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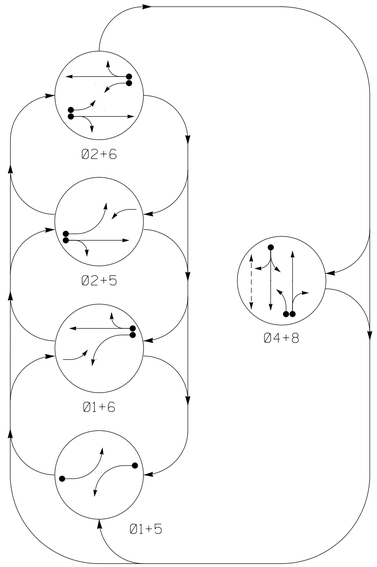
PROJECT REFERENCE NO.	SHEET NO.
A-0009CA	Sig. 4.3

5 Phase Fully Actuated Isolated

DEFAULT PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

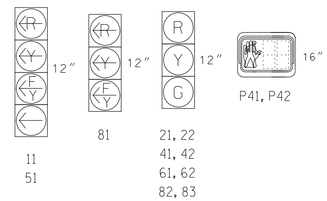
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø4+8	FLASH
11	←●	←	F Y	F Y	→R	→Y
21, 22	R	R	G	G	R	Y
41, 42	R	R	R	R	G	R
51	←	F Y	←	F Y	→R	→Y
61, 62	R	G	R	G	R	Y
81	→R	→R	→R	→R	F Y	→R
82, 83	R	R	R	R	G	R
P41,P42	DW	DW	DW	DW	W	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



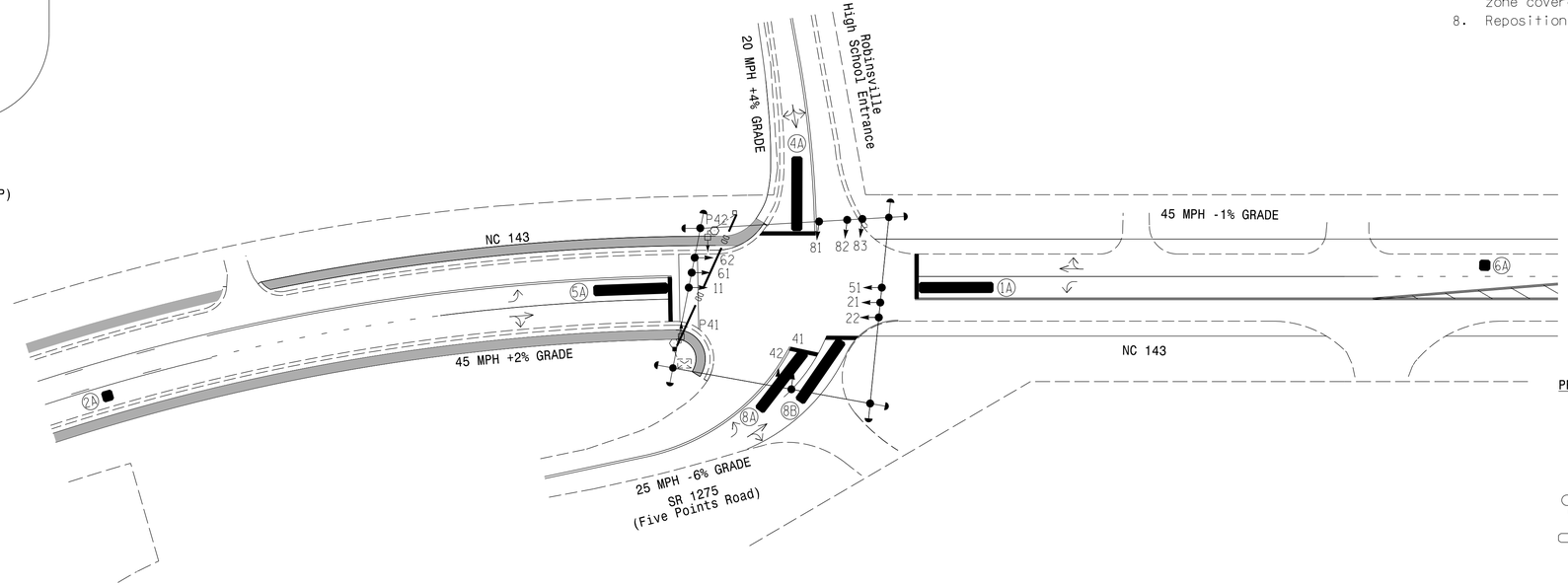
ASC/3 DETECTOR INSTALLATION CHART

DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
1A	*	0	*	Y	1	Yes	-	15	-	N	-	*
					6	Yes	-	-	-	N	-	*
2A	*	300	*	X	2	Yes	-	-	-	N	-	*
4A	*	0	*	X	4	Yes	-	10	-	N	-	*
5A	*	0	*	X	5	Yes	-	15	-	N	-	*
					2	Yes	-	-	-	N	-	*
6A	*	300	*	X	6	Yes	-	-	-	N	-	*
8A	*	0	*	X	8	Yes	-	3	-	N	-	*
8B	*	0	*	X	8	Yes	-	10	-	N	-	*

* Multizone Microwave Detection Zones

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 and/or phase 5 may be lagged.
4. Set all detector units to presence mode.
5. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
6. Program pedestrian heads to countdown the flashing 'Don't Walk' time only.
7. This intersection features a multizone microwave detection system. Install detectors according to manufacturer's specifications to ensure optimum detection zone coverage.
8. Reposition all signal heads.



LEGEND

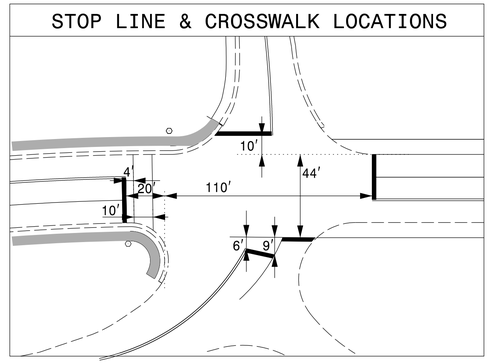
PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Type II Signal Pedestal	
DD	Directional Drill	N/A
	Curb Ramp	N/A
	Construction Zone	N/A
	Multizone Microwave Detection	N/A

ASC/3 TIMING CHART

FEATURE	PHASE 1	2	4	5	6	8
Min Green *	7	12	7	7	12	7
Walk *	-	-	7	-	-	-
Ped Clear	-	-	10	-	-	-
Veh. Extension *	2.0	6.0	2.0	2.0	6.0	2.0
Max 1 *	20	90	25	20	90	15
Yellow	3.0	4.6	3.0	3.0	4.6	3.5
Red Clear	2.6	1.9	2.4	2.9	1.9	2.4
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Actuations B4 Add *	-	-	-	-	-	-
Seconds /Actuation *	-	2.5	-	-	2.5	-
Max Initial *	-	34	-	-	34	-
Time Before Reduction *	-	15	-	-	15	-
Time To Reduce *	-	30	-	-	30	-
Minimum Gap	-	3.0	-	-	3.0	-
Locking Detector	-	-	-	-	-	-
Recall Position	-	VEH RECALL	-	-	VEH RECALL	-
Dual Entry	-	-	X	-	-	X
Simultaneous Gap	X	X	X	X	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.

STOP LINE & CROSSWALK LOCATIONS



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Signal Upgrade-Temporary Design 2 (Phase II)

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

NC 143 at SR 1275 (Five Points Road)/ Robbinsville High School

Division 14 Graham County Robbinsville

PLAN DATE:	May 2022	REVIEWED BY:	M. L. Stygles
PREPARED BY:	J. Ma	REVIEWED BY:	

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 033108 ENGINEER JIAN MA

DocuSigned by: Jianzhu Ma 827E195308144F... 5/10/2022
SIGNATURE DATE

SIG. INVENTORY NO. 14-0631T2