.
	X -	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Russ.

Signal Upgrade Temporary Design 2 - (TMP Phase III)

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US 276 (Russ Avenue) at Walnut Street

Division 14 Haywood County Waynesville

PLAN DATE: April 2023 REVIEWED BY: WJ Hamilton

PREPARED BY: TS Popelka RKA PROJ. NO.: 16085 (040)

750 N. Greenfield Pkwy, Garner, NC 27529

0 SCALE 20 1"=20'

REVISIONS INIT. DATE

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 32396 WILLIAM J. HAMILTON

William J. Hamilton 04/11/2023

SIGNATURE DATE

SIG. INVENTORY NO. 14-04172

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