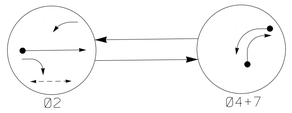
PROJECT REFERENCE NO.	SHEET NO.
U-5312	Sig.3.7

2 Phase Fully Actuated (Isolated)

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE 02	PHASE 04+07	PHASE FLASH
21,23	↑	R	Y
23	FY	R	Y
41,42	R	→	R
71,72	FY	←	Y
P21,P22	W	DW	DRK

MAXTIME DETECTOR INSTALLATION CHART

DETECTOR						PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP		CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
2A	✳	300	✳	✳		2	-	1.6	X	-	X	-	✳
2B	✳	90	✳	✳		2	-	-	X	-	X	-	✳
4A	✳	0	✳	✳		4	15.0	-	X	-	X	-	✳
7A	✳	0	✳	✳		7	15.0*	-	X	-	X	-	✳

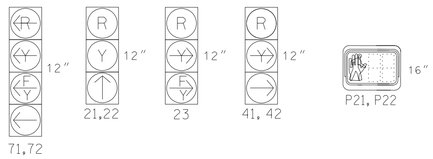
*Video Detection Zone

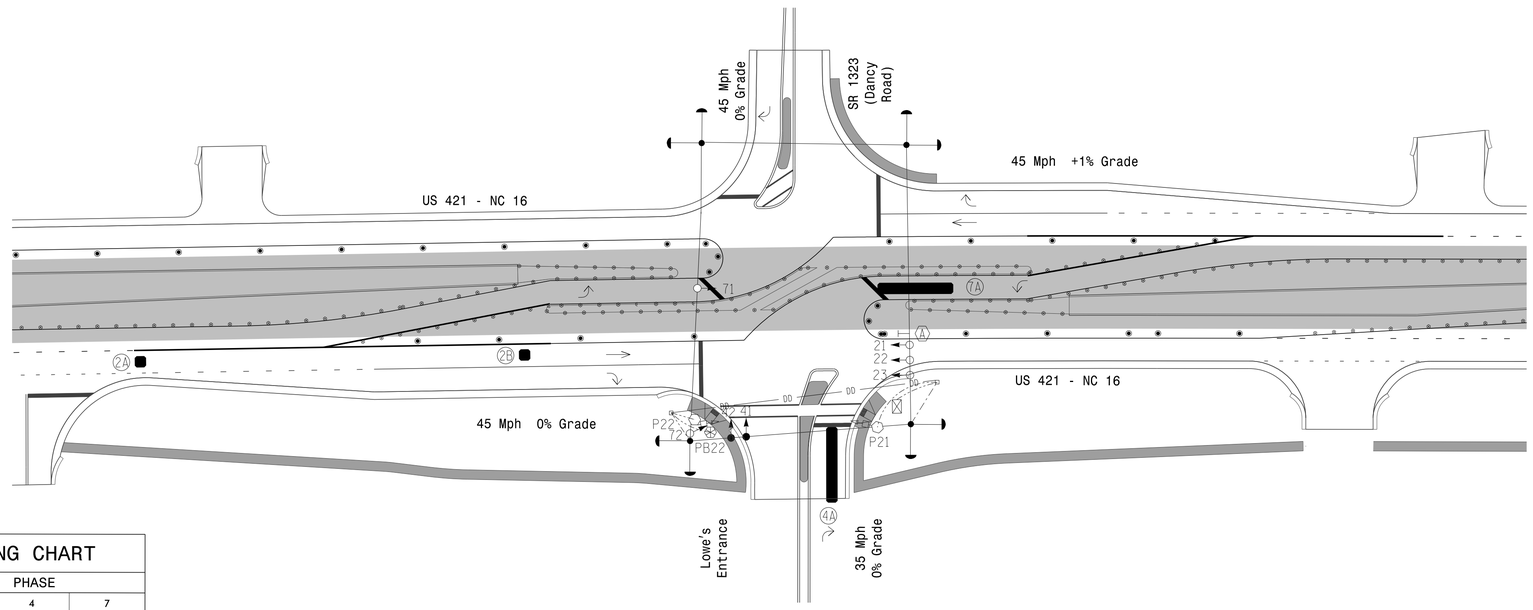
NOTES

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 operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
4. This intersection uses video detection. Install detectors according to the manufacturer's instructions to schieve the desitred detection.
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 pedestrain heads to countdown the flashing "Don't Walk" time only.
8. To provide a leading pedestrian interval on phase 6, program FYA heads 71,72 and 23 to delay for 3 seconds after the start of the phase 6 walk interval. See electrical details.
9. Refer to Pavement Marking Plans for proposed stop bar locations.
10. Reposition signal heads as shown on this plan.

SIGNAL FACE I.D.

All Heads L.E.D.





LEGEND

PROPOSED		EXISTING
○→	Traffic Signal Head	●→
○—	Signal Pole with Guy	●—
○↓	Signal Pole with Sidewalk Guy	●↓
○>	Video Detector	●>
▬	Video Detection Zone	N/A
▭	Inductive Loop Detector	▭
⊠	Controller & Cabinet	⊠
□	Junction Box	■
-----	2-in Underground Conduit	-----
N/A	Right of Way	———
→	Directional Arrow	→
▬	Construction Zone	N/A
○	Wood Pole	●
Ⓐ	No Left Turn Sign (R3-2)	Ⓐ
●	Drum	N/A
⬢	Skinny Drum	N/A

MAXTIME TIMING CHART

FEATURE	PHASE 2	PHASE 4	PHASE 7
Walk *	7	–	–
Ped Clear *	16	–	–
Min Green	12	7	7
Passage *	2.0	2.0	2.0
Max 1 *	60	30	30
Yellow Change	4.5	3.0	3.0
Red Clear	1.3	1.4	2.3
Added Initial *	–	–	–
Maximum Initial *	–	–	–
Time Before Reduction *	–	–	–
Time To Reduce *	–	–	–
Minimum Gap	–	–	–
Advance Walk	**	–	–
Non Lock Detector	–	X	X
Vehicle 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.

** See Note 8

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New Installation - Temporary Design 1(Phase 9)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:
Transportation Mobility and Safety Division
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

US 421 - NC 16 at Lowe's Entrance

Divsion 11 Wilkes County Wilkesboro

PLAN DATE:	May 2023	REVIEWED BY:	M.L. Stygles
PREPARED BY:	S.R. Chiluka	REVIEWED BY:	J. Ma

REVISIONS	INIT.	DATE

SCALE 0 40 1"=40'

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 047250 ENGINEER SRILATHA R CHILUKA

DocuSigned by: SRChiluka 5/26/2023
SIGNATURE DATE

SIG. INVENTORY NO. 11-1460T1