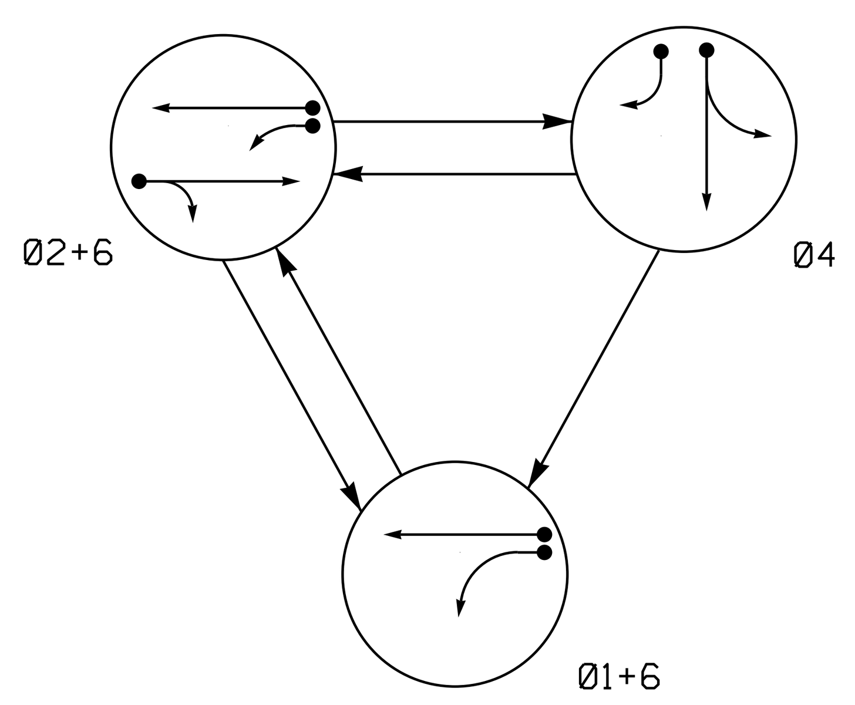
PROJECT REFERENCE NO.	SHEET NO.
I-5987B	Sig 5.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

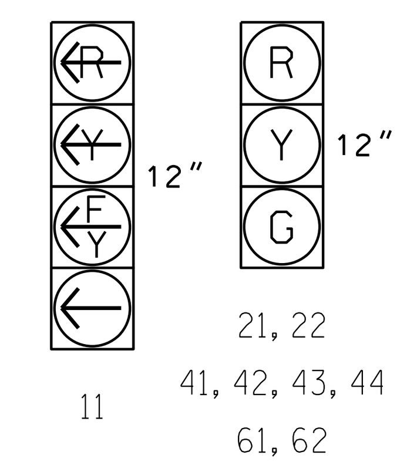
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø1+6	Ø2+6	Ø4	FLASH
11	←	F←Y	←R	←Y
21, 22	R	G	R	Y
41, 42, 43, 44	R	R	G	R
61, 62	G	G	R	Y

SIGNAL FACE I.D.

All Heads L.E.D.



ASC/3 DETECTOR INSTALLATION CHART

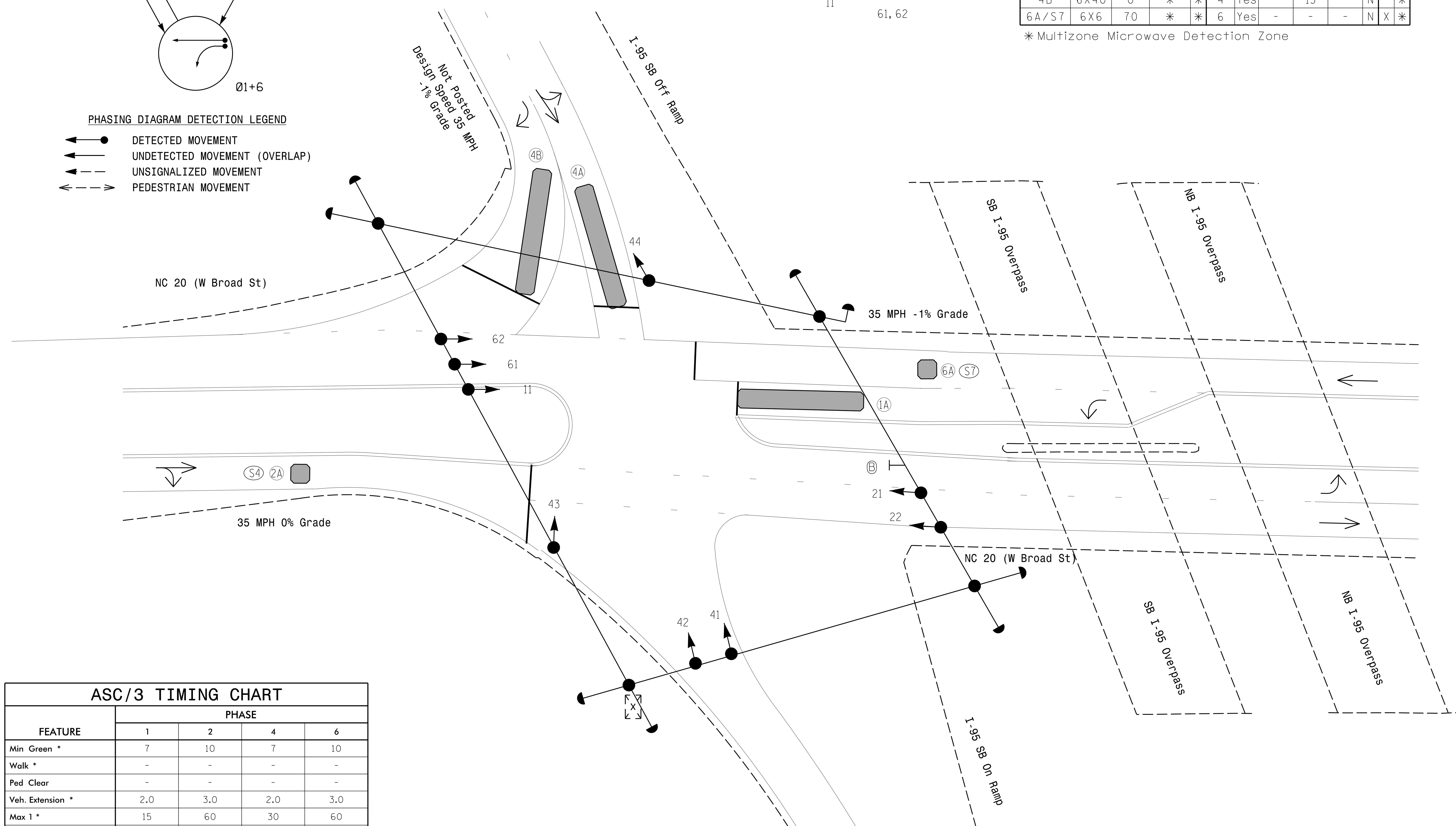
ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW ZONE	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	0	✳	✳	1	Yes	-	15	-	N	-	✳
					6	Yes	-	-	-	N	-	✳
2A/S4	6X6	70	✳	✳	2	Yes	-	-	-	N	X	✳
4A	6X40	0	✳	✳	4	Yes	-	-	-	N	-	✳
4B	6X40	0	✳	✳	4	Yes	-	15	-	N	-	✳
6A/S7	6X6	70	✳	✳	6	Yes	-	-	-	N	X	✳

✳ Multizone Microwave Detection Zone

3 Phase
Fully Actuated
D06-21 St. Pauls

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 may be lagged.
4. Remove existing signal head numbered 23 in temporary design 3.
5. Reposition existing signals heads numbered 11, 21, 22, 41, 42, 61 and 62.
6. Set all detector units to presence mode.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
8. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
9. Closed loop system data: Controller Asset #1365.
10. Contractor shall remove and relocate wireless radio/antenna, as required, in order to maintain CLS communication during construction.
11. Reposition existing sign B.



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	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	No Left Turn Sign (R3-2)	
	Microwave Detection Zone	N/A
	Construction Zone	N/A

ASC/3 TIMING CHART

FEATURE	PHASE 1	2	4	6
Min Green *	7	10	7	10
Walk *	-	-	-	-
Ped Clear	-	-	-	-
Veh. Extension *	2.0	3.0	2.0	3.0
Max 1 *	15	60	30	60
Yellow	3.0	3.9	3.9	3.9
Red Clear	1.9	1.6	1.6	1.6
Actuations B4 Add *	-	-	-	-
Seconds /Actuation *	-	-	-	-
Max Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Locking Detector	-	X	-	X
Recall Position	-	VEH. RECALL	-	VEH. RECALL
Dual Entry	-	-	-	-
Simultaneous Gap	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
Temporary Design 4 - (TMP Phase 3)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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Prepared for:
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Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

NC 20 (W. Broad St.)
at
I-95 SB Ramps

Division 6	Robeson County	St. Pauls
PLAN DATE: February 2022	REVIEWED BY: WJ Hamilton	
PREPARED BY: TS Popelka	RKA PROJ. NO.: 21031 (040)	

SCALE 0 20
1"=20'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 32396 ENGINEER WILLIAM J. HAMILTON

DocuSigned by: William J. Hamilton
SIGNATURE 02/25/2022 DATE

SIG. INVENTORY NO. 06-1365T4