PROJECT REFERENCE NO.	SHEET NO.
R-5857	Sig. 15.0

2 Phase
Fully Actuated
Signal System #: D03-14_Shallotte

DEFAULT PHASING DIAGRAM

Ø2   Ø7

DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	Ø2	Ø7	FLASH
21,22	G	R	R
71,72	⌒	⌒	R

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	Ø2	Ø7	FLASH
21,22	R	G	R
71,72	⌒	⌒	R

Figure 1

23, 25   Y
BE PREPARED TO STOP   W3-4
WHEN FLASHING   W16-13
24, 26   Y

See notes 7 and 8

PHASING DIAGRAM DETECTION LEGEND

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

ALTERNATE PHASING DIAGRAM

Ø2   Ø7

SIGNAL FACE I.D.

All Heads L.E.D.

R
Y   12"
G
21,22

(R)
(Y)   12"
(⌒)
(⌒)
71,72

TABLE OF OPERATION

SIGNAL FACE	INTERVAL	
	1	2
23,25	ON	OFF
24,26	OFF	ON

MAXTIME DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOP LINE (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
7A	*	0	*	X	7	15**	-	X	-	X	-	-

* Multi-zone microwave detection zone
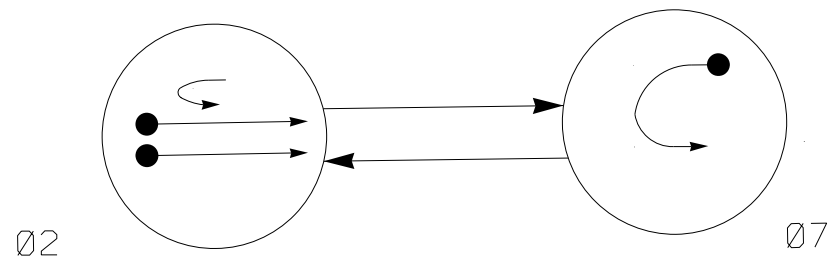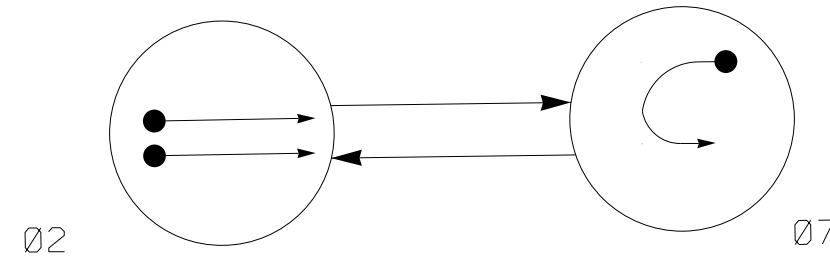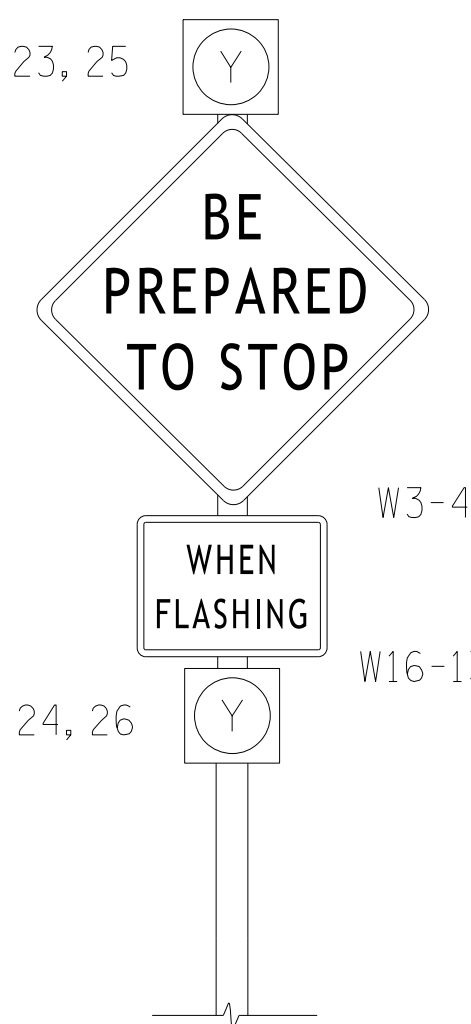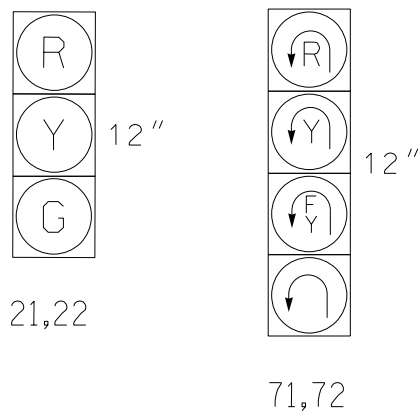** Disable delay during alternate phasing operation

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
4. The Division Traffic Engineer will determine the hours of use for each phasing plan.
5. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
6. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
7. Activate flashers 3 seconds prior to end of phase 2 green.
8. Flash vertically-mounted beacons alternately.
9. Route conduit back to signal cabinet 03-1248 for electrical service drop.
10. Install new conduit as close as possible to edge of pavement.
11. Refer to the Pavement Marking Plans for pavement markng details.

US 17 (Ocean Hwy West)
55 Mph -2% Grade
55 Mph -1% Grade

Min 200'
See Note 10
450' from Stop Line
See Note 10

Metal Pole #1
Sta. 20+62 -L1- 12.5' Rt

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	
	Type III Signal Pedestal	
	Detection Zone	
⊠	Controller & Cabinet	⊠
□	Junction Box	■
N/A	Curb Ramp	▲
	2-in Underground Conduit	
—DD—	Directional Drill	N/A
N/A	Right of Way	
⟶	Directional Arrow	⟶
◁	Metal Pole with Mastarm	◻━
(A)	Signal Ahead Sign (W3-3)	(A)
(B)	"BE PREPARED TO STOP" Sign (W3-4) w/ "WHEN FLASHING" Plaque (W16-3) (See Figure 1)	(B)

MAXTIME TIMING CHART

FEATURE	PHASE	
	2	7
Walk *	–	–
Ped Clear *	–	–
Min Green *	14	7
Passage *	2.0	2.0
Max 1 *	90	25
Yellow Change	5.3	3.0
Red Clear	1.1	5.0
Added Initial *	–	–
Maximum Initial *	–	–
Time Before Reduction *	–	–
Time To Reduce *	–	–
Minimum Gap	–	–
Advance Walk	–	–
Pre-Clearance	3.0	–
Non Lock Detector	–	X
Vehicle 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.

ADVANCED MICROWAVE EXTEND RANGE DETECTION

FUNCTION	Sensor 1 (2A)		
Channel	1		
Phase	2		
Direction of Travel	NB		
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

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

US 17 NB (Ocean Highway W) at U-Turn South of US 17 Bus/Frontage Rd NW

Division 3   Brunswick County   Shallotte

PLAN DATE:	March 2025	REVIEWED BY: G. G. Murr, Jr.
PREPARED BY: Nadia Degbotse		REVIEWED BY:

SEAL
NORTH CAROLINA
PROFESSIONAL ENGINEER
SEAL 14543
GENE G. MURR JR.

REVISIONS	INIT.	DATE

Signed by:
Gene G. Murr Jr.
A46F5076CAB34CF...
3/31/2025

SIG. INVENTORY NO.   03-1250

TRANSYSTEMS
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License: F-0453

SCALE
0   40
1"=40'