

**DEFAULT PHASING TABLE OF OPERATION**

SIGNAL FACE	PHASE				
	Ø 1 + 5	Ø 2 + 6	Ø 2 + 5	Ø 4 + 8	FLASH
11	←	←	←	←	Y
21, 22	R	R	G	G	R
41, 42	R	R	R	R	G
51	←	←	←	←	Y
61, 62	R	G	R	G	R
81	←	←	←	←	Y
82, 83	R	R	R	R	G
P41, P42	DW	DW	DW	DW	W DRK

**ALTERNATE PHASING TABLE OF OPERATION**

SIGNAL FACE	PHASE				
	Ø 1 + 5	Ø 1 + 6	Ø 2 + 5	Ø 2 + 6	FLASH
11	←	←	←	←	Y
21, 22	R	R	G	G	R
41, 42	R	R	R	R	G
51	←	←	←	←	Y
61, 62	R	G	R	G	R
81	←	←	←	←	Y
82, 83	R	R	R	R	G
P41, P42	DW	DW	DW	DW	W DRK

**DETECTOR INSTALLATION CHART**

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	X	1	Yes	-	15*	-	N	-	X
2A	6X6	300	4	X	2	Yes	-	3	-	X	N	-
4A	6X40	0	2-4-2	X	4	Yes	-	10	-	N	-	X
5A	6X40	0	2-4-2	X	5	Yes	-	15*	-	N	-	X
6A	6X6	300	5	X	6	Yes	-	-	-	X	N	-
8A	6X40	0	2-4-2	X	8	Yes	-	3	-	N	-	X
8B	6X40	0	2-4-2	X	8	Yes	-	10	-	N	-	X

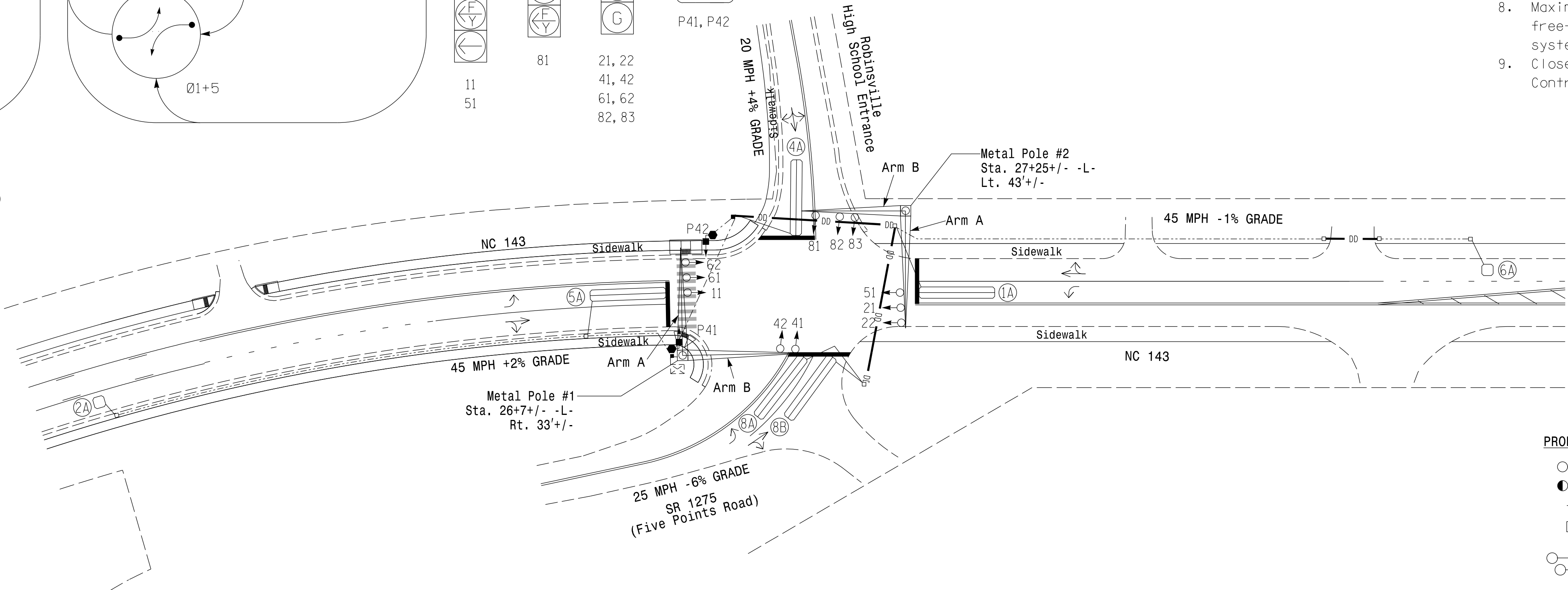
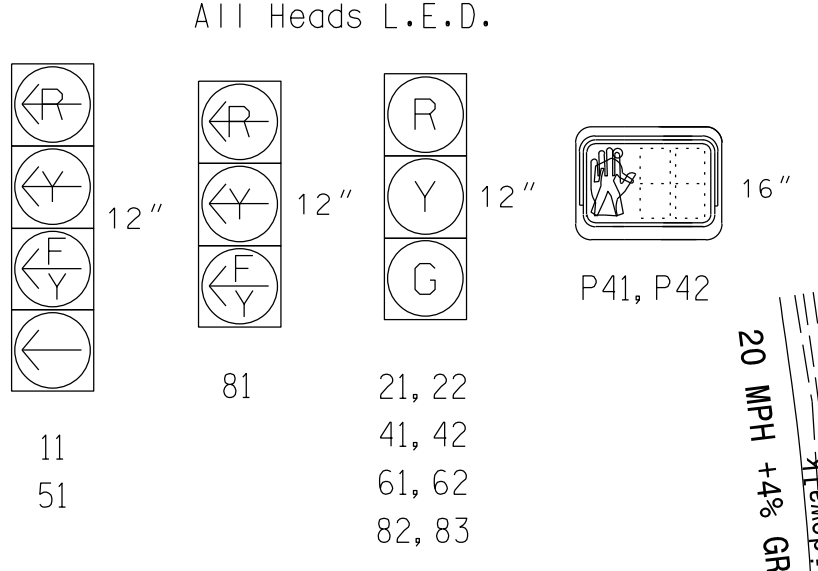
**5 Phase Fully Actuated w/ Alternate Phasing Operation (US 129-NC 143 Closed Loop System)**

**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 1 and/or phase 5 may be lagged.
- 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.
- The Division (City) Traffic Engineer will determine the hours of use for each phasing plan.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data: Master Asset #0750, Controller Asset #1631.

\* Reduce delay to 3 seconds during Alternate Phasing Operation.  
# Disables phase call for loop(s) during Alternate Phasing Operation.

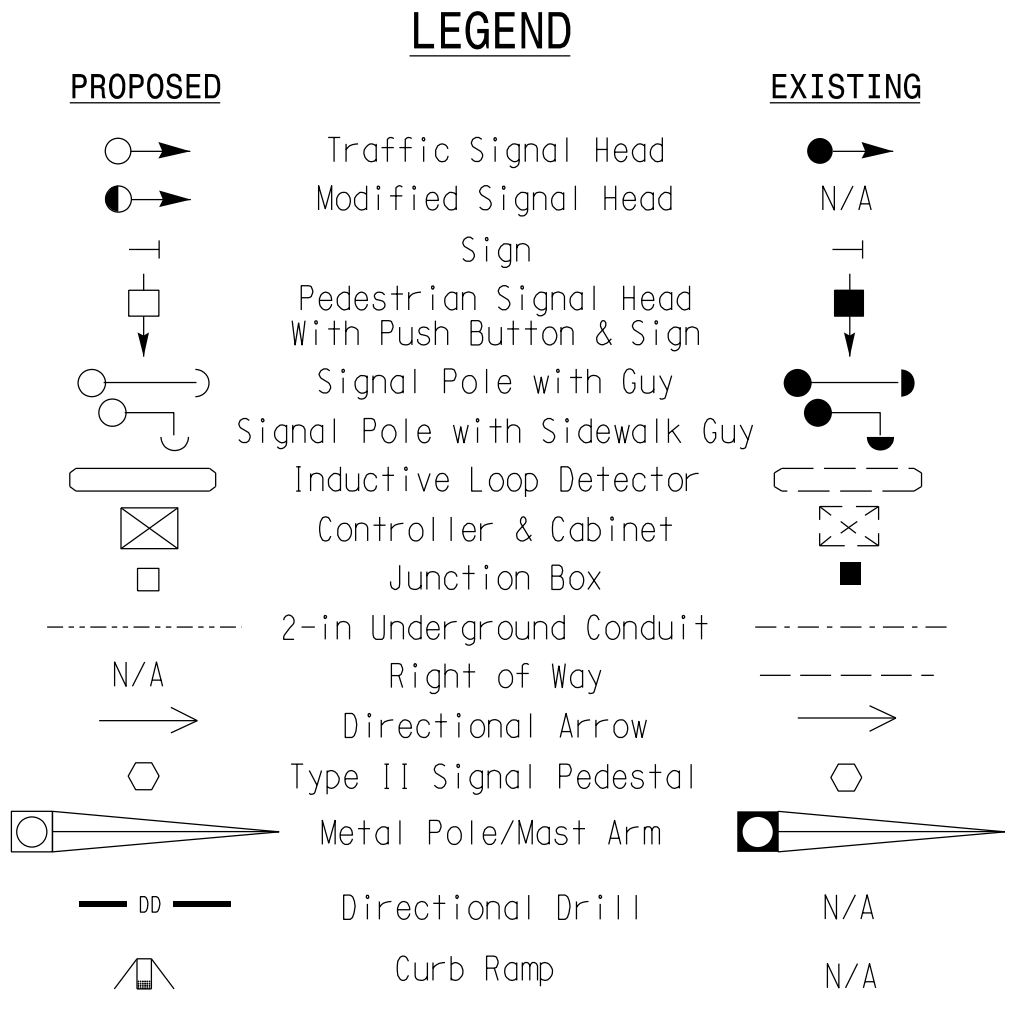
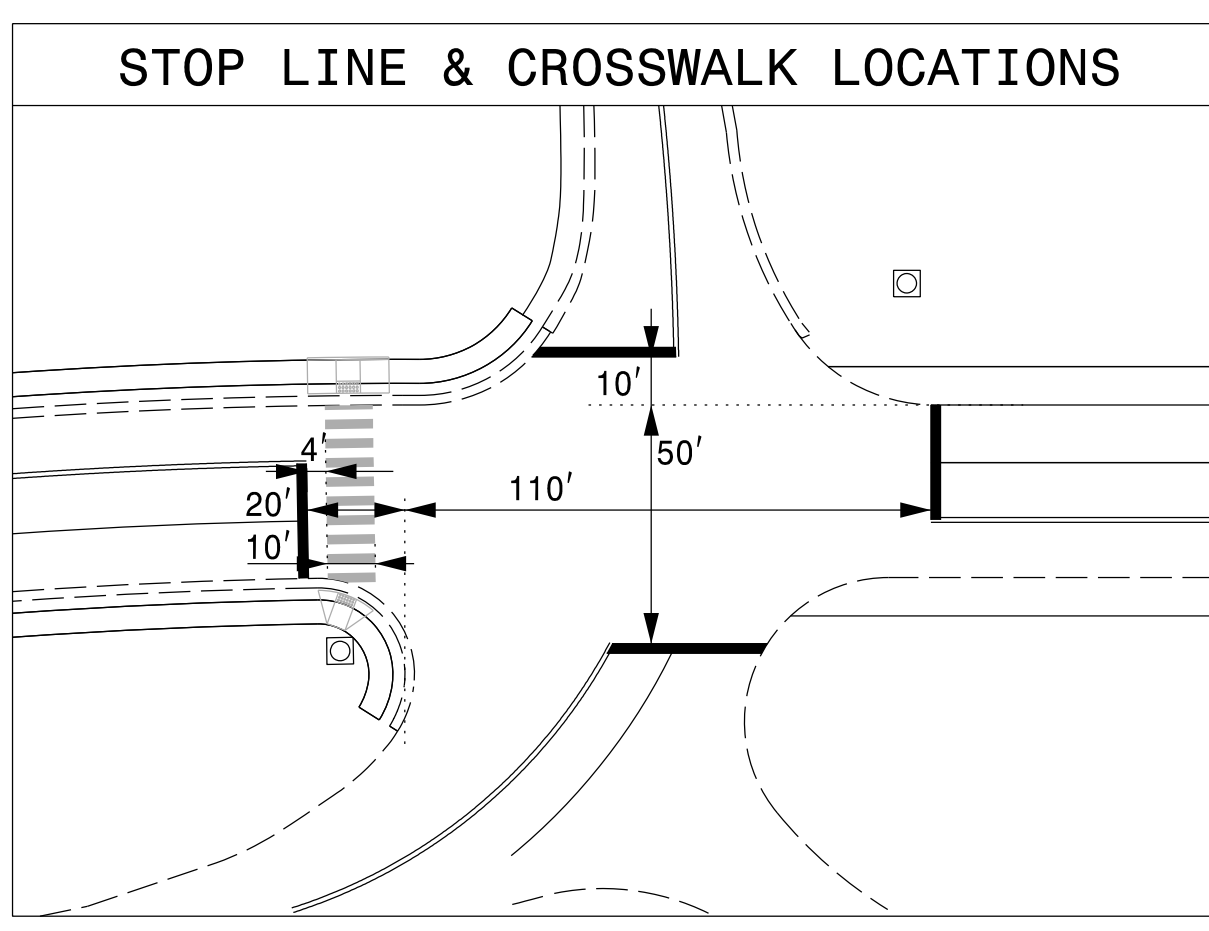
**SIGNAL FACE I.D.**



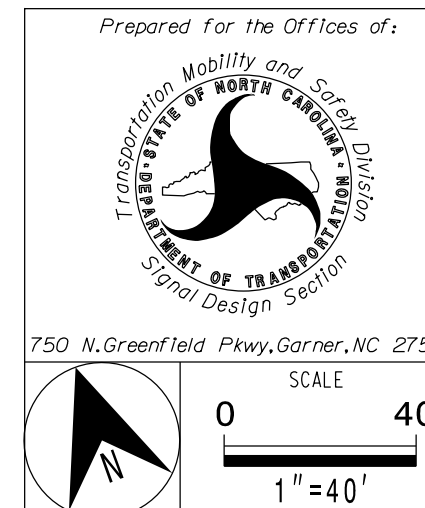
**TIMING CHART**

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 I *	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	2.2
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.



**Signal Upgrade-Final Design**



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:

REVISIONS: INIT. DATE

SCALE: 0 40 1"=40'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 033108 J. Ma

DATE: 5/10/2022

SIG. INVENTORY NO. 14-0631