PROJECT REFERENCE NO.	SHEET NO.
W-5705K	Sig. 2

EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

■ = DENOTES POSITION OF SWITCH

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. Insert yellow flash program blocks for loadswitches S4 and S5.
2. Program controller to Start Up in phase 2 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. Program all timing information into phase banks 1, 2, and 3 unless otherwise noted.
5. Set phase bank 3 maximum limit to 250 seconds for phases used.
6. Ensure start up flash phases are coordinated with flash program block assignments.
7. This cabinet and controller are part of the Durham Signal System.

EQUIPMENT INFORMATION

CONTROLLER.....2070E
CABINET.....332
SOFTWARE.....McCAIN 2033
CABINET MOUNT.....BASE
OUTPUT FILE POSITIONS...12
LOAD SWITCHES USED.....S4,S5,S6,S12
PHASES USED.....2*,4*,4 PED
OVERLAP 1.....2
OVERLAP 2.....NONE
OVERLAP 3.....NONE
OVERLAP 4.....NONE

* Used for timing purposes only

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16
PHASE	1	2	2 PED	**	**	4 PED	5	6	6 PED	7	8	8 PED
SIGNAL HEAD NO.	NU	NC	NU	21,22	21,22	P41	NU	NU	NU	NU	NU	P81
RED				116	101							
YELLOW				117	*							
GREEN				*	*							
RED ARROW												
YELLOW ARROW												
GREEN ARROW												
✋						104						110
🚶						106						112

NU = Not Used

NC = Not Connected

* Denotes install load resistor. See load resistor installation detail this sheet.

** These indications are driven by controller logic. See Logic Programming Detail on sheet 2.

SIGNAL HEAD WIRING DETAIL

(wire signal heads as shown)

NOTE: Ped 8 push button is programmed to call Ped 4

INPUT FILE POSITION LAYOUT

(front view)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	U	SLOT	Ø2 2A	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	NOT USED	NOT USED	FS DC ISOLATOR
	L	EMPTY	Ø2 2B	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	Ø4 PED DC ISOLATOR	Ø8 PED DC ISOLATOR	ST DC ISOLATOR
FILE "J"	U	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT
	L	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY

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

FS = FLASH SENSE
ST = STOP TIME

INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	DETECTOR NO.	PIN NO.	ATTRIBUTES	NEMA PHASE
2A	TB2-5,6	I2U	1	39	5 7	2
2B	TB2-7,8	I2L	5	43	5 7	2
PED PUSH BUTTONS						
P41	TB8-5,6	I12L	27	69	2	4 PED
P81	TB8-8,9	I13L	28	70	2	4 PED

NOTE:
INSTALL DC ISOLATORS IN INPUT FILE SLOTS I12 AND I13.

NOTE: PROGRAM DETECTOR DELAY AND CARRYOVER TIMES AS SPECIFIED ON SIGNAL DESIGN PLANS.

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

DETECTOR ATTRIBUTES LEGEND:

1-FULL TIME DELAY
2-PED CALL
3-RESERVED
4-COUNTING
5-EXTENSION
6-TYPE 3
7-CALLING
8-ALTERNATE

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 05-0335
DESIGNED: March 2017
SEALED: 4/27/2017
REVISED:

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown below)

ACCEPTABLE VALUES

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

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.

Electrical Detail - Sheet 1 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared in the Offices of:
Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Management Section
750 N.Greenfield Pkwy,Garner,NC 27529

SR 1327 (N. Gregson Street)
at
Lamond Avenue

Division 5 Durham County Durham

PLAN DATE: April 2017	REVIEWED BY:
PREPARED BY: B.A. Stouchko	REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 030530 ENGINEER ZACHARY M. LITTLE

DocuSigned by: Zachary M. Little
DC21EFD94F5341F
5/2/2017
DATE

SIG. INVENTORY NO. 05-0335

28-APR-2017 12:49
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