PROJECT REFERENCE NO.	SHEET NO.
W-5601GG	Sig. 1.1

EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE JUMPERS AS SHOWN

NOTES:

1. Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
2. Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
3. Ensure that Red Enable is active at all times during normal operation.
4. Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

NOTES

1. To prevent "flash-conflict" problems, insert red flash program blocks for all unused vehicle load switches in the output file. Verify that signal heads flash in accordance with the signal plans.
2. Program controller to Start Up in phases 2 and 6 green.
3. Set power-up flash time to 0 seconds within the controller programming. The conflict monitor will govern startup flash. Ensure STARTUP "RED START" is set to 0 seconds.
4. Enable Simultaneous Gap-Out feature for all phases.
5. Program all timing information into phase banks 1, 2, and 3 unless otherwise noted.
6. Set phase bank 3 maximum limit to 250 seconds for phases used.
7. Program phases 4 and 8 for Double Entry.
8. Ensure start up flash phases are coordinated with flash program block assignments.
9. Program Startup Ped Calls for phases 2, 4, 6, and 8.
10. Set the Red Revert interval on the controller to 1 second.
11. This cabinet and controller are part of the Durham Signal System.

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	NU	NC	P21, P22	81★	41,42	P41, P42	NU	61,62 63	P61, P62	NU	82,83	P81, P82	21★	81★	NU	NU	NU	NU
RED					101			134			107							
YELLOW				✳	102			135			108							
GREEN					103			136			109							
RED ARROW													A121	A124				
YELLOW ARROW													A122	A125				
FLASHING YELLOW ARROW													A123	A126				
GREEN ARROW				118														
✋			113			104			119			110						
🚶			115			106			121			112						

NU = Not Used
NC = No Connectin
✳ Denotes install load resistor. See load resistor installation detail this sheet.
★ See pictorial of head wiring in detail this sheet.

EQUIPMENT INFORMATION

CONTROLLER.....2070E
CABINET.....332 W/ AUX
SOFTWARE.....McCAIN 2033
CABINET MOUNT.....BASE
OUTPUT FILE POSITIONS...18 WITH AUX FILE
LOAD SWITCHES USED.....S3,S4,S5,S6,S8,S9,S11,S12,AUX S1,AUX S2
PHASES USED.....✳✳2,✳✳✳3,4,6,8,2 PED,4 PED,6 PED,8 PED
OVERLAP 1.....2
OVERLAP 2.....✳
OVERLAP 3.....NOT USED
OVERLAP 4.....NOT USED

✳ SEE FYA PPLT PROGRAMMING DETAIL ON SHEET 2.
✳✳ USED FOR TIMING PURPOSES ONLY
✳✳✳ USED FOR PREEMPTION

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)

INPUT FILE POSITION LAYOUT

(front view)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	U	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	FS DC ISOLATOR
	L	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	ST DC ISOLATOR
FILE "J"	U	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	CH. 3 UNUSED	CH. 1 EVB	SLOT
	L	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	CH. 4 UNUSED	CH. 2 UNUSED	EMPTY

EX.: 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
ST = STOP TIME
EVB = EMERGENCY VEHICLE PREEMPT

TOMAR OSP CARD INSERT CARD INTO SLOT J13

COUNTDOWN PEDESTRIAN SIGNAL OPERATION

Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual for instructions on selecting this feature.

LOAD RESISTOR INSTALLATION DETAIL

(install resistor as shown below)

ACCEPTABLE VALUES

VALUE (ohms)	WATTAGE
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)

TYPICAL TOMAR FIELD WIRE DETAIL

(input file, rear view)

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 05-1005
DESIGNED: August 2016
SEALED: 10-24-16
REVISED: N/A

Electrical Detail - Sheet 1 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

SR 1327 (N. Gregson Street) at US 70 Bus. WB (W. Morgan Street)

Division 5 Durham County Durham

PLAN DATE: October 2016 REVIEWED BY:
PREPARED BY: James Peterson REVIEWED BY:

REVISIONS	INIT.	DATE

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

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 036880 ENGINEER KEITH M. MINS

DocuSigned by: Keith M. Mins 10/27/2016
2F8D7B6EBCD34A5 DATE

SIG. INVENTORY NO. 05-1005

06-OCT-2016 07:35
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jtpeterson