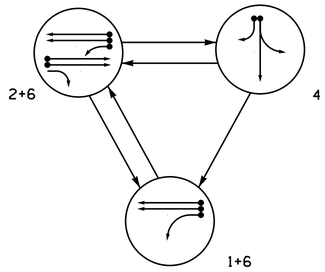
PROJECT REFERENCE NO.	SHEET NO.
U-4913A	Sig. 7.0

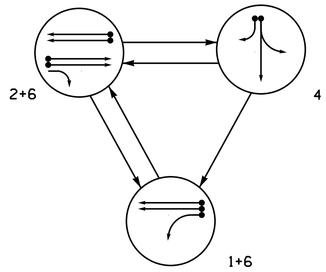
DEFAULT PHASING DIAGRAM



DEFAULT TABLE OF OPERATION

SIGNAL FACE	PHASE 1+6	PHASE 2+6	PHASE 4	FLASH
11	←	~~Y~~	~~R~~	~~R~~
21	R	↑	R	R
22	R	G	R	R
41,42	R	R	G	R
61	G	G	R	R
62	↑	↑	R	R

ALTERNATE PHASING DIAGRAM



ALTERNATE TABLE OF OPERATION

SIGNAL FACE	PHASE 1+6	PHASE 2+6	PHASE 4	FLASH
11	←	~~R~~	~~R~~	~~R~~
21	R	↑	R	R
22	R	G	R	R
41,42	R	R	G	R
61	G	G	R	R
62	↑	↑	R	R

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	DELAY DURING GREEN	NEW CARD
1A ✱	6X40	0	✱	-	1	15.0*	-	X	-	X	-	-
					6	3.0	-	X	-	X	X	-
4A ✱	6X40	0	✱	-	4		-	X	-	X	-	-
4B ✱	6X40	0	✱	-	4	15.0	-	X	-	X	-	-

* Reduce delay to 3 seconds during Alternate Phasing Operation.
✱ Microwave Detection Zone

3 Phase
Fully Actuated w/
Alternate Phasing
SR 3174/1501 (Idlewild Road) CLS

NOTES

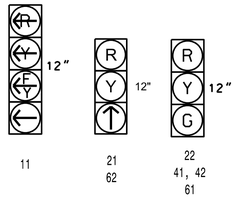
1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Phase 1 may be lagged.
3. Set all detector units to presence mode.
4. The Division Traffic Engineer will determine the hours of use for each phasing plan.
5. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
6. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

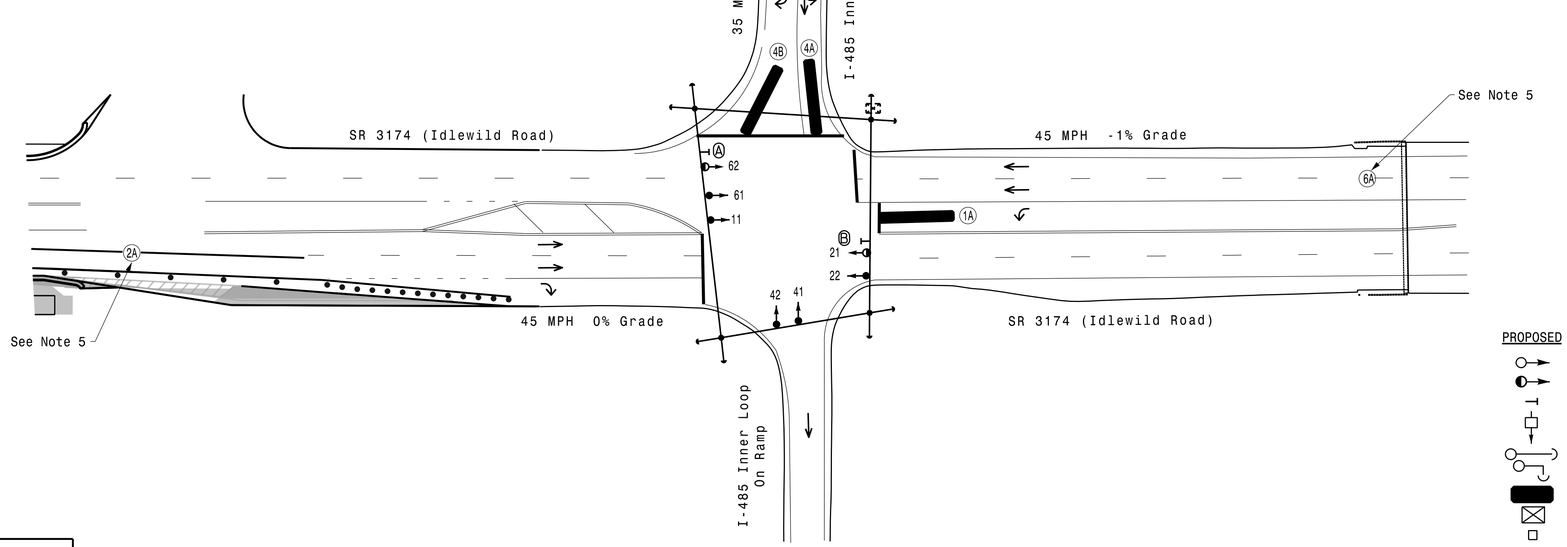
PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.

All Heads L.E.D.





MAXTIME TIMING CHART

FEATURE	PHASE 1	PHASE 2	PHASE 4	PHASE 6
Walk *	–	–	–	–
Ped Clear	–	–	–	–
Min Green *	7	12	7	12
Passage *	2.0	6.0	2.0	6.0
Max 1 *	20	90	25	90
Yellow Change	3.0	4.6	3.8	4.6
Red Clear	2.6	1.1	1.7	1.1
Added Initial *	–	1.5	–	1.5
Maximum Initial *	–	34	–	34
Time Before Reduction *	–	15	–	15
Time To Reduce *	–	30	–	30
Minimum Gap	–	3.0	–	3.0
Advance Walk	–	–	–	–
Non Lock Detector	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.

Advance Microwave Detection

FUNCTION	Sensor 1 (2A)		Sensor 2 (6A)	
Channel	1		1	
Phase	2		6	
Direction of Travel	EB		WB	
Type	Priority		Priority	
Level	2	QUEUE	2	QUEUE
Discovery Zone (ft)	<750	N/A	<750	N/A
Detection Zone (ft)	100–600	100–150	100–600	100–150
Enable Speed	Y	Y	Y	Y
Speed Range (mph)	35–100	1–35	35–100	1–35
Enable Estimated Time of Arrival	Y	N	Y	N
Estimated Time of Arrival (sec)	2.5–6.5	–	2.5–6.5	–

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	
	Non-Intrusive Detection Zone	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
(A)	No Right Turn Sign (R3-1)	(A)
(B)	No Left Turn Sign (R3-2)	(B)
	Construction Zone	
	Construction Barrel	

Signal Upgrade - Temporary Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared For the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy.Garner,NC 27529

SR 3174 (Idlewild Road)
at
I-485 Inner Loop Ramps

Division 10 Mecklenburg County Stallings

PLAN DATE: February 2025 REVIEWED BY: KP Baumann
PREPARED BY: SP Pennington REVIEWED BY:

REVISIONS	INIT.	DATE

SCALE 0 40 1"=40'

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 044434 ENGINEER KEVIN P. BAUMANN
DocuSigned by: 5DC709A66BCB447...
5/12/2025
SIGNATURE DATE
SIG. INVENTORY NO. 10-2050T

PLANS PREPARED IN THE OFFICE OF:
Kimley»Horn
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421 Fayetteville Street, Suite 600
Raleigh, NC 27601
(919) 677-2000

5/9/2025 11:32:40 AM susan.pennington K:\RAL_TPTD_SIGNALS\011036730 U-4913A\S4 - Signal Design\GRD\w7.0 U-4913A_102050-2025gT.dgn