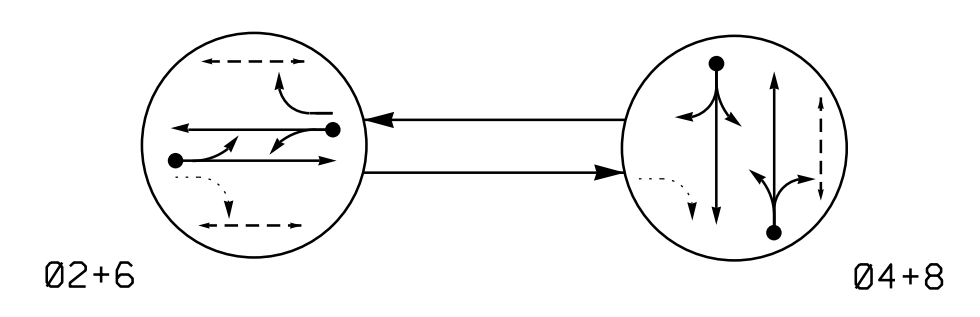


PHASING DIAGRAM



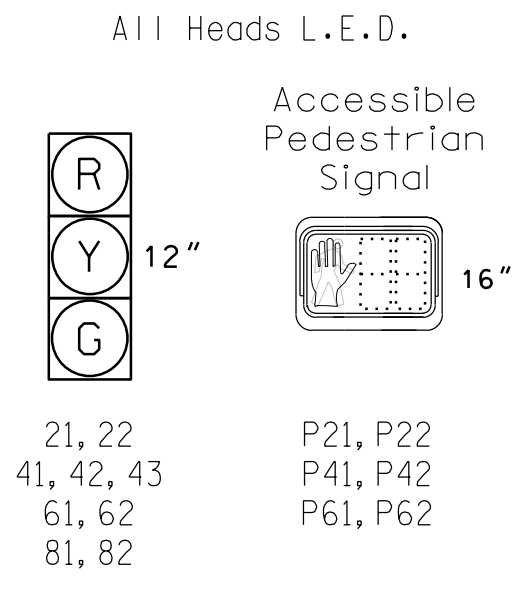
PHASING DIAGRAM DETECTION LEGEND

- (solid circle) DETECTED MOVEMENT
- (solid line) UNDETECTED MOVEMENT (OVERLAP)
- - - (dashed line) UNSIGNALIZED MOVEMENT
- (dashed line with arrow) PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE		
	02+6	04+8	FLASH
21, 22	G	R	Y
41, 42, 43	R	G	R
61, 62	G	R	Y
81, 82	R	G	R
P21, P22	W	DW	DRK
P41, P42	DW	W	DRK
P61, P62	W	DW	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	DELAY DURING GREEN	NEW CARD	
2A	6X6	70	*	*	2	-	-	X	-	X	-	*
4A	6X40	0	*	*	4	10	-	X	-	X	-	*
6A	6X6	70	*	*	6	-	-	X	-	X	-	*
8A	6X40	0	*	*	8	10	-	X	-	X	-	*

* Multizone Microwave Detection.

2 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.
- Set all detector units to presence mode.
- Remove existing No Right Turn sign and existing No Left Turn sign.
- 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 and crosswalk locations.
- This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- Remove bags and reconnect signal heads 41, 42, 43, and 63.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

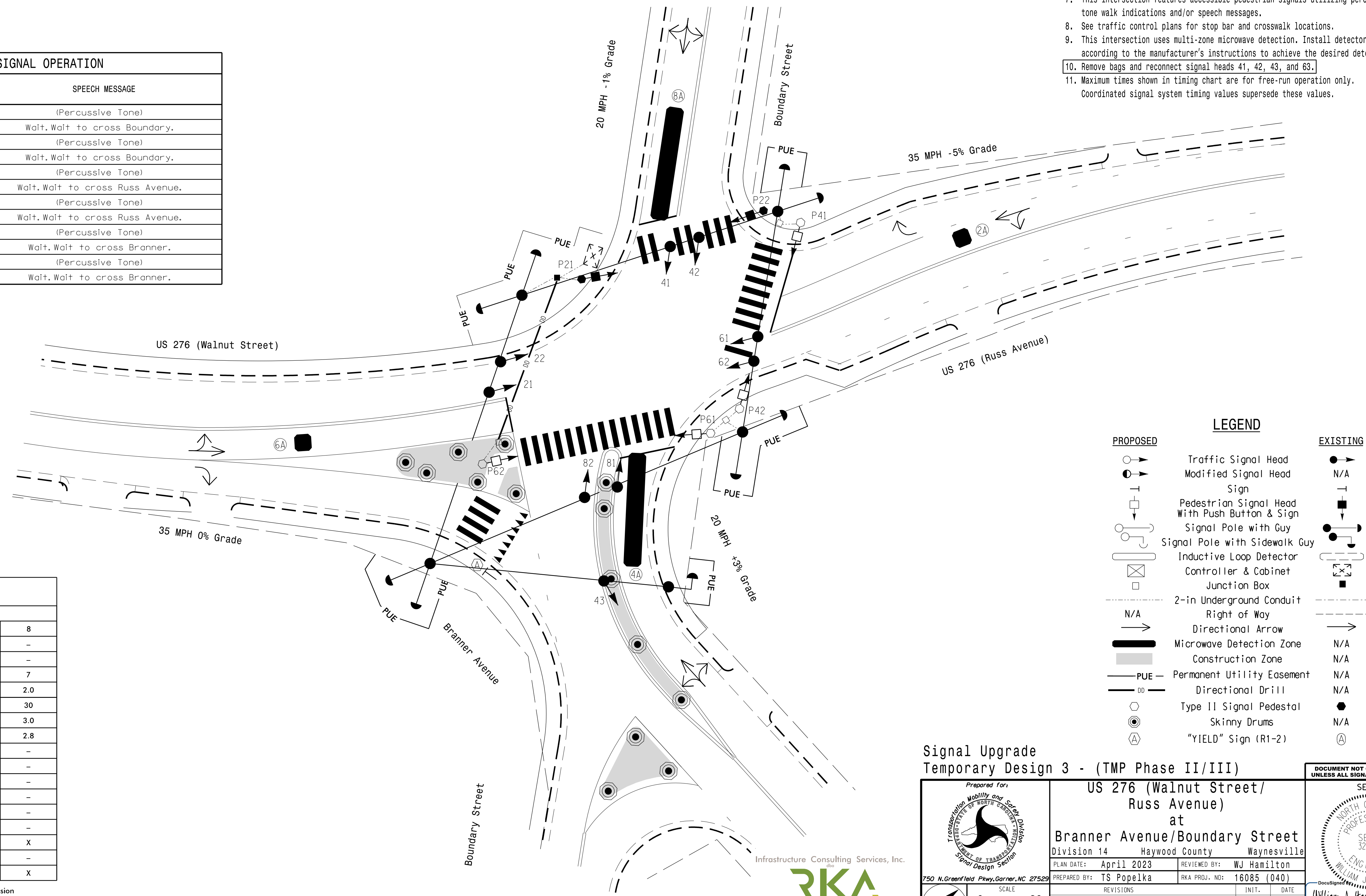
ACCESSIBLE PEDESTRIAN SIGNAL OPERATION

SIGNAL FACE	VOICE	TONES	INTERVAL	SPEECH MESSAGE
P21	-	X	Walk	(Percussive Tone)
	X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Boundary.
P22	-	X	Walk	(Percussive Tone)
	X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Boundary.
P41	-	X	Walk	(Percussive Tone)
	X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Russ Avenue.
P42	-	X	Walk	(Percussive Tone)
	X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Russ Avenue.
P61	-	X	Walk	(Percussive Tone)
	X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Branner.
P62	-	X	Walk	(Percussive Tone)
	X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Branner.

MAXTIME TIMING CHART

FEATURE	PHASE			
	2	4	6	8
Walk *	7	7	7	-
Ped Clear *	9	12	15	-
Min Green	10	7	10	7
Passage *	3.0	2.0	3.0	2.0
Max I *	45	30	45	30
Yellow Change	4.2	3.0	3.8	3.0
Red Clear	2.0	2.4	1.8	2.8
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	-	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.



LEGEND

PROPOSED	EXISTING
○ (circle) Traffic Signal Head	● (solid circle) N/A
○ (circle with horizontal lines) Modified Signal Head	- (dash) N/A
○ (circle with vertical lines) Pedestrian Signal Head With Push Button & Sign	○ (circle with vertical lines) N/A
○ (circle with diagonal lines) Signal Pole with Guy	○ (circle with diagonal lines) N/A
○ (circle with horizontal lines) Signal Pole with Sidewalk Guy	○ (circle with horizontal lines) N/A
□ (square) Inductive Loop Detector	□ (square) N/A
□ (square) Controller & Cabinet	□ (square) N/A
□ (square) Junction Box	□ (square) N/A
- - - (dashed line) 2-in Underground Conduit	- - - (dashed line) N/A
N/A	- - - (dashed line) Right of Way
→ (arrow) Directional Arrow	→ (arrow) N/A
▨ (hatched area) Microwave Detection Zone	▨ (hatched area) N/A
▨ (hatched area) Construction Zone	▨ (hatched area) N/A
- - - (dashed line) PUE Permanent Utility Easement	- - - (dashed line) N/A
- - - (dashed line) Directional Drill	- - - (dashed line) N/A
○ (circle) Type II Signal Pedestal	○ (circle) N/A
○ (circle) Skinny Drums	○ (circle) N/A
Ⓐ (triangle in circle) "YIELD" Sign (R1-2)	Ⓐ (triangle in circle) N/A

Signal Upgrade Temporary Design 3 - (TMP Phase II/III)

Prepared For:

 STATE OF NORTH CAROLINA
 SIGNAL DESIGN SECTION

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US 276 (Walnut Street/
 Russ Avenue)
 at
 Branner Avenue/Boundary Street

Division 14 Haywood County Waynesville
 PLAN DATE: April 2023 REVIEWED BY: WJ Hamilton
 PREPARED BY: TS Popelka RKA PROJ. NO: 16085 (040)

REVISIONS: _____ INIT. DATE _____

SCALE: 0 20
 1"=20'

SEAL

 William J. Hamilton
 ENGINEER
 SIGNATURE DATE: 04/11/2023
 SIG. INVENTORY NO. 14-037473