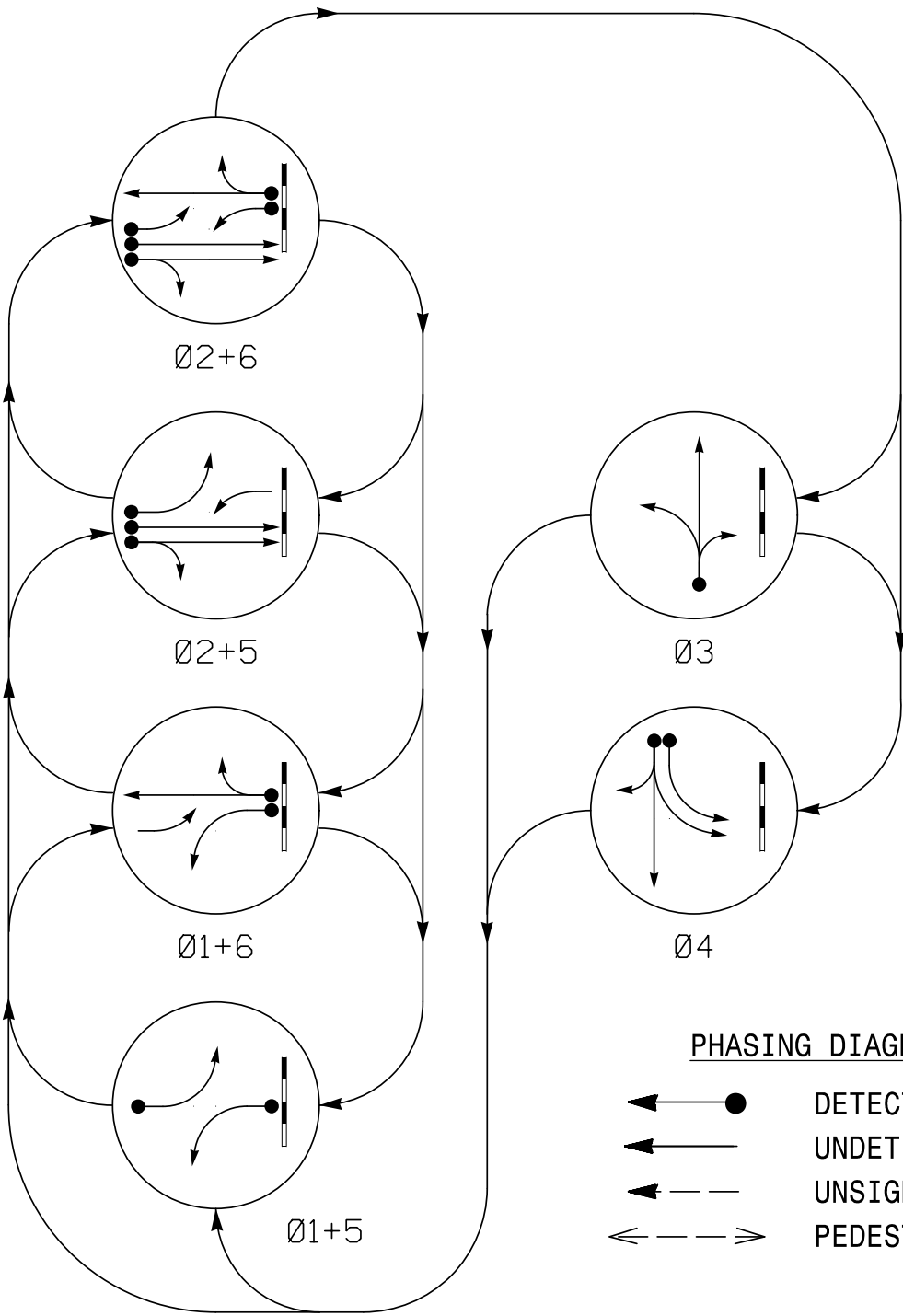
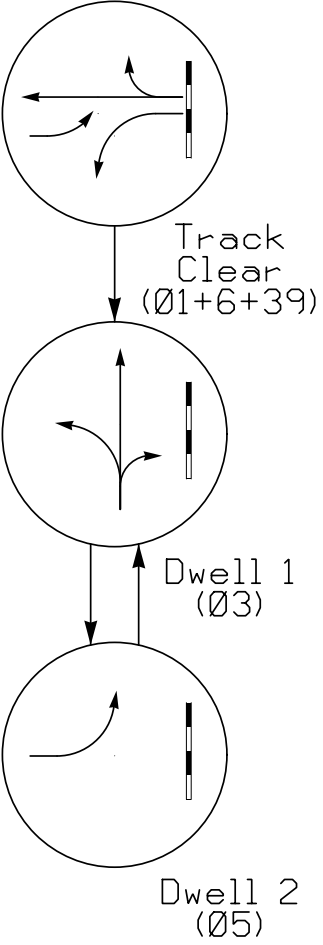


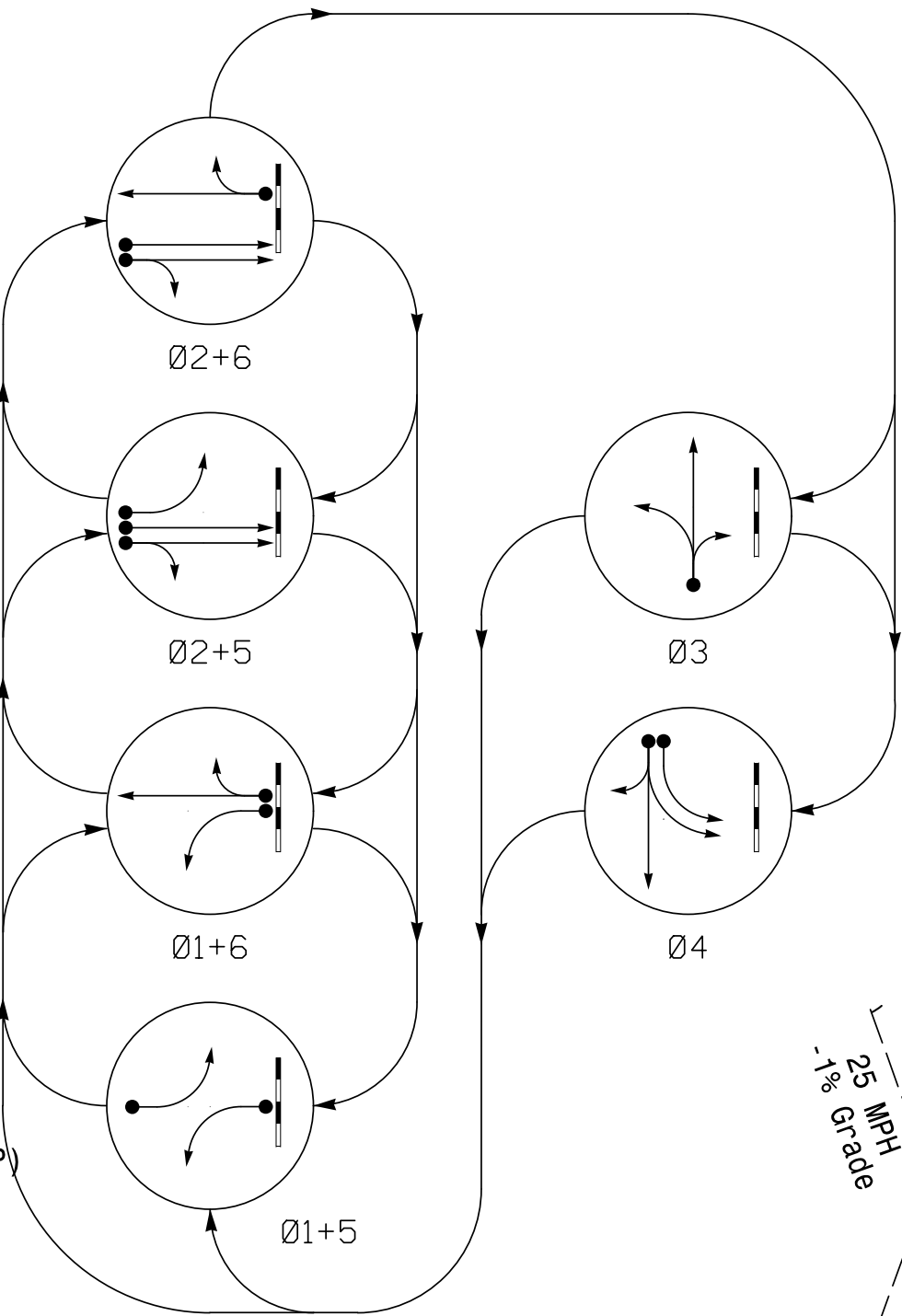
DEFAULT PHASING DIAGRAM



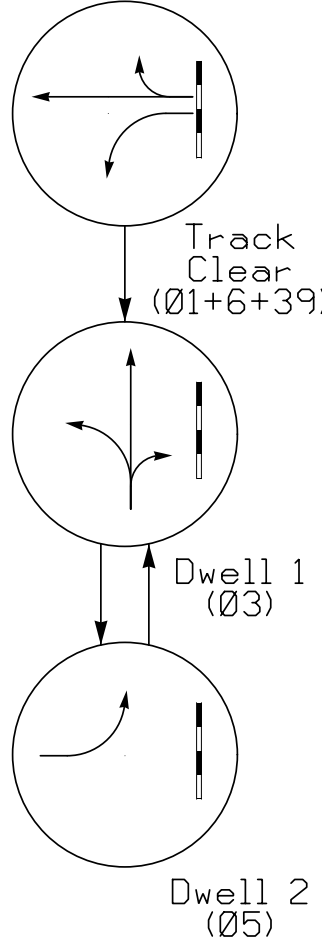
DEFAULT RAIL
PREEMPT PHASES
(High Priority)



ALTERNATE PHASING DIAGRAM



ALTERNATE RAIL
PREEMPT PHASES
(High Priority)



DEFAULT PHASING
TABLE OF OPERATION

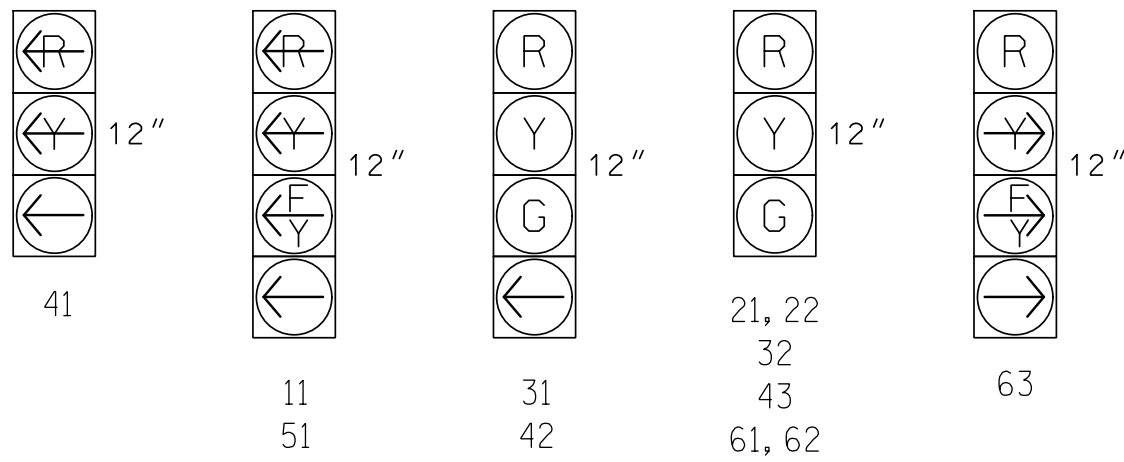
SIGNAL FACE	PHASE											
	Ø 1 + 5	Ø 1 + 6	Ø 2 + 5	Ø 2 + 6	Ø 3	Ø 4	R R C L R	D W R L 1	D W R L 2	F L A S H		
11	←	←	←	←	←	←	←	←	←	←		
21, 22	R	R	G	G	R	R	R	R	R	R		
31	R	R	R	R	←	←	R	←	R	R		
32	R	R	R	R	G	R	R	G	R	R		
41	←	←	←	←	←	←	←	←	←	←		
42	R	R	R	R	R	←	G	R	R	R		
43	R	R	R	R	R	G	R	G	R	R		
51	←	←	←	←	←	←	←	←	←	←		
61, 62	R	G	R	G	R	R	G	R	R	R		

ALTERNATE PHASING
TABLE OF OPERATION

SIGNAL FACE	PHASE											
	Ø 1 + 5	Ø 1 + 6	Ø 2 + 5	Ø 2 + 6	Ø 3	Ø 4	R R C L R	D W R L 1	D W R L 2	F L A S H		
11	←	←	←	←	←	←	←	←	←	←		
21, 22	R	R	G	G	R	R	R	R	R	R		
31	R	R	R	R	←	←	R	←	R	R		
32	R	R	R	R	G	R	R	G	R	R		
41	←	←	←	←	←	←	←	←	←	←		
42	R	R	R	R	R	←	G	R	R	R		
43	R	R	R	R	R	G	R	G	R	R		
51	←	←	←	←	←	←	←	←	←	←		
61, 62	R	G	R	G	R	R	G	R	R	R		

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME PREEMPTION CHART

FUNCTION	PRE 1
Type	RAIL ROAD
Exit Phases	2, 6
Delay	0.0
Max Presence	0
Enter Min Green	1
Enter Walk	1
Enter Ped Clear	0
Enter Yellow Change	4.6
Enter Red Clear	3.3
Track Green	37
Track Yellow Change	4.6
Track Red Clear	2.6
Dwell Green	7
Exit Min Green	255 *
Exit Yellow Change	25.5 *
Exit Red Clear	25.5 *
Call Extend Time	1.0
Exit Type	EXIT PHASES
Ped Clear Through Yellow	N
Require All Red Entry	N

* Directs controller to use default phase timing.

MAXTIME TIMING CHART

FEATURE	PHASE							39	40
	1	2	3	4	5	6			
Walk *	-	-	-	-	-	-			
Ped Clear *	-	-	-	-	-	-			
Min Green	7	12	7	7	7	12			
Passage *	2.0	2.0	2.0	2.0	2.0	2.0			
Max I *	20	90	30	30	20	90			
Yellow Change	3.0	4.6	3.2	3.2	3.0	4.6	4.6	4.6	
Red Clear	2.6	1.6	2.6	3.3	2.8	1.6	2.6	3.3	
Added Initial *	-	-	-	-	-	-			
Maximum Initial *	-	-	-	-	-	-			
Time Before Reduction *	-	-	-	-	-	-			
Time To Reduce *	-	-	-	-	-	-			
Minimum Gap	-	-	-	-	-	-			
Advance Walk	-	-	-	-	-	-			
Non Lock Detector	X	-	X	X	X	-			
Vehicle Recall	-	MIN RECALL	-	-	-	MIN RECALL			MIN RECALL
Dual Entry	-	-	-	-	-	-			

* 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.

This signal was designed for Advanced Preemption.

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	NEW CARD
1A	6X40	0	*	*	1	15**	-	X	-	X	*
					6 #	-	-	X	-	X	*
3A	6X20	0	*	*	3	5	-	X	-	X	*
4A	6X40	0	*	*	4	-	-	X	-	X	*
4B	6X40	0	*	*	4	5	-	X	-	X	*
5A	6X40	0	*	*	5	15**	-	X	-	X	*
					2 #	-	-	X	-	X	*

* Multi-zone Microwave Detection Zone

** Disable Delay During Alternate Phasing

Disable Phase Call for Loop During Alternate Phasing

RADAR DETECTION
SYSTEM

FUNCTION	SENSOR 1 - (2A)	SENSOR 2 - (6A)
Channel	1	2
Phase	2	6
Direction of Travel	EB	WB
Detection Zone (ft)	500 - 100	500 - 100
Enable Speed	Y	Y
Speed Range (mph)	35 - 100	35 - 100
Enable Estimated Time of Arrival	Y	Y
Estimated Time of Arrival (sec)	2.5 - 6.5	2.5 - 6.5

LEGEND

PROPOSED	EXISTING

New Installation
Temporary Design 2 - TMP Phase V, Step 2

stv
STV Engineers, Inc.
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Charlotte, NC 28202
(704) 372-1885
NC License Number F-0991

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

NC 211 (N. Roberts Avenue)
at
Boomerang Drive /
Restaurant Driveway
Division 6 Robeson County Lumberton
PLAN DATE: Feb 2025 REVIEWED BY: H.M. Surti
PREPARED BY: J.C. Grimm REVIEWED BY: T.M. Woody
REVISIONS: INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
Trent M. Woody
03/19/2025
DATE
SIC. INVENTORY NO. 06-138772