6 Phase Fully Actuated (Isolated)

## NOTES

- 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 operation unless otherwise directed by the Engineer.
- 3. Set all detector units to presence mode.
- This intersection uses video detection. Install detectors according to the manufacturer's instructions to schieve the desitred detection.
- 5. Omit "walk" and flashing "Don't Walk" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- 7. To provide a leading pedestrian interval on phase 2, program FYA heads 51 and 22 to delay for 3 seconds after the start of the phase 6 walk interval. See electrical details.
- Refer to Pavement Marking Plans for proposed stop bar locations.
- Reposition existing signal heads as shown on the

	MAX	TIME D	ETECT	OR	INS	TALL	ATION	С	НА	RT		
DETECTOR					PROGRAMMING							
L00P	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A,1B	*	0	*	*	1	-	-	Χ	-	Χ	-	*
1C	*	0	*	*	1	15.0	_	Χ	-	Χ	-	*
1D	*	0	*	*	1	15.0	-	Χ	-	Χ	-	*
2A	*	300	*	*	2	-	1.6	Χ	Χ	Χ	_	*
2B	*	90	*	*	2	-	-	Χ	Χ	Χ	_	*
4A	*	0	*	*	4	<u>-</u>	-	Χ	-	Χ	-	*
4B	*	0	*	*	4	-	_	Χ	Χ	Χ	-	*
4C	*	0	*	*	4	_	-	Χ	Χ	Χ	-	*
5A	*	0	*	*	5	15.0	-	Χ	-	Χ	-	*
5B	*	0	*	*	5	15.0	-	Χ	-	Χ	_	*
6A,6B	*	300	*	*	6	_	1.6	Χ	Χ	Χ	-	*
6C,6D	*	90	*	*	6	_	_	Х	Х	Х		*

45 MPH 1.5% Grade

PHASING DIAGRAM

PHASING DIAGRAM DETECTION LEGEND

DETECTED MOVEMENT

UNSIGNALIZED MOVEMENT

PEDESTRIAN MOVEMENT

UNDETECTED MOVEMENT (OVERLAP)

MAXTIME TIMING CHART

2

12

2.0

60

4.6

1.5

2.5

34

30

3.4

MIN RECALL

\* 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.

7

2.0

30

3.0

3.5

\_

\_

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Χ

PHASE

2.0

2.4

5

2.0

30

3.0

3.5

6

7 32

12

2.0

60

4.5

1.8

1.5

34

15

30

3.4

\*\*

MIN RECALL

02+5

**│**●●●

04

<del>( Y )</del> 12 " 13,14

42,43 61,62 44

TABLE OF OPERATION

FACE

11, 12

13,14

44

61, 62

6.3

PHASE

| R | R | R | G | F

→ | R | → | R | <del>[</del> F

·│<del>◆</del>₽│◆─│◆₽│◆₽│

 $\left| \stackrel{\vdash}{\Rightarrow} \right| R \left| \stackrel{\vdash}{\Rightarrow} \right| \longrightarrow \left| \stackrel{\triangleleft}{\Rightarrow} \right|$ 

SIGNAL FACE I.D.

All Heads L.E.D.

Replace existing cabinet with a new cabinet on existing foundation

US 421 - NC 16

45 MPH 1% Grade

<u>PROPOSED</u>

 $\bigcirc \bigcirc$ 

O-----)

LEGEND **EXISTING** Curb Ramp Signal Pole with Guy

Signal Pole with Sidewalk Guy Traffic Signal Head Type II Signal Pedestal

Sign Pedestrian Signal Head With Push Button & Sign Inductive Loop Detector Video Detection Zone

Construction Zone Controller & Cabinet Junction Box

2-in Underground Conduit

N/A N/A 

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Signal Upgrade - Temporary Design 3(Phase 3)

Divsion 11 Wilkes County REVIEWED BY: M.L. Stygles May 2023

750 N.Greenfield Pkwy, Garner, NC 27529 PREPARED BY: S.R. Chiluka REVIEWED BY:

Wilkesboro INIT. DATE 1"=40'

020 2:39:55 PM gbl\proj\Raleigl

\* \* See note 7

**FEATURE** 

Walk \*

Ped Clear \*

Min Green

Passage \*

Max 1 \*

Red Clear

Yellow Change

Added Initial \*

Maximum Initial \*

Time To Reduce \*

Minimum Gap

Advance Walk

Vehicle Recall

Dual Entry

Non Lock Detector

Time Before Reduction

SEAL US 421 Business Curtis Bridge Road 047250

VHB Engineering NC, P.C. (C-3705) 940 Main Campus Drive, Suite 500 Raleigh, NC 27606 919.829.0328

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SRChiluk5x26/2023