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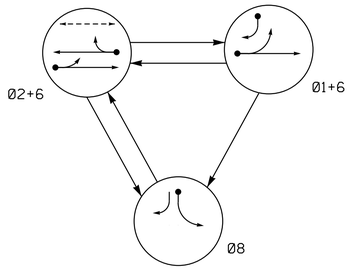
PROJECT REFERENCE NO.	SHEET NO.
U-5839	Sig 3.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

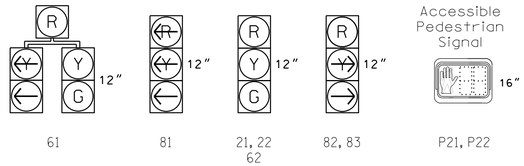
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø2+6	PHASE Ø1+6	PHASE Ø8	FLASH
21, 22	G	R	R	Y
61	G	G	R	Y
62	G	G	R	Y
81	R	R	R	R
82, 83	R	→	→	R
P21, P22	W	DW	DW	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART

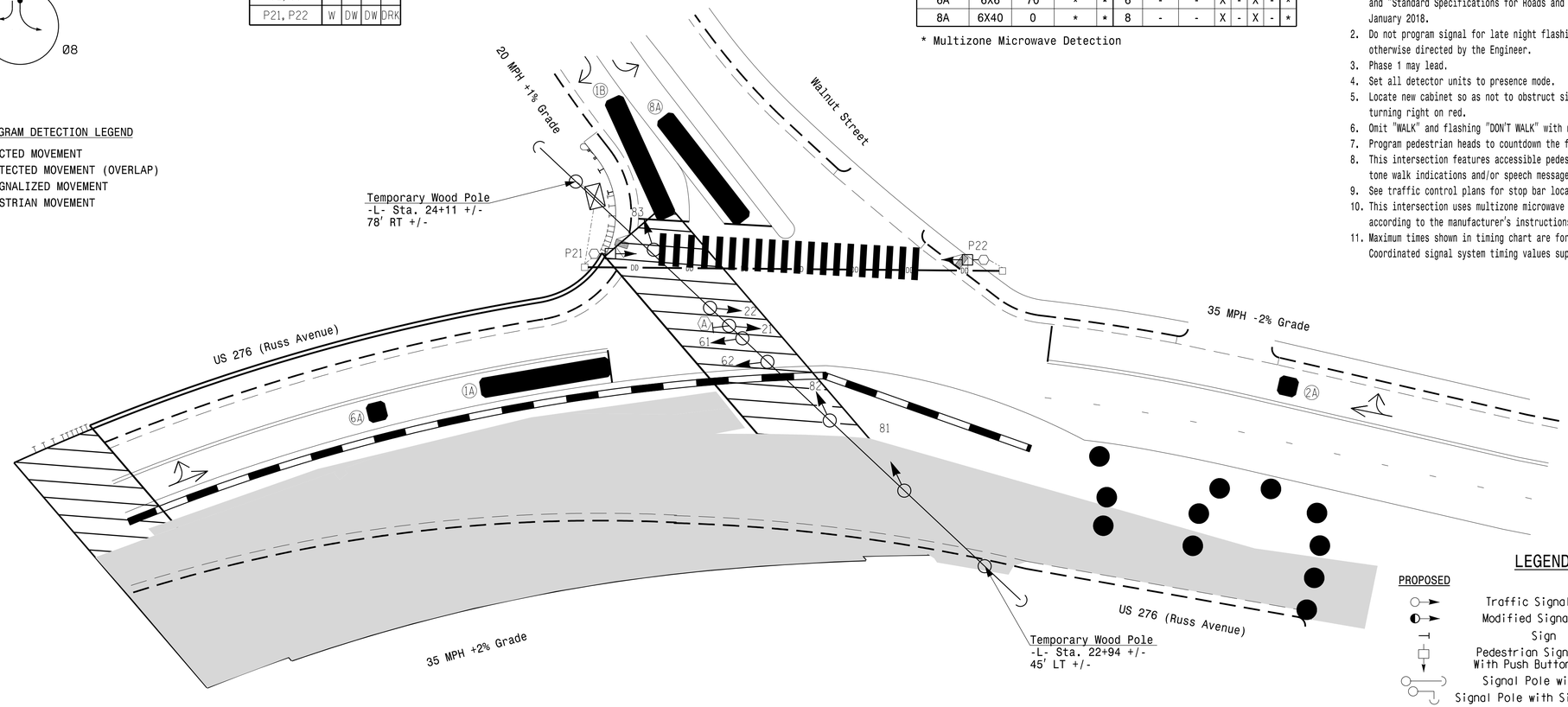
DETECTOR ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND ADDED INITIAL	CALL DELAY DURING GREEN	NEW CARD
1A	6X40	0	*	*	1	15	-	X -	X -	*
					6	-	-	X -	X X	*
1B	6X40	0	*	*	1	15	-	X -	X -	*
2A	6X6	70	*	*	2	-	-	X -	X -	*
6A	6X6	70	*	*	6	-	-	X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

* Multizone Microwave Detection

3 Phase
Fully Actuated
D14-12_Waynesville

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 may lead.
4. Set all detector units to presence mode.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
8. This intersection features accessible pedestrian signals utilizing percussive tone walk indications and/or speech messages.
9. See traffic control plans for stop bar locations.
10. This intersection uses multizone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
11. 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	
	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	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Microwave Detection Zone	N/A
	Construction Zone	N/A
DD	Directional Drill	N/A
	Type II Signal Pedestal	
	Construction Barrier	N/A
A	"LEFT TURN YIELD ON GREEN" Sign (R10-12)	A

MAXTIME TIMING CHART

FEATURE	PHASE 1	PHASE 2	PHASE 6	PHASE 8
Walk *	–	7	–	–
Ped Clear *	–	25	–	–
Min Green	7	10	10	7
Passage *	2.0	3.0	3.0	2.0
Max 1 *	15	45	45	25
Yellow Change	3.0	4.0	3.7	3.0
Red Clear	2.6	1.9	2.4	3.1
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	(Percussive Tone)
	X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Walnut.

Signal Upgrade
Temporary Design 1 - (TMP Phase II)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for: Transportation Mobility and Safety Division, State of North Carolina, Department of Transportation, Signal Design Section

750 N.Greenfield Pkwy.Garner,NC 27529

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)

SCALE 0 20 1"=20'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 32396 ENGINEER WILLIAM J. HAMILTON

DocuSigned by: William J. Hamilton
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SIGNATURE 04/11/2023 DATE

SIG. INVENTORY NO. 14-0417TI

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