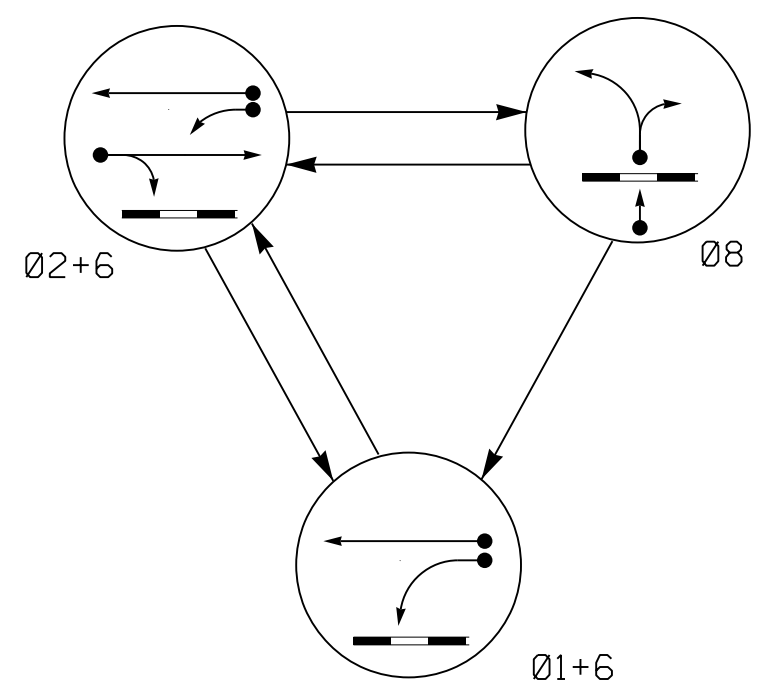
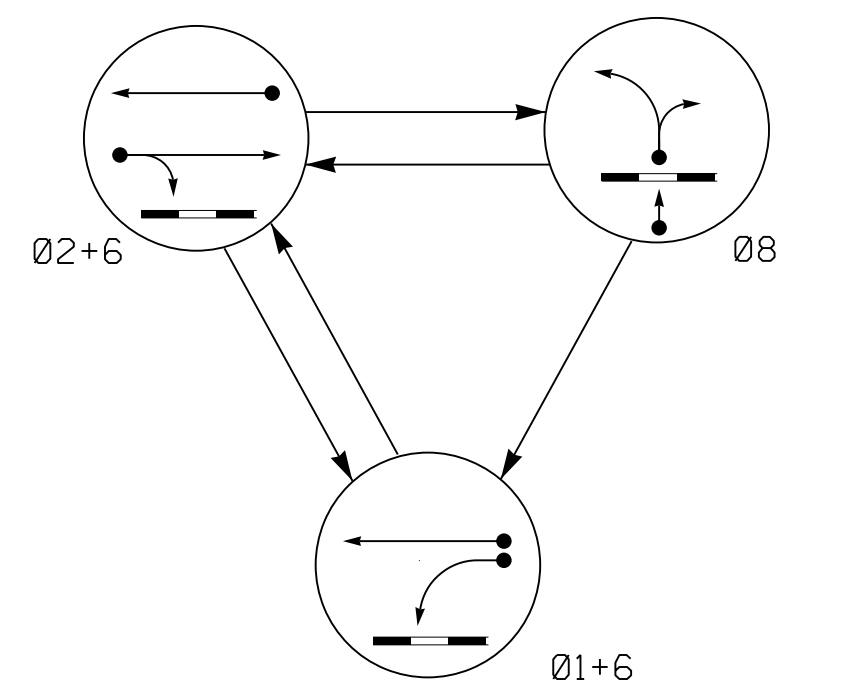


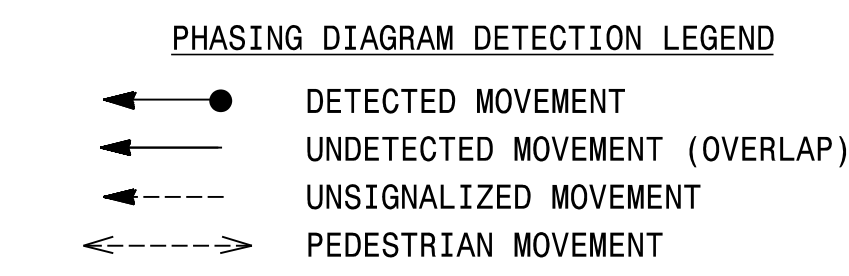
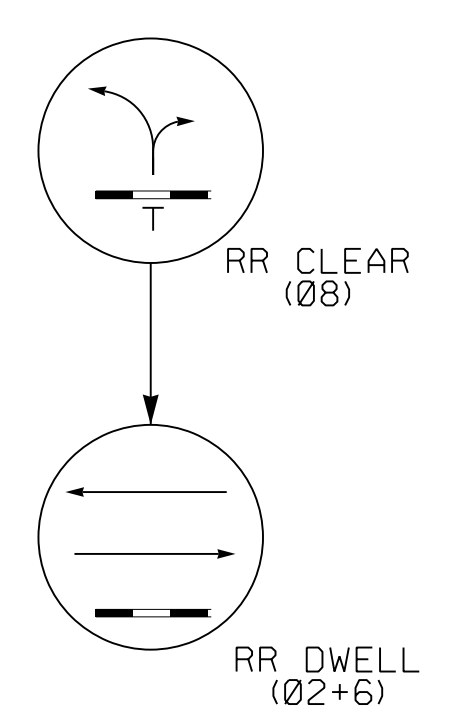
DEFAULT PHASING DIAGRAM



ALTERNATIVE PHASING DIAGRAM



RAIL PREEMPT PHASES (HIGH PRIORITY)



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE							
	01+6	02+6	08	C	D	F	H	S
11	←	←	←	←	←	←	←	←
21,22	←	←	←	←	←	←	←	←
61,62,63	←	←	←	←	←	←	←	←
81,85	←	←	←	←	←	←	←	←
82	←	←	←	←	←	←	←	←
83,84	←	←	←	←	←	←	←	←
Sign (A)	OFF	OFF	OFF	ON	ON	ON	ON	*

* See Note 6

ALTERNATIVE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE							
	01+6	02+6	08	C	D	F	H	S
11	←	←	←	←	←	←	←	←
21,22	←	←	←	←	←	←	←	←
61,62,63	←	←	←	←	←	←	←	←
81,85	←	←	←	←	←	←	←	←
82	←	←	←	←	←	←	←	←
83,84	←	←	←	←	←	←	←	←
Sign (A)	OFF	OFF	OFF	ON	ON	ON	ON	*

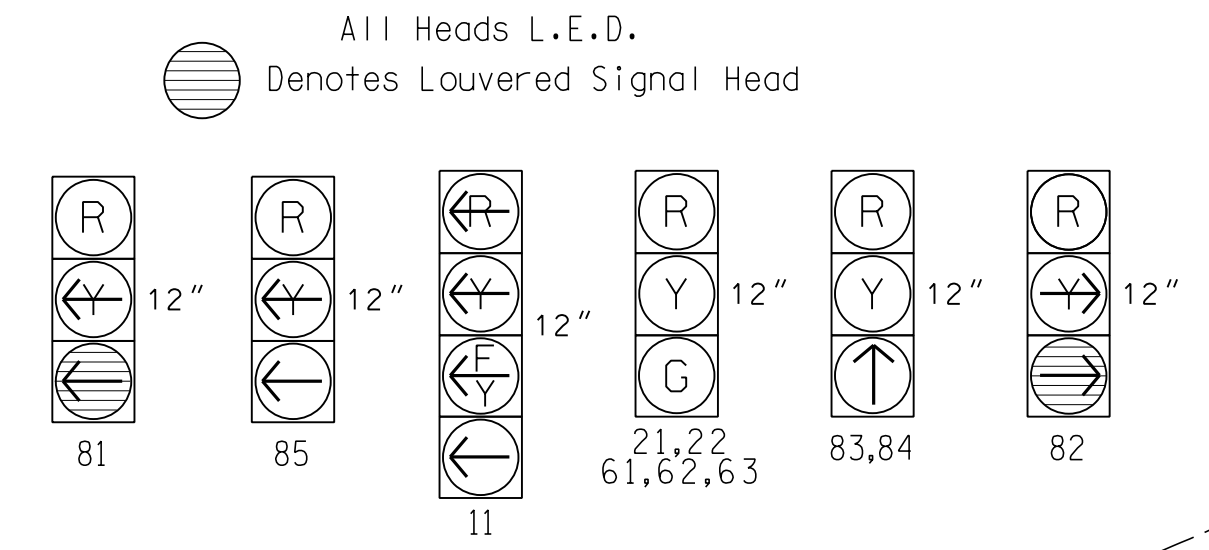
* See Note 6

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	5	X	2	Yes	-	-	-	G	-	X
6A	6X6	300	4	X	6	Yes	-	-	-	X	-	X
8A	6X40	0	2-4-2	X	8	Yes	-	10	-	N	-	X
8B	6X15	0	3	X	8	Yes	-	10	-	N	-	X
8C	6X40	0@	2-4-2	X	8	Yes	5.0	-	-	N	-	X

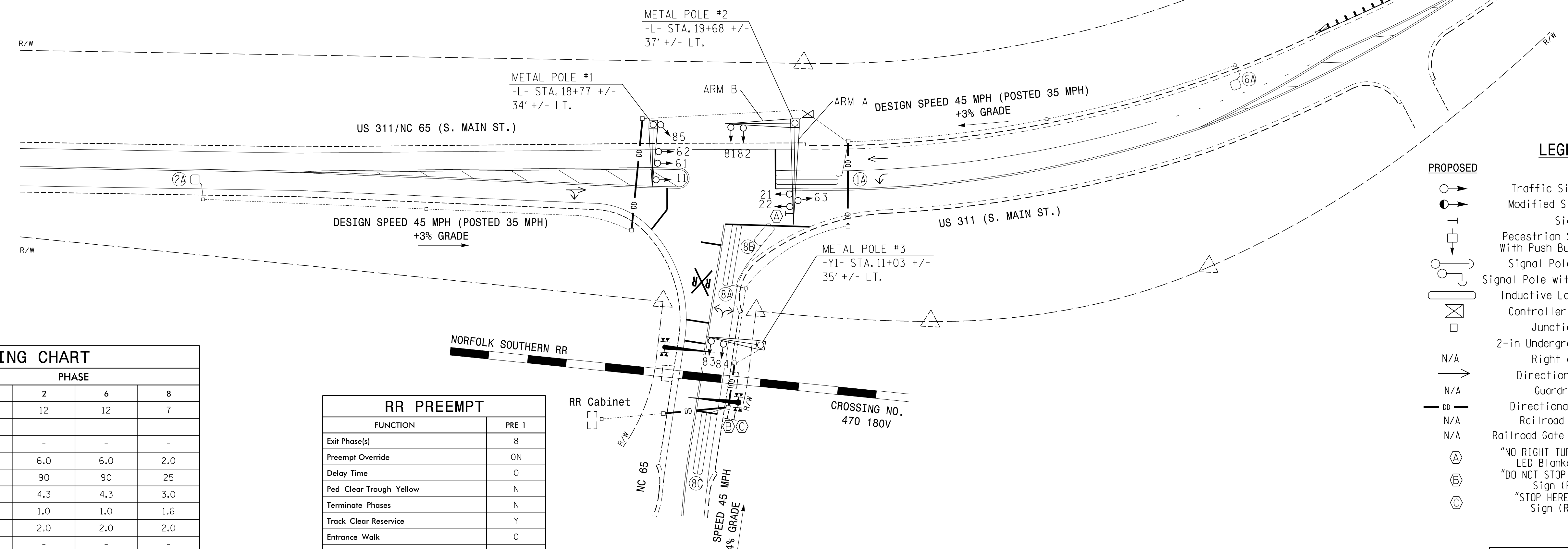
* Disable delay during alternate phasing operation.
 # Disable phase call(s) for loop(s) during alternate phasing operation.
 @ Located at Stop Line for Pre Signal/Railroad Gate

SIGNAL FACE I.D.



3 PHASE FULLY ACTUATED WITH RAILROAD PREEMPTION (ISOLATED) NOTES

- REFER TO "ROADWAY STANDARD DRAWINGS NCDOT" DATED JANUARY 2018 AND "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2018.
- THIS LOCATION CONTAINS RAILROAD PREEMPTION PHASING. DO NOT PROGRAM SIGNAL FOR LATE NIGHT FLASHING OPERATION.
- PHASE 1 MAY BE LAGGED.
- SET ALL DETECTOR UNITS TO PRESENCE MODE.
- LOCATE NEW CABINET SO AS NOT TO OBSTRUCT SIGHT DISTANCE OF VEHICLES TURNING RIGHT ON RED.
- ENSURE FLASHING OPERATION DOES NOT ALTER OPERATION OF BLANKOUT SIGN.
- PROGRAM PARENT PHASES FOR OVERLAP "P" FOR ALL PHASES USED IN NORMAL OPERATION.
- ENSURE OVERLAP "P" IS TERMINATED PRIOR TO ENTERING PREEMPTION.



TIMING CHART

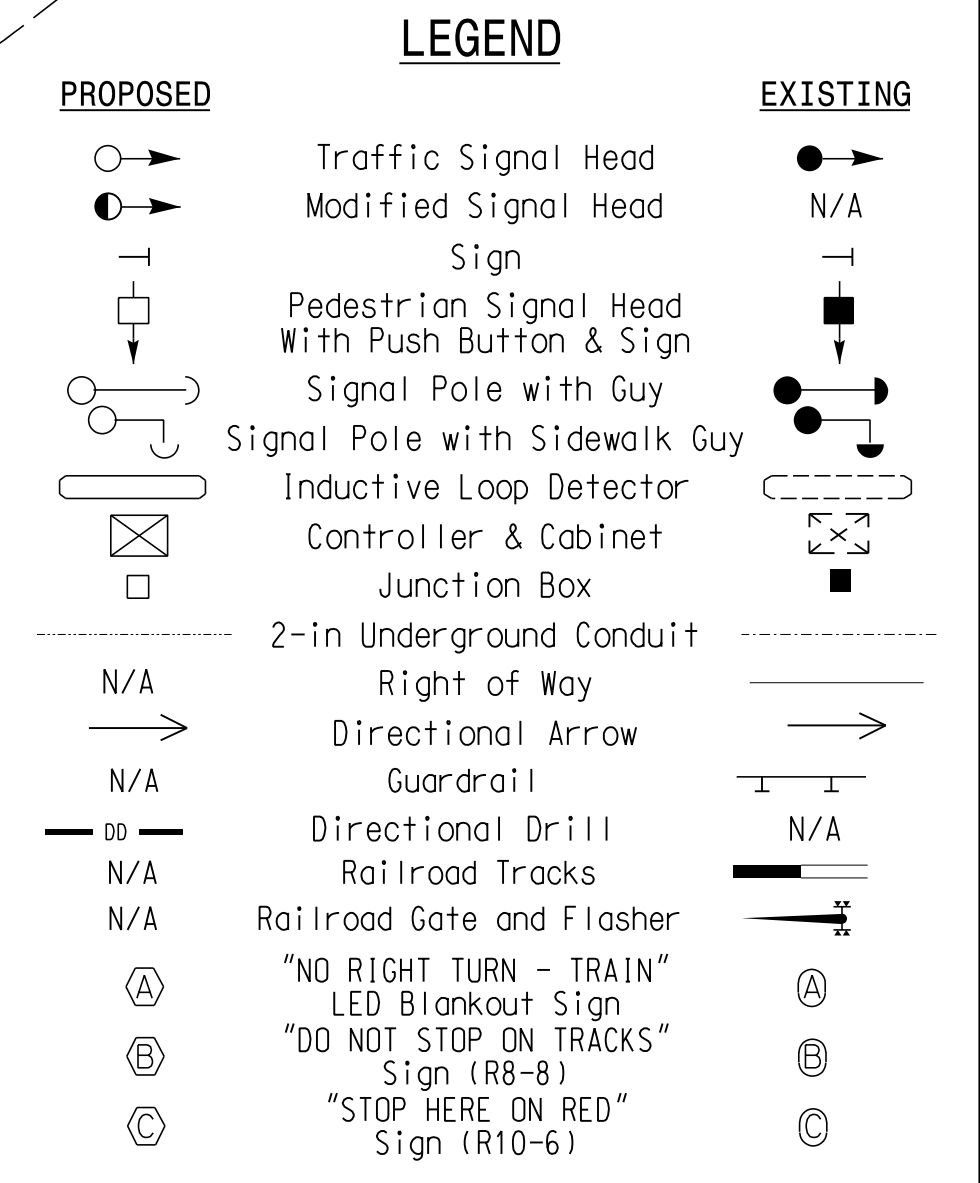
FEATURE	PHASE			
	1	2	6	8
Min Green *	7	12	12	7
Walk *	-	-	-	-
Ped Clear	-	-	-	-
Veh. Extension *	2.0	6.0	6.0	2.0
Max I *	25	90	90	25
Yellow	3.0	4.3	4.3	3.0
Red Clear	1.4	1.0	1.0	1.6
Red Revert	2.0	2.0	2.0	2.0
Actuations B4 Add *	-	-	-	-
Seconds / Actuation *	-	2.5	2.5	-
Max Initial *	-	34	34	-
Time Before Reduction *	-	15	15	-
Time To Reduce *	-	30	30	-
Minimum Gap	-	3.0	3.0	-
Locking Detector	-	X	X	-
Recall Position	-	VEH. RECALL	VEH. RECALL	-
Dual Entry	-	-	-	-
Simultaneous Gap	X	X	X	X

RR PREEMPT

FUNCTION	PRE 1
Exit Phase(s)	8
Preempt Override	ON
Delay Time	0
Ped Clear Trough Yellow	N
Terminate Phases	N
Track Clear Reserve	Y
Entrance Walk	0
Entrance Ped Clear	0
Entrance Min Green	1
Entrance Yellow Change	4.3
Entrance Red Clear	1.4
Track Clear Min Green	23
Track Clear Yellow Change	3.0
Track Clear Red Clear	1.6
Min Dwell Time	12
Exit Yellow Change	25.5*
Exit Red Clear	25.5*

* Allows normal phase times to be used.

THIS SIGNAL IS DESIGNED FOR ADVANCED PREEMPTION



New Installation

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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Prepared for the Offices of:
 Transportation Mobility and Safety Solutions
 UNIVERSITY OF NORTH CAROLINA
 STATE OF CAROLINA
 Signal Design Section

US 311 (S. MAIN ST.) AT NC 65 [North Intersection]

DIVISION 9 STOKES COUNTY WALNUT COVE
 PLAN DATE: NOVEMBER 2022 REVIEWED BY: DTSEARS
 PREPARED BY: WP. ERICKSON-JONES REVIEWED BY:

REVISIONS: INIT. DATE

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 044558
 DAVID T. SEARS
 11/8/2022
 SIGNATURE DATE
 SIG. INVENTORY NO. 09-0360