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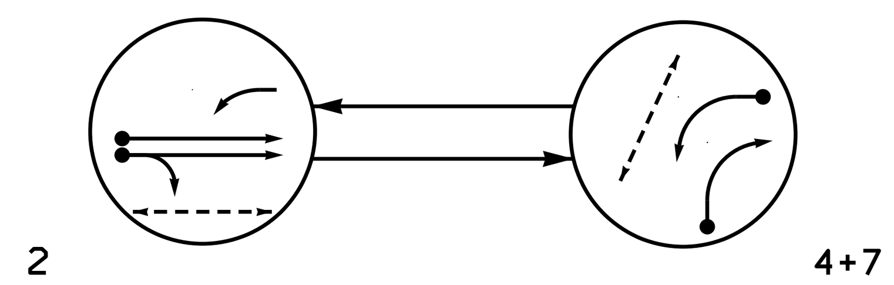
PROJECT REFERENCE NO.	SHEET NO.
U-4913A	Sig. 6.0

DEFAULT PHASING DIAGRAM



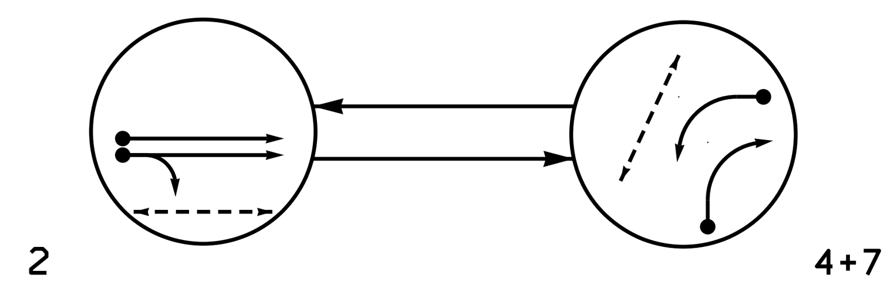
PHASING DIAGRAM DETECTION LEGEND

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

DEFAULT TABLE OF OPERATION

SIGNAL FACE	PHASE 2	PHASE 4+7	FLASH
21	↑	R	R
22	G	R	R
41, 42	R	→	R
71, 72	←F/Y	←	←R
P21,P22	W	DW	DRK
P41,P42	DW	W	DRK

ALTERNATE PHASING DIAGRAM



ALTERNATE TABLE OF OPERATION

SIGNAL FACE	PHASE 2	PHASE 4+7	FLASH
21	↑	R	R
22	G	R	R
41, 42	R	→	R
71, 72	←R	←	←R
P21,P22	W	DW	DRK
P41,P42	DW	W	DRK

MAXTIME DETECTOR INSTALLATION CHART

DETECTOR					PROGRAMMING							
ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW ZONE	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
4A ✱	6X40	0	✱	X	4	15.0	-	X	-	X	-	-
7A ✱	6X40	0	✱	X	7	15.0*	-	X	-	X	-	-

* Disable delay during Alternate Phasing Operation.
✱ Microwave Detection Zone

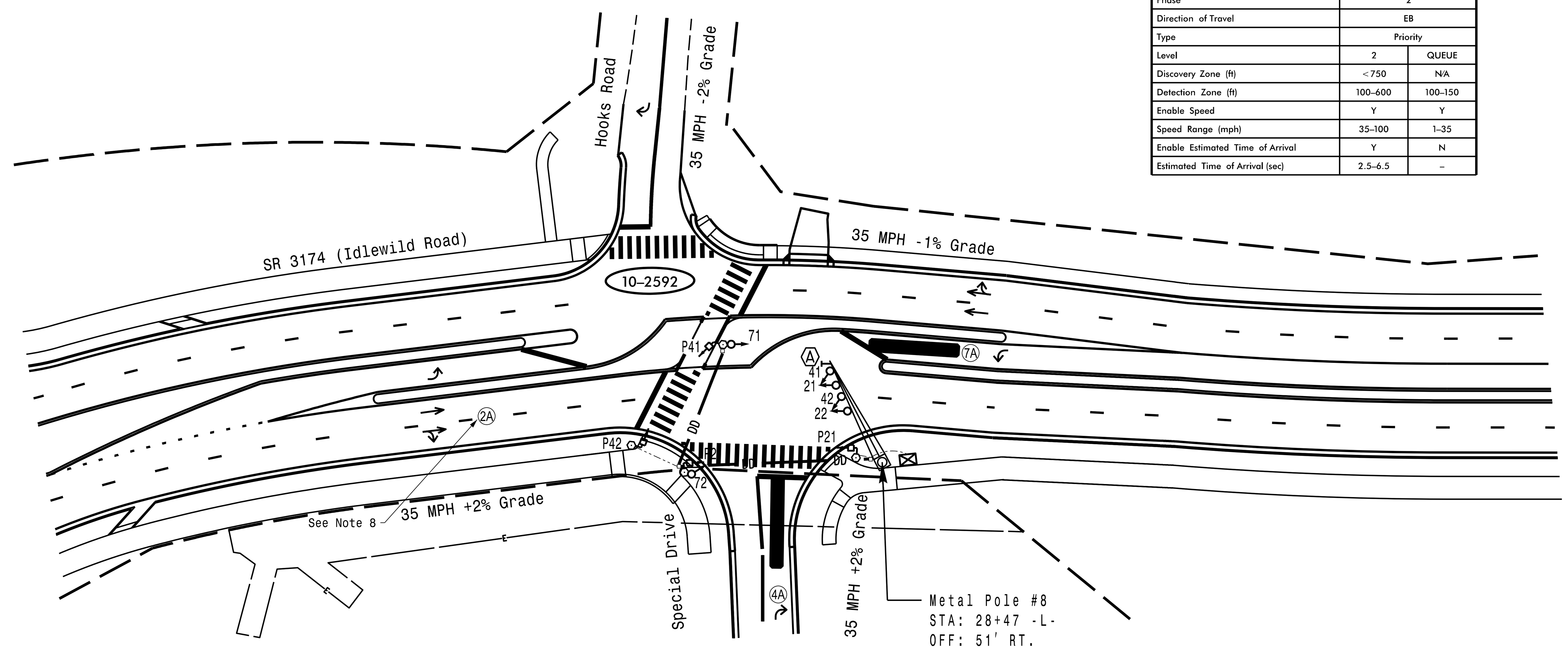
2 Phase
Fully Actuated w/ Alternate Phasing
SR 3174/1501(Idlewild Road) CLS

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Set all detector units to presence mode.
3. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
4. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
5. Program pedestrian heads to countdown the flashing "DON'T WALK" time only.
6. The Division Traffic Engineer will determine the hours of use for each phasing plan.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
8. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.

Advance Microwave Detection

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



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Type II Signal Pedestal	
	Metal Pole with Mastarm	
	Non-Intrusive Detection Zone	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
DD	Directional Drill	N/A
N/A	Right of Way	
N/A	Permanent Easement	E
	Directional Arrow	
N/A	Curb Ramp	
(A)	No Left Turn Sign (R3-2)	(A)

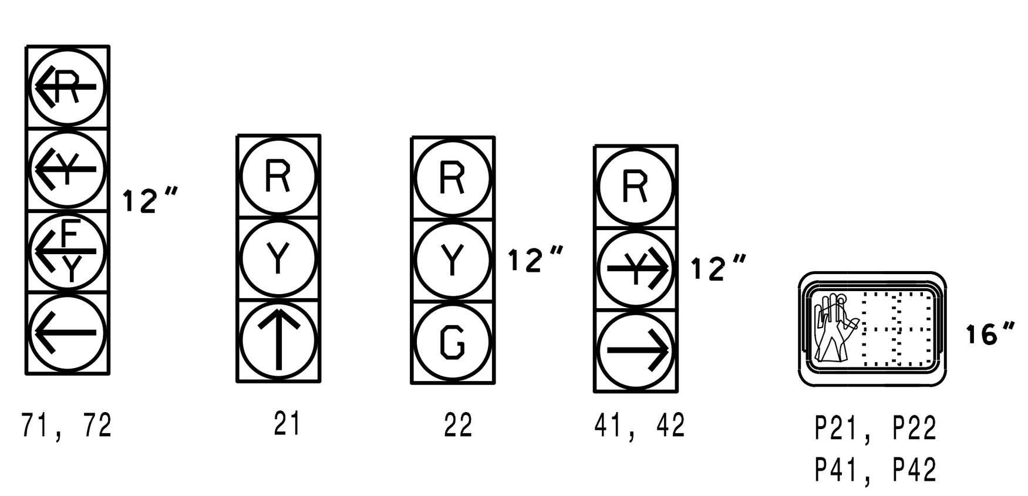
MAXTIME TIMING CHART

FEATURE	PHASE 2	PHASE 4	PHASE 7
Walk *	14	7	–
Ped Clear	17	6	–
Min Green *	10	7	7
Passage *	3.0	2.0	2.0
Max 1 *	90	25	25
Yellow Change	3.7	3.0	3.0
Red Clear	1.9	2.4	2.4
Added Initial *	–	–	–
Maximum Initial *	–	–	–
Time Before Reduction *	–	–	–
Time To Reduce *	–	–	–
Minimum Gap	–	–	–
Advance Walk	7	–	–
Non Lock Detector	–	X	X
Vehicle Recall	MIN RECALL	–	–
Dual Entry	–	X	X

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

SIGNAL FACE I.D.

All Heads L.E.D.



New Installation

PLANS PREPARED IN THE OFFICE OF:
Kimley»Horn
NC License #F-0102
421 Fayetteville Street, Suite 600
Raleigh, NC 27601
(919) 677-2000

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

SCALE 0 40 1"=40'

SR 3174 (Idlewild Road) Eastbound at Special Drive

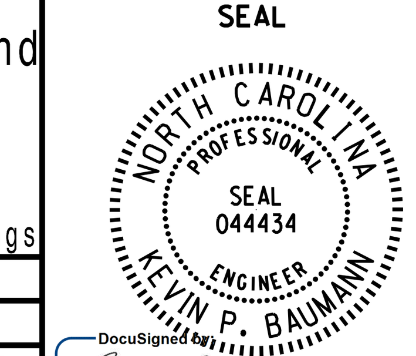
Division 10 Mecklenburg County Stallings

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

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL



DocuSigned by: 50C709A866C8447
SIGNATURE 5/12/2025 DATE

SIG. INVENTORY NO. 10-2591

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5/9/2025 11:26:53 AM susan.pennington