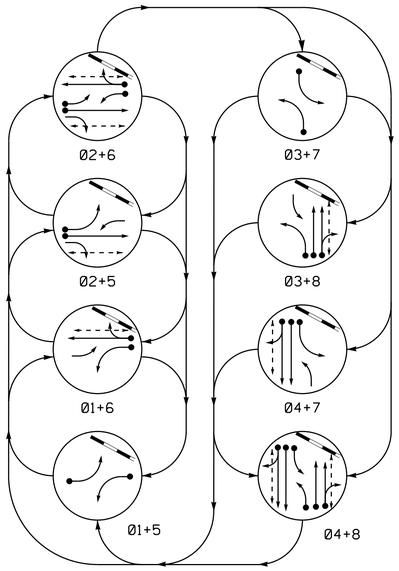
PROJECT REFERENCE NO.	SHEET NO.
U-5606	Sig. 4.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

RAIL PREEMPT PHASES

(High Priority)

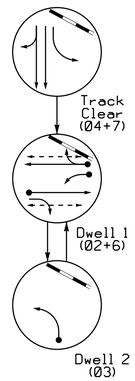


TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8	TRACK CLEAR	DWELL 1	DWELL 2	FLASH
11	←	←	F Y	F Y	R	R	R	R	R	F Y	R	Y
21,22	R	R	G	G	R	R	R	R	G	G	R	Y
31	R	R	R	R	←	←	F Y	F Y	R	R	←	R
41,42	R	R	R	R	R	R	G	G	G	R	R	R
51	←	F Y	←	F Y	R	R	R	R	R	R	R	Y
61,62	R	G	R	G	R	R	R	R	R	G	R	Y
71	R	R	R	R	←	F Y	←	F Y	←	R	R	R
81,82	R	R	R	R	R	G	R	G	R	R	R	R
P21,P22	DW	DW	W	W	DW	DW	DW	DW	DW	W	DW	DRK
P41,P42	DW	DW	DW	DW	DW	DW	W	W	DW	DW	DW	DRK
P61,P62	DW	W	DW	W	DW	DW	DW	DW	DW	W	DW	DRK
P81,P82	DW	DW	DW	DW	DW	W	DW	W	DW	DW	DW	DRK

ASC/3 DETECTOR INSTALLATION CHART

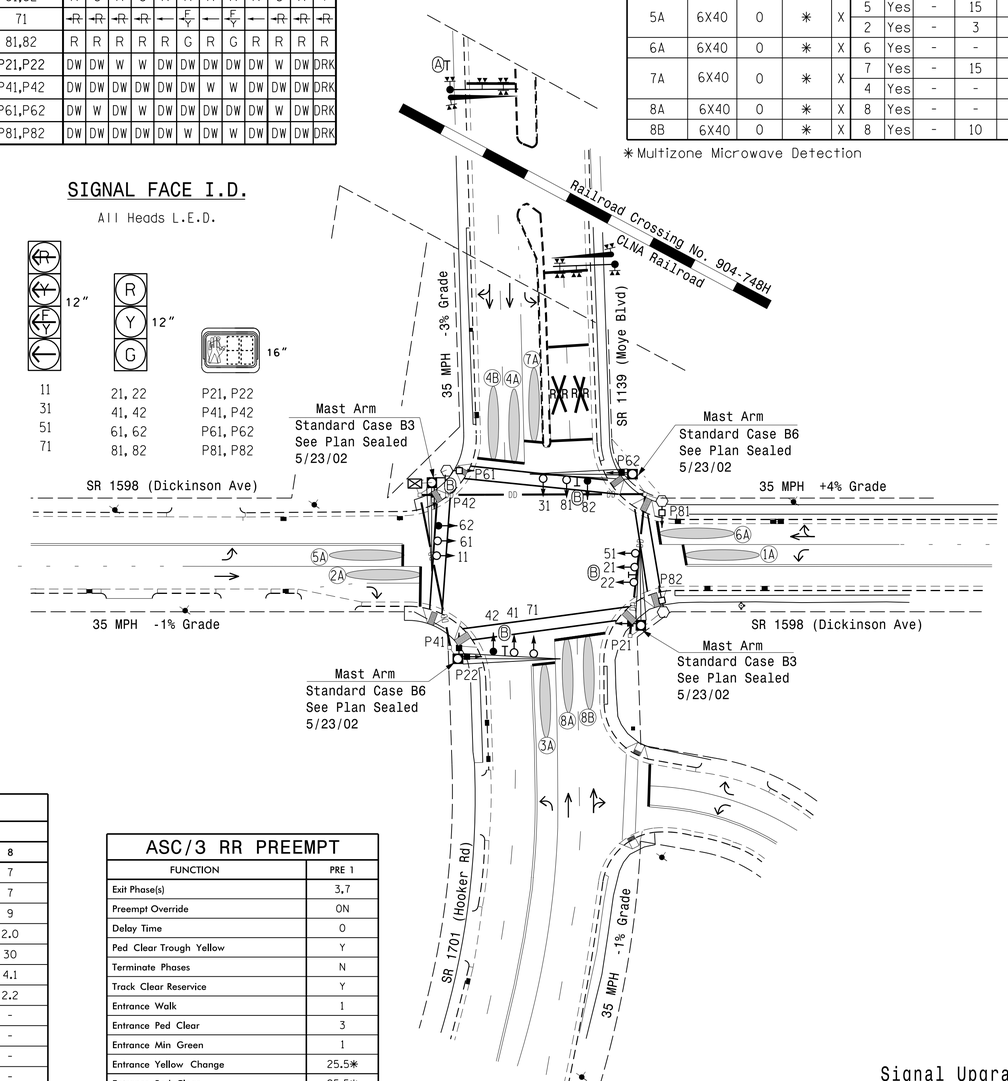
DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	0	✳	X	1	Yes	-	15	-	S	-	X
					6	Yes	-	3	-	G	-	X
2A	6X40	0	✳	X	2	Yes	-	-	-	S	-	X
3A	6X40	0	✳	X	3	Yes	-	15	-	S	-	X
					8	Yes	-	3	-	G	-	X
4A	6X40	0	✳	X	4	Yes	-	-	-	S	-	X
4B	6X40	0	✳	X	4	Yes	-	10	-	S	-	X
5A	6X40	0	✳	X	5	Yes	-	15	-	S	-	X
					2	Yes	-	3	-	G	-	X
6A	6X40	0	✳	X	6	Yes	-	-	-	S	-	X
7A	6X40	0	✳	X	7	Yes	-	15	-	S	-	X
					4	Yes	-	-	-	G	-	X
8A	6X40	0	✳	X	8	Yes	-	-	-	S	-	X
8B	6X40	0	✳	X	8	Yes	-	10	-	S	-	X

✳ Multizone Microwave Detection

SIGNAL FACE I.D.

All Heads L.E.D.

11	21, 22	P21, P22
31	41, 42	P41, P42
51	61, 62	P61, P62
71	81, 82	P81, P82



8 Phase Fully Actuated W/ Railroad Preemption Greenville Signal System

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. This location contains railroad preemption phasing. Do not program signal for late night flashing operation.
3. Reposition existing signal heads numbered 42, 62 and 82.
4. Set all detector units to presence mode.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
8. Pedestrian pedestals are conceptual and shown for reference only. See sheets P1-P3 for pushbutton location details.
9. Pavement markings are existing.
10. Program parent phases for Overlap "P" for all phases used in normal operation.
11. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

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	
N/A	Railroad Tracks	
N/A	Railroad Gate and Flasher	
N/A	Railroad Cantilever	
	Inductive Loop Detector	
	Out of Pavement Detection Zone	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
	Directional Drill	N/A
N/A	Right of Way	
	Directional Arrow	
N/A	Curb Ramp	
	"DO NOT STOP ON TRACKS" Sign (R8-8)	
	"Street Name" Sign	

ASC/3 TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6	7	8
Min Green *	7	10	7	7	7	10	7	7
Walk *	0	7	0	7	0	7	0	7
Ped Clear	0	20	0	12	0	19	0	9
Veh. Extension *	2.0	3.0	2.0	2.0	2.0	3.0	2.0	2.0
Max 1 *	20	35	20	30	20	35	20	30
Yellow	3.0	3.9	3.0	4.1	3.0	3.9	3.0	4.1
Red Clear	3.1	2.5	3.1	2.2	3.2	2.5	3.2	2.2
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	-	-	-	X	-	-	-	X
Simultaneous Gap	X	X	X	X	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.

ASC/3 RR PREEMPT

FUNCTION	PRE 1
Exit Phase(s)	3,7
Preempt Override	ON
Delay Time	0
Ped Clear Trough Yellow	Y
Terminate Phases	N
Track Clear Reservice	Y
Entrance Walk	1
Entrance Ped Clear	3
Entrance Min Green	1
Entrance Yellow Change	25.5✳
Entrance Red Clear	25.5✳
Track Clear Min Green	24
Track Clear Yellow Change	25.5✳
Track Clear Red Clear	25.5✳
Min Dwell Time	7
Exit Yellow Change	25.5✳
Exit Red Clear	25.5✳

* Allows normal phase times to be used.

Signal Upgrade - Temporary 1

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

SR 1598 (Dickinson Avenue) at SR 1701 (Hooker Rd)/ SR 1709 (Moye Boulevard)

Division 2 Pitt County Greenville

PLAN DATE: January 2018	REVIEWED BY: MEL
PREPARED BY: emm	REVIEWED BY:

SCALE 1"=40' (0 – 40)

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 042608 ENGINEER MEGHAN E. LEBLANC

DocuSigned by: Meghan E. LeBlanc 2/19/2018
ENGINEER'S SIGNATURE DATE
SIG. INVENTORY NO. 02-0004TI

05-MAR-2018 13:59
U:\Traffic\Signals\Design\Signals\02-00044\02004_sig_dsn_20180219 11.dgn
meleblanc