

PHASING DIAGRAM

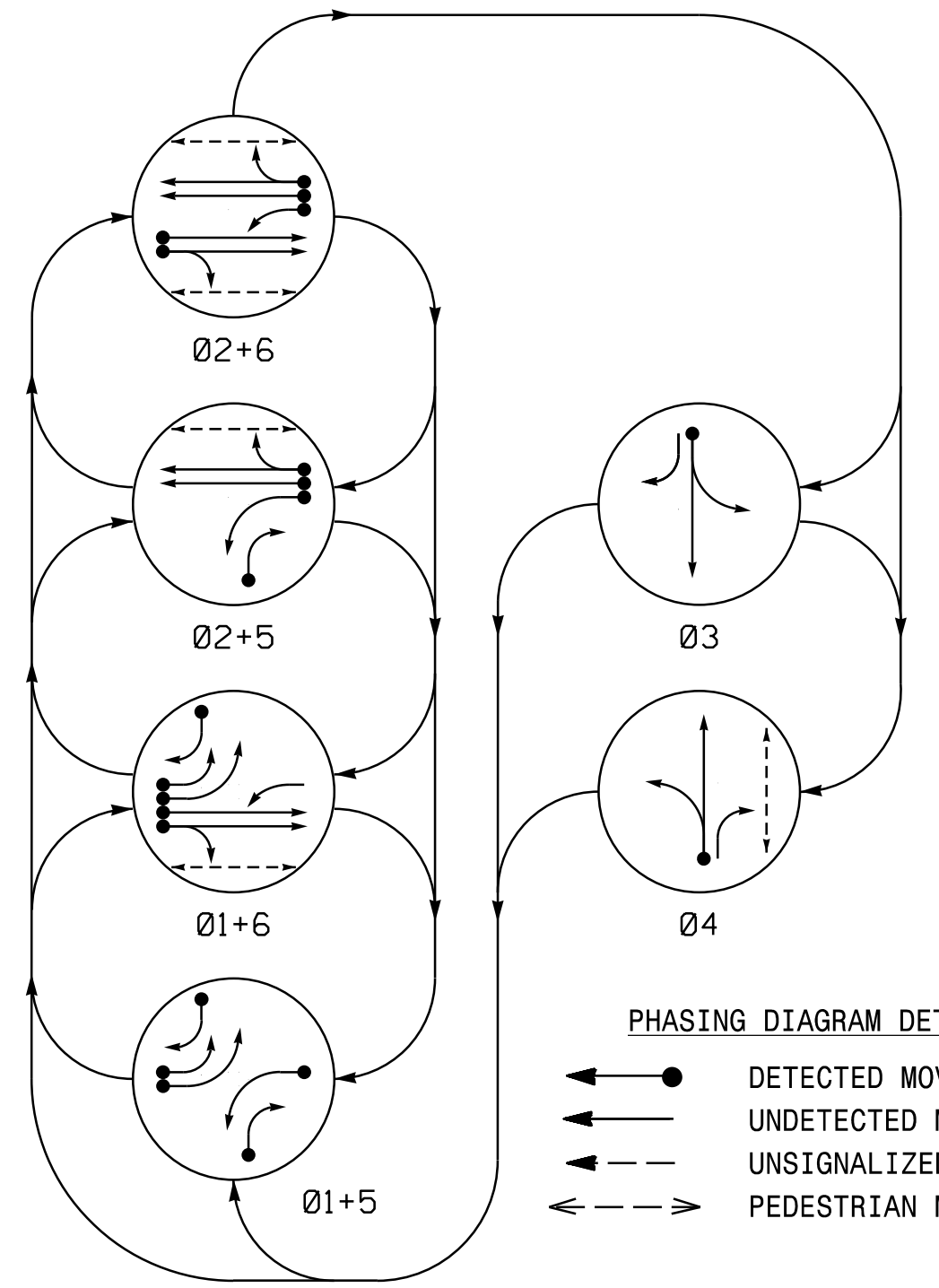
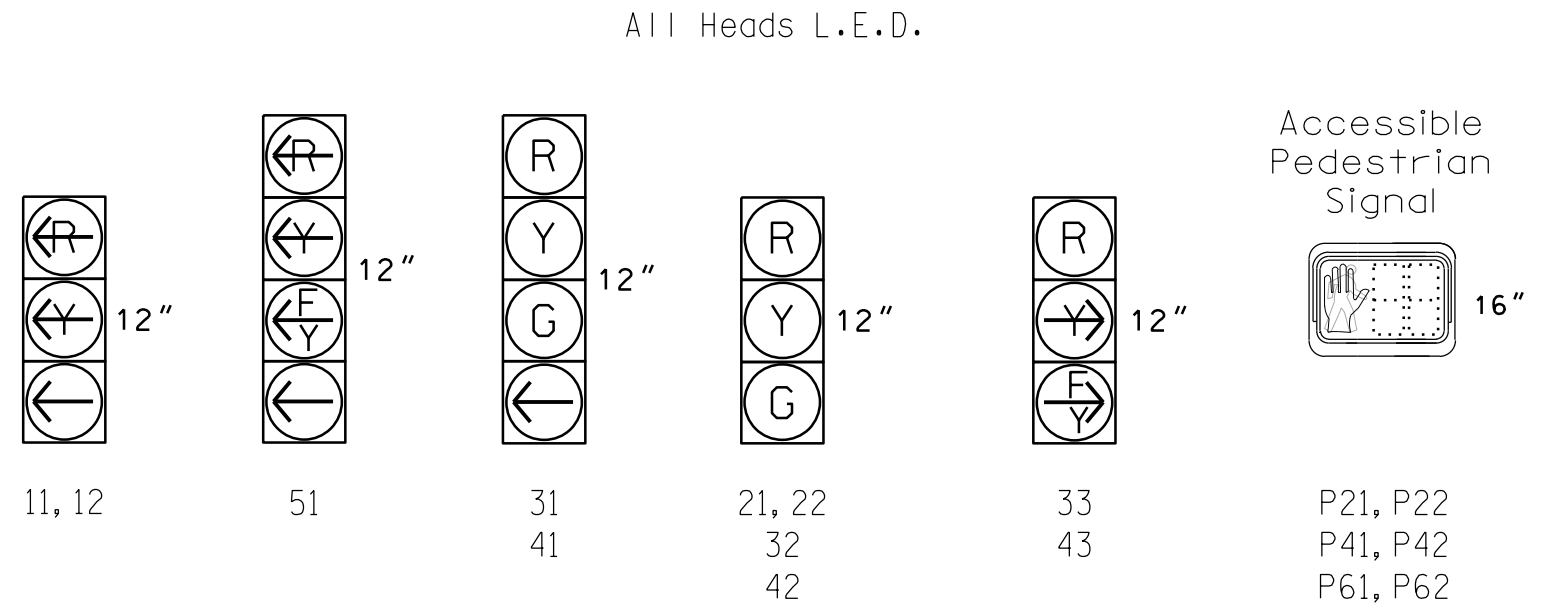


TABLE OF OPERATION

SIGNAL FACE	PHASE					
	Ø1+5	Ø2+6	Ø3	Ø4	Ø5+6	Ø6+7
11, 12	R	R	G	G	R	R
21, 22	R	R	G	G	R	R
31	R	R	R	G	R	R
32	R	R	R	G	R	R
33	R	R	R	G	R	R
41	R	R	R	R	G	R
42	R	R	R	R	G	R
43	R	R	R	R	G	R
51	R	G	R	R	R	Y
61, 62	R	G	R	R	R	Y
P21, P22	DW	DW	W	W	DW	DRK
P41, P42	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DRK

SIGNAL FACE I.D.



MAXTIME DETECTOR INSTALLATION CHART

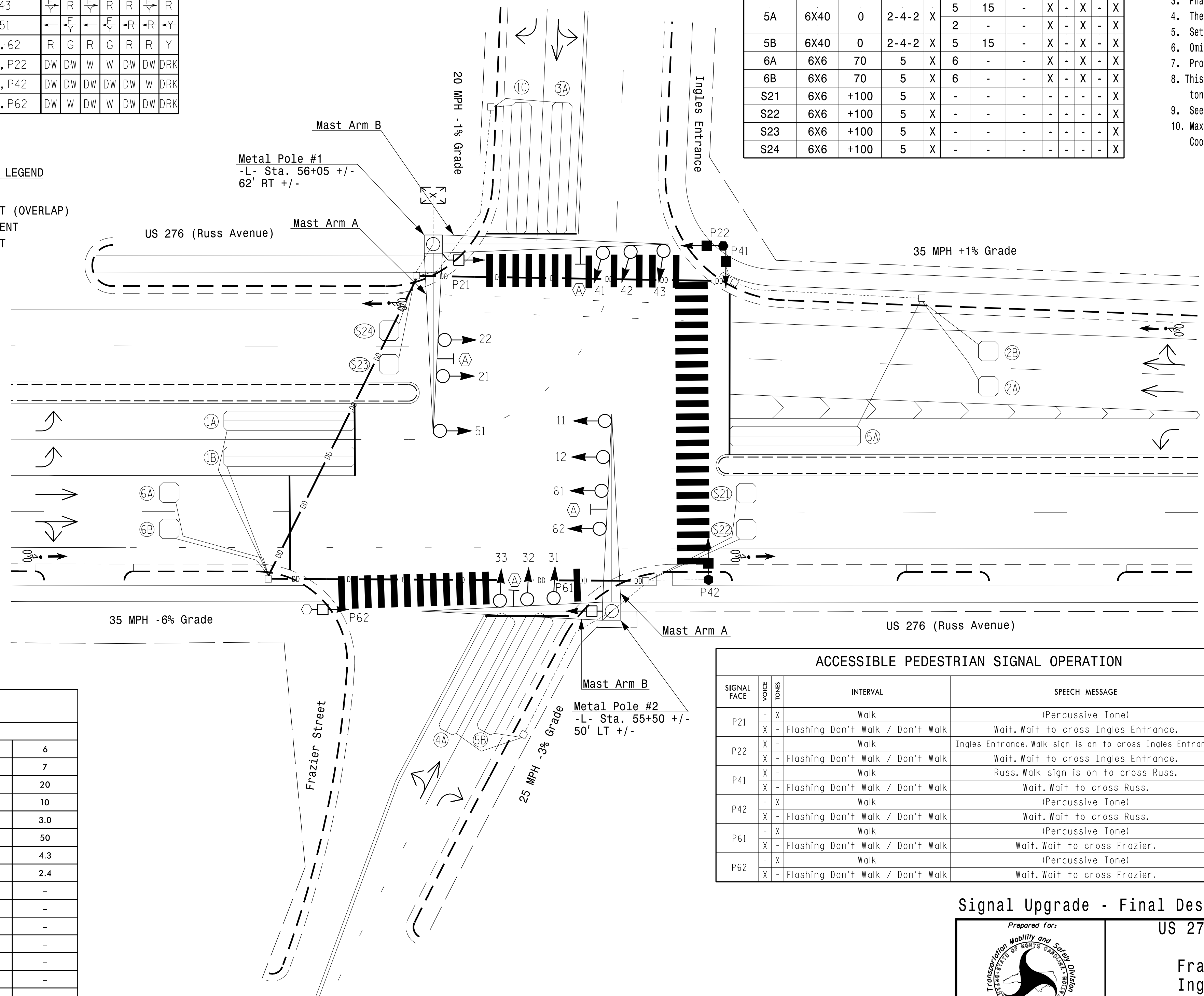
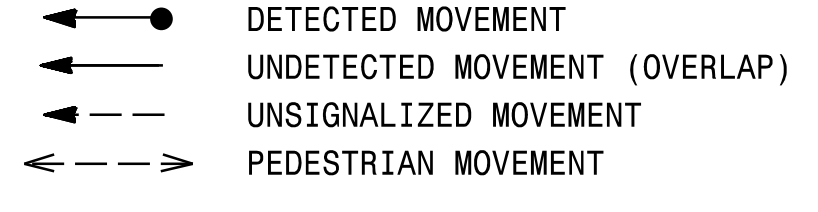
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A	6X40	0	2-4-2	X	1	-	-	X	-	X	-	X
1B	6X40	0	2-4-2	X	1	-	-	X	-	X	-	X
1C	6X40	0	2-4-2	X	1	15	-	X	-	X	-	X
2A	6X6	70	5	X	2	-	-	X	-	X	-	X
2B	6X6	70	5	X	2	-	-	X	-	X	-	X
3A	6X40	0	2-4-2	X	3	3	-	X	-	X	-	X
4A	6X40	0	2-4-2	X	4	3	-	X	-	X	-	X
5A	6X40	0	2-4-2	X	5	15	-	X	-	X	-	X
5B	6X40	0	2-4-2	X	5	15	-	X	-	X	-	X
6A	6X6	70	5	X	6	-	-	X	-	X	-	X
6B	6X6	70	5	X	6	-	-	X	-	X	-	X
S21	6X6	+100	5	X	-	-	-	-	-	-	-	X
S22	6X6	+100	5	X	-	-	-	-	-	-	-	X
S23	6X6	+100	5	X	-	-	-	-	-	-	-	X
S24	6X6	+100	5	X	-	-	-	-	-	-	-	X

6 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 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- 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 pavement marking plans for stop bar and crosswalk locations.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

PHASING DIAGRAM DETECTION LEGEND

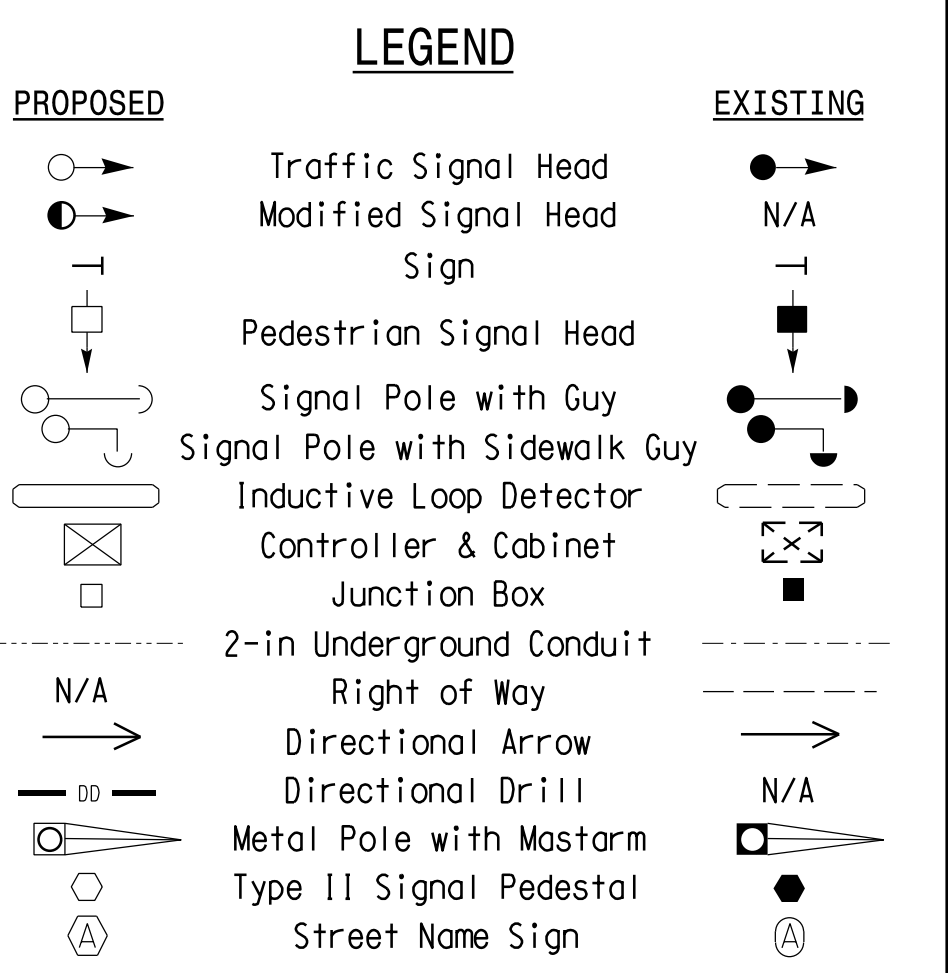


MAXTIME TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Walk *	-	7	-	7	-	7
Ped Clear *	-	18	-	24	-	20
Min Green	7	10	7	7	7	10
Passage *	2.0	3.0	2.0	2.0	2.0	3.0
Max I *	15	50	20	20	15	50
Yellow Change	3.1	3.8	3.0	3.3	3.0	4.3
Red Clear	3.3	2.1	3.4	2.9	2.9	2.4
Added Initial *	-	-	-	-	-	-
Maximum Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Advance Walk	-	-	-	-	-	-
Non Lock Detector	X	-	X	X	X	-
Vehicle Recall	-	MIN RECALL	-	-	-	MIN RECALL
Dual Entry	-	-	-	-	-	-

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 Ingles Entrance.
P22	- X	Walk	Ingles Entrance. Walk sign is on to cross Ingles Entrance.
X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Ingles Entrance.
P41	- X	Walk	Russ. Walk sign is on to cross Russ.
X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Russ.
P42	- X	Walk	(Percussive Tone)
X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Russ.
P61	- X	Walk	(Percussive Tone)
X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Frazier.
P62	- X	Walk	(Percussive Tone)
X	-	Flashing Don't Walk / Don't Walk	Wait. Wait to cross Frazier.



* 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.

Signal Upgrade - Final Design

US 276 (Russ Avenue) at Frazier Street / Ingles Entrance

Division 14 Haywood County Waynesville

PLAN DATE: April 2023 REVIEWED BY: WJ Hamilton

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

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SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER WILLIAM J. HAMILTON 32396

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

SIG. INVENTORY NO. 14-1075