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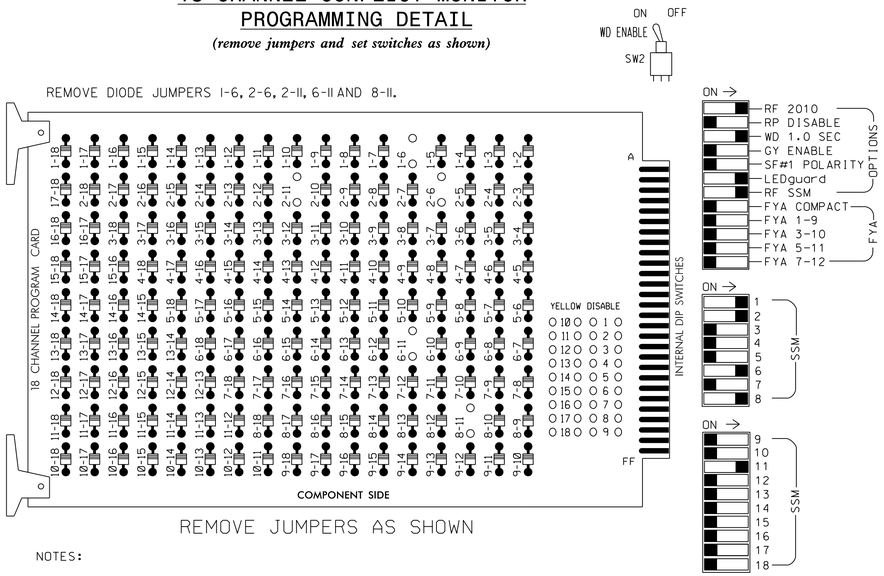
PROJECT REFERENCE NO.	SHEET NO.
U-5748	Sig. 11.1

18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches 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. The installer shall verify that signal heads flash in accordance with the Signal Plans.
2. Program controller to start up in phases 2 and 6 green.
3. Enable simultaneous gap-out feature, on controller unit, for all phases.
4. Program phases 2 and 6, on controller unit, for volume density operation.
5. The cabinet and controller are part of the Raleigh Signal System.

EQUIPMENT INFORMATION

CONTROLLER.....2070LX
CABINET.....332 W/ AUX
SOFTWARE.....SE-PAC2070
CABINET MOUNT.....BASE
OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE
LOAD SWITCHES USED.....S1,S2,S8,S11,AUX S4
PHASES USED.....1,2,4*,6,8
OVERLAP "A".....NOT USED
OVERLAP "B".....NOT USED
OVERLAP "C".....**
OVERLAP "D".....NOT USED

* Phase used for timing purposes only.
** See this sheet for overlap programming.

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	OLA	OLB	SPARE	OLC	OLD	SPARE
SIGNAL HEAD NO.	11	21	22,23, 24,25	NU	NU	NC	NU	NU	61,62 63	NU	NU	81,82, 83	NU	NU	NU	NU	26,27, 28	NU	NU
RED		128	128						134								A114		
YELLOW		129	129						135										
GREEN			130						136										
RED ARROW	125											107							
YELLOW ARROW	126											108					A115		
GREEN ARROW	127	130										109					A116		

NU = Not Used
NC = Not Connected

OVERLAP PROGRAMMING FOR OVERLAP C

1. From Main Menu select 4 - UNIT DATA
2. From UNIT DATA Submenu select 3 - OVERLAP DATA

Use Up/Dn/Left/Right keys to position cursor on the desired Overlap. Use the NEXT key to select the overlap type. Press the ENT key and then program as per the Overlap screen(s) shown.

```
OVERLAP DATA

  A: ---   E: ---   I: ---   M: ---
  B: ---   F: ---   J: ---   N: ---
  C: STD   G: ---   K: ---   O: ---
  D: ---   H: ---   L: ---   P: ---

 PREV/NEXT TO CYCLE
```

OVERLAP C

Use Up/Dn/Left/Right keys to position cursor on Overlap 'C', use the NEXT key to select 'STD', then press ENT

```
OVERLAP - C        12345678 90123456
          PARENTS: 01000001 00000000
      +GRN PHASES: 00000000 00000000
      -G/Y PHASES: 00000000 00000000
      -PED PHASES: 00000000 00000000
 TRAIL GREEN STANDARD:   0  YEL/10:  40
 TRAIL GREEN  PREEMPT:   0  YEL/10:  20
```

END OVERLAP PROGRAMMING

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	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 POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

SPECIAL DETECTOR NOTE

Install a video detection system for vehicle detection. Perform installation according to manufacturer's directions and NCDOT engineer-approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 05-1982T3
DESIGNED: Jan 2023
SEALED: 1/24/2023
REVISED:

AECOM
NC Firm License No.: F-0342
5438 Wade Park Boulevard
Suite 200 Raleigh, NC 27607
Phone: 919-461-1100

Temporary Design 3 (TMP Phase IV)
Electrical Detail

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared for the Offices of:
Traffic Engineering & Signal Management Section
NC Department of Transportation Mobility and Safety Division
750 N.Greenfield Pkwy,Garner,NC 27529

US 401 (Louisburg Road)
at
SR 2224 (Mitchell Mill Road)

Division 5 | Wake County | Raleigh

PLAN DATE:	Jan 2023	REVIEWED BY:	H.M. Surti
PREPARED BY:	A. Ravipati	REVIEWED BY:	

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 034481 ENGINEER HEMANG M. SURTI

DocuSigned by: Hemang M. Surti AE1D8DDC7A5A41... 1/24/2023

SIG. INVENTORY NO. 05-1982T3

1/24/2023
pw:\\aecom-na-pw.bentley.com:AECOM_DS21_NA_2020\Documents\60609754-U-5748 Ligon Mill\900-CAD GIS\910_CAD\70_NCDOT_TIP\Traffic\Signals\Design\Signals\Electrical Details_2022\05198213_sm_ele_2022XXXX.dgn
michael.cavenaugh