

PROJECT REFERENCE NO.	SHEET NO.
R-5857	Sig 2.0

6 Phase  
Fully Actuated  
Isolated

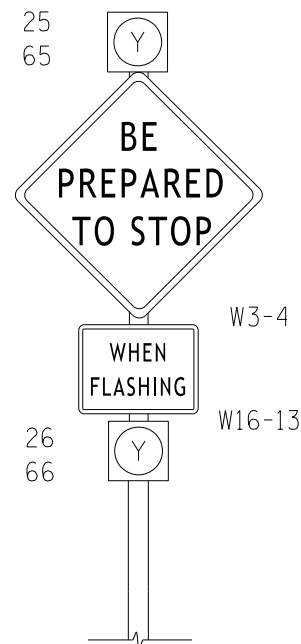
NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024, "Standard Specifications for Roads and Structures" dated January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- Activate flashers 3 seconds prior to end of phase 2 and/or phase 6 green.
- Flash vertically-mounted beacons alternately.
- Install new conduit as close as possible to edge of pavement.
- Pavement markings are existing.

MAXTIME DETECTOR INSTALLATION CHART										
DETECTOR					PROGRAMMING					
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	INITIAL	NEW CARD
1A	*	0	*	X	1 6#	15**	-	X	-	*
3A	*	0	*	X	3	5	-	X	-	*
3B	*	0	*	X	3	15	-	X	-	*
4A	*	0	*	X	4	3	-	X	-	*
4B	*	0	*	X	4	-	-	X	-	*
4C	*	0	*	X	4	10	-	X	-	*
4D	*	0	*	X	4	15	-	X	-	*
5A	*	0	*	X	5 2#	15**	-	X	-	*

\* Multizone microwave detection zone  
\*\* Disable Delay During Alternate Phasing Operation  
# Disable phase call for loop(s) during Alternate Phasing Operation

Figure 1



See notes 8 and 9

DEFAULT PHASING TABLE OF OPERATION						
SIGNAL FACE	PHASE					
	Ø 1 + 5	Ø 1 + 6	Ø 2 + 5	Ø 2 + 6	Ø 3	Ø 4 + 5
11	←	←	←	←	←	←
21, 22, 23	R	R	G	G	R	R
31	R	R	R	R	G	R
32, 33	R	R	R	R	G	R
41, 42	←	←	←	←	←	←
43, 44, 45	←	←	←	←	←	←
51	←	←	←	←	←	←
61, 63	R	G	R	G	R	R
62	R	G	R	G	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 + 5
11	←	←	←	←	←	←
21, 22, 23	R	R	G	G	R	R
31	R	R	R	R	G	R
32, 33	R	R	R	R	G	R
41, 42	←	←	←	←	←	←
43, 44, 45	R	R	R	R	G	R
51	←	←	←	←	←	←
61, 63	R	G	R	G	R	R
62	R	G	R	G	R	R

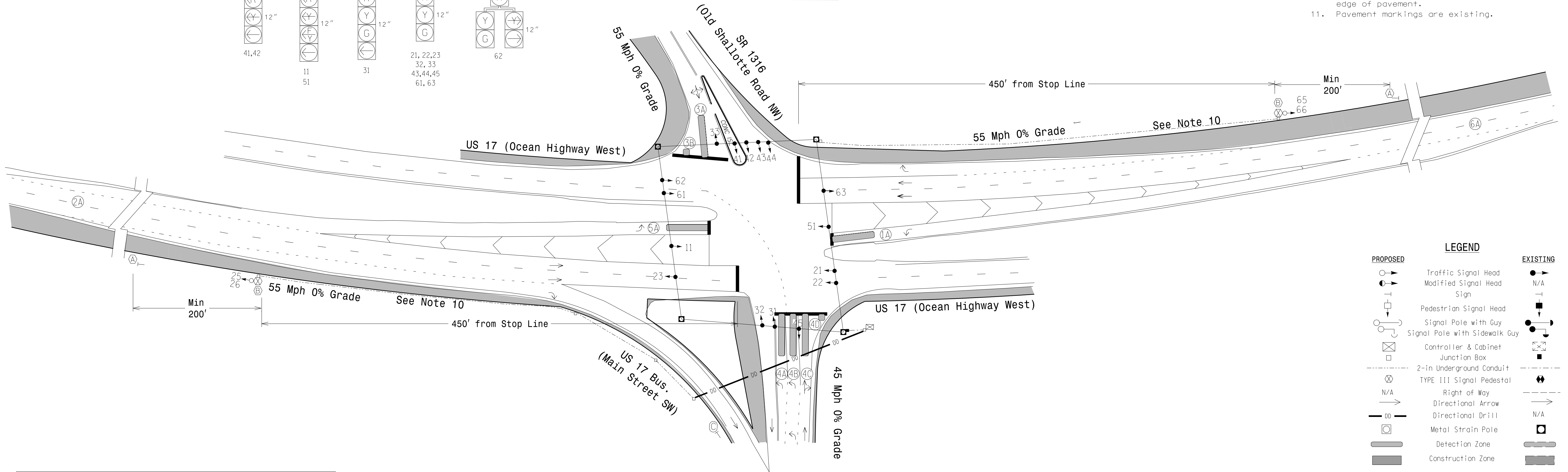
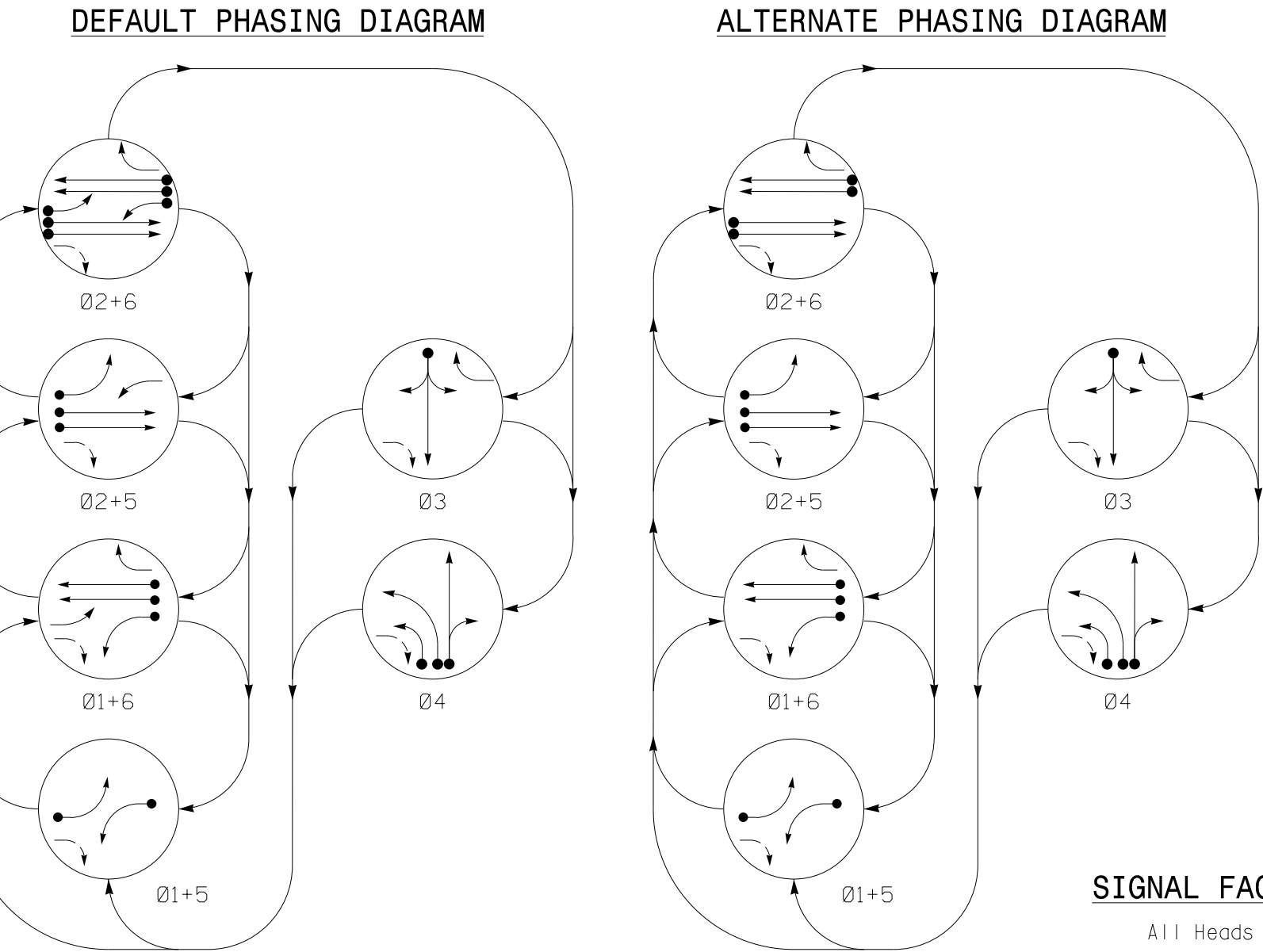
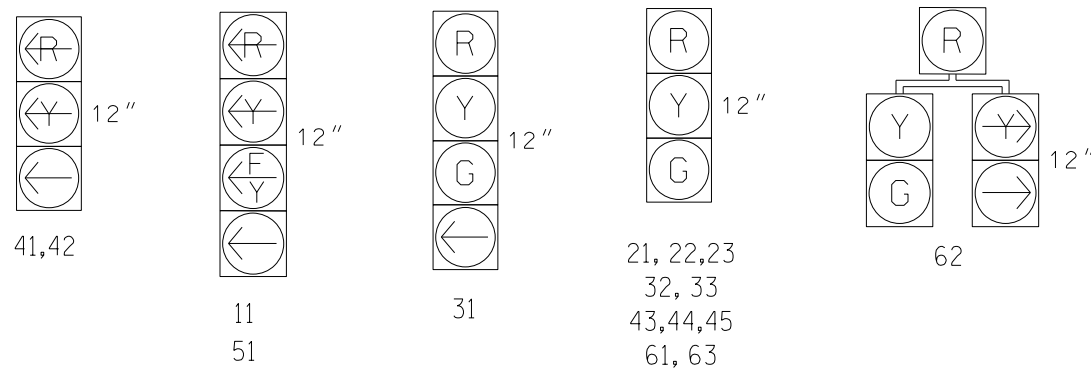
PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION		
SIGNAL FACE	INTERVAL	
	1	2
25	ON	OFF
26	OFF	ON
65	ON	OFF
66	OFF	ON

SIGNAL FACE I.D.

All Heads L.E.D.



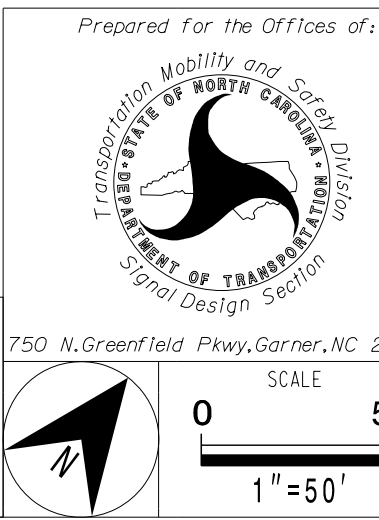
MAXTIME TIMING CHART						
FEATURE	PHASE					
	1	2	3	4	5	6
Walk *	-	-	-	-	-	-
Red Clear	-	-	-	-	-	-
Min Green *	7	14	7	7	7	14
Passage *	3.0	2.0	2.0	2.0	2.0	2.0
Max 1 *	45	90	25	25	15	90
Yellow Change	3.0	5.2	5.2	4.5	3.0	5.2
Red Clear	2.8	1.5	1.8	2.4	2.8	1.5
Added Initial *	-	-	-	-	-	-
Maximum Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Advance Walk	-	-	-	-	-	-
Pre Clearance	-	3.0	-	-	-	3.0
Non Lock Detector	X	-	X	X	X	-
Vehicle Recall	-	MIN RECALL	-	-	-	MIN RECALL
Dual Entry	-	-	-	-	-	-

\* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

ADVANCED MICROWAVE EXTENDED RANGE DETECTION			
FUNCTION	Sensor 1 (2A)	Sensor 1 (6A)	
Channel	1	1	
Phase	2	6	
Direction of Travel	NB	SB	
Type	PRIORITY		
Level	1	2	QUEUE
Discovery Zone (ft)	>=750	<750	N/A
Range (ft)	100-900	100-600	100-150
Enable Speed	Y	Y	Y
Speed Range (mph)	35-100	35-100	1-35
Enable Estimated Time of Arrival	Y	Y	N
Estimated Time of Arrival (sec)	2.5-10.0	2.5-6.5	-

New Installation - Temporary Design 1 (TMP Phase 1)

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED



US 17 (Ocean Highway West) at  
US 17 Bus (Main Street SW) /  
SR 1316 (Old Shallotte Rd NW)

Division 3 Brunswick County Shallotte  
PLAN DATE: March 2025 REVIEWED BY: G. G. Murr, Jr.

PREPARED BY: Nadia Degbotse REVIEWED BY:

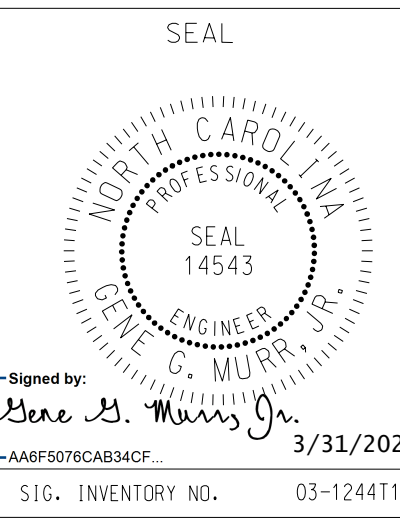
REVISIONS INIT. DATE

INIT. DATE

INIT. DATE

INIT. DATE

INIT. DATE



Signed by: G. G. Murr, Jr.

3/31/2025

SIG. INVENTORY NO. 03-124411

TRANSYSTEMS

1 Glenwood Avenue  
Raleigh, NC 27603  
Tel: 919.789.9977  
Fax: 919.789.9591  
License: F-0453

