

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Administration

General Specifications

Customer Name	EM Highways	Customer Order No.	855407954
Intersection/ General Description	M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008	Controller/ Serial Number	07067741
		S.T.S. /EM Number	84052 Issue 5
Controller	☒ New ☐ Modification	Equipment Installation by	Siemens Mobility Traffic
Area Specifications/ Customer Drawings		Slot Cutting by	Siemens Mobility Traffic
Specification Section		Civil Works by	Civils Contractor
Contract/Tender Ref:		Customer's Engineer	G.Williams
Quotation No.		Telephone Number	01962-892328
Works Order No.	460907478		

Signal Company Use Only

Signal Engineer	Kevin L Roberts	(IF PROM Label as >) PROM Number	16260	PROM Variant	0
		Configuration Check Value	1F 69 78 4F		
Controller Options					
Hardware	ST950 ELV	Firmware Type and Issue	46059 ISS 8	Other Options	
ST950/ST900/ST750 Series Cabinet Options					
Cabinet/Rack	Cabinet	Kit Type Options	☒ UK-Std ☐ Non-UK ☐		
Cabinet/Rack Variant	Grey	Cuckoo Options	None	Gemini Unit Fitted	☐

Mains Supply	230	Volts	50	Hz				
Peak Lamp Current	8	Amps	Dimming Vdtage	27.5	Answer Issue	0	Date Created	11/03/2015
Average Lamp Power	300	Watts	Low Inrush Transformer	☐	Edit Issue	14		
Total Average Power	400	Watts						
Power feed fuse rating: requires 30 Amp minimum for controller, 15 Amp minimum for pelican/lightly loaded controller								

Phases, Stages and Streams

Phases, Stages and Streams

Add/Delete/Insert Streams:

Streams

Current Number of Streams

4

Phases

Current Total Number of Phases

11

Number of Real Phases

7

Number of Dummy Phases

4

Stages

Current Number of stages
(inc. ALL-RED stages)

11

Switched Signs

Number of Switched Signs

0

Action

Add At

Delete At

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Facilities/Modes Enabled and Mode Priority Levels

Facilities

UTC

☒ Serial/Internal UTMC OTU

☐ Free-standing OTU

☐

☐

☒ Master Time Clock

☐ Holiday Clock

☐ FT To Current MAX

☒ Linked Fixed Time

☒ Lamp Monitoring

☐ RED Lamp Monitoring

☐ Pelican/Puffin/Toucan

☐ Standalone Manual

☐ Extend All Red

☐ Speed Measurement

☐ Ripple Change

☐

☐ Non-UK

☐ Fail to Part Time

☐ Fail To Hardware Flashing

☐

☐ Download To Level 3

9

Starting Intergreen

Mode Priority

	1	2	3	4	5	6	7	8	9	10	11	12	13
☐ Part Time	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐ Emergency Vehicles	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☒ Hurry Call	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐
☐ LRT	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐ Priority Vehide	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☒ Manual Control	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐ Manual Step On	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☒ Selected FT or VA or CLF	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☒ UTC	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☒ MOVA Mode	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐
☒ CLF (Non-Base Time)	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐
☐ CLF (Base Time)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☒ Vehide Actuated	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐
☒ Fixed Time	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒

Configuration Complexity

☐ Low

☐ Medium

☐ High

☒ Maximum

standard46059.8df

Default PROM data file

Correspondence Monitoring to inc.

☒ Reds

☒ Ambers

☐ Switched Signs

☐ Ignore Reds and Ambers during

Flash Rate (ms)

400

Off

400

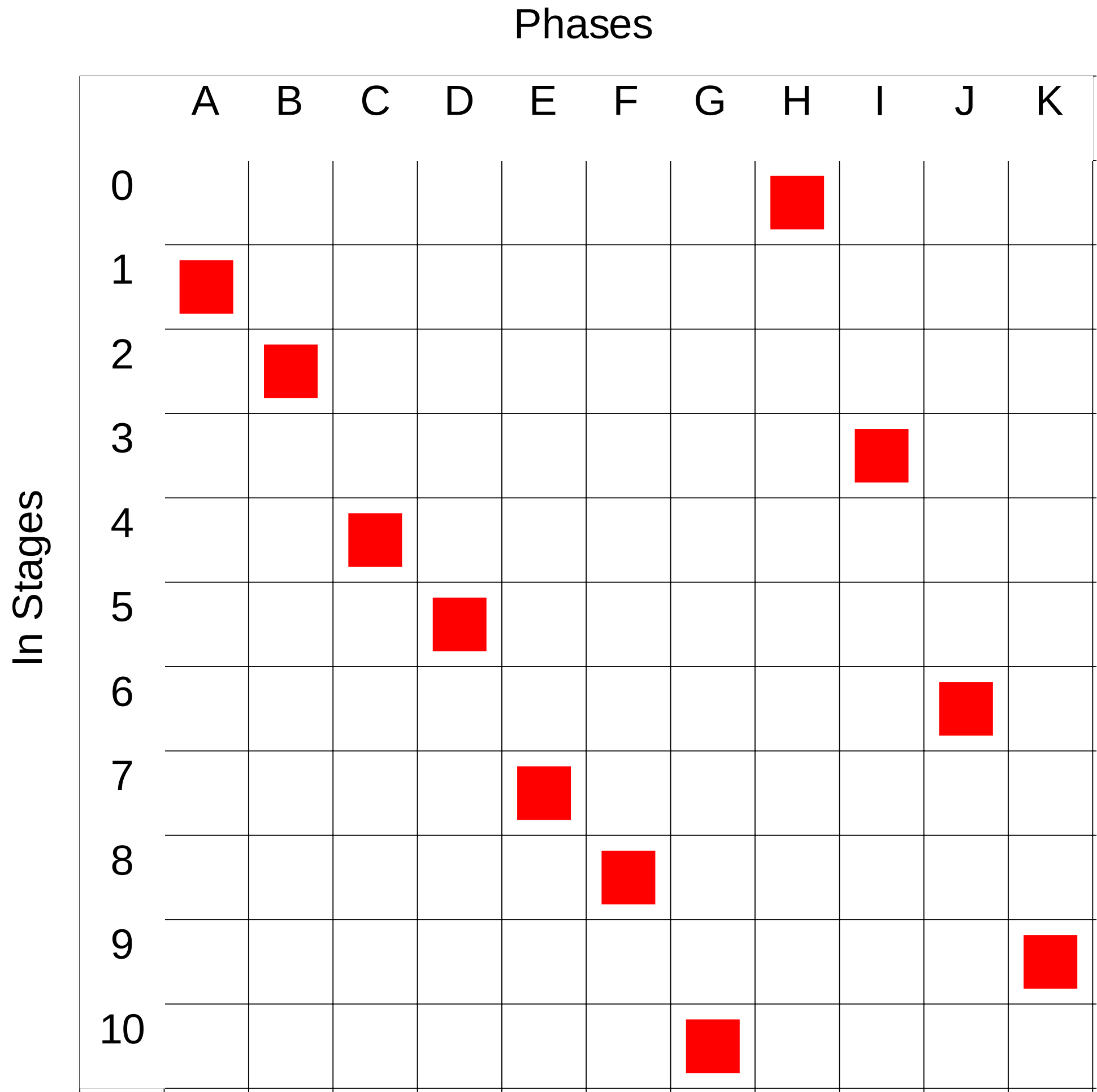
On

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Form Ref: 1.3

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Phases in Stages



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Stages in Streams

Stages in Streams

Phase or Stage to revert to in absence of demands/extensions

Startup Stage

Switch Off Stage

Standalone Pedestrian

01234567

14710

14710

14710

Note: For a Stand-Alone Stream, the reversion must be to All Red stage or Traffic stage/phase to meet the relevant standard or specification.

In Stream

Stages

012345678910

0

1

2

3

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Form Ref: 1.5

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Phase Type and Conditions

Phase Type and Conditions

☒ Phases A to P

☐

Manual Output Allocation

☒ Improved GA Appearance

☐

Phase	Title	Type	App. Type	Term. Type	Assoc. Phase	No. of Drive Outputs		
						"R"	"A"	"G"
A	Gyratory Northbound approach	0 - UK Traffic	0	0 - E		1	1	1
B	M27 Eastbound Off-Slip	0 - UK Traffic	0	0 - E		1	1	1
C	Gyratory Eastbound approach	0 - UK Traffic	0	0 - E		1	1	1
D	Stoneham Lane	0 - UK Traffic	0	0 - E		1	1	1
E	Gyratory Southbound approach	0 - UK Traffic	0	0 - E		1	1	1
F	Wide Lane	0 - UK Traffic	0	0 - E		1	1	1
G	Wide Lane Left Turn	0 - UK Traffic	0	0 - E		1	1	1
H	All Red Stream 0	2 - UK Green Arrow	0	0 - E				
I	All Red Stream 1	2 - UK Green Arrow	0	0 - E				
J	All Red Stream 2	2 - UK Green Arrow	0	0 - E				
K	All Red Stream 3	2 - UK Green Arrow	0	0 - E				

1) App Types: 0 = Always Appears, 1 = Appears if dem'd prior to interstage, 2 = If dem'd, 3 = If dem'd before end of window time
2) Term Types: 0 = Term's at end of stage, 1 = Term's when Assoc phase gains R.O.W, 2 = Term's when Assoc phase loses R.O.W.
3) The HW Fail Flash fields are for information only on all but ST900ELV Controllers. For other controllers, physical switches or links (etc.) select which aspects flash and these need to be set up manually.

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Opposing and Conflicting Phases

Select Stream(s) To Configure

☐ All ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ ☐ ☐ ☐

Initialise

☒ Amber Conflict Monitoring

		To Phase										
		A	B	C	D	E	F	G	H	I	J	K
From Phase	A		Co						o			
	B	Co							o			
	C				Co					o		
	D			Co						o		
	E						Co				o	
	F					Co					o	
	G											o
	H	o	o									
	I			o	o							
	J					o	o					
	K							o				

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Phase Minimums, Maximums, Extensions, Ped Leaving Periods

Phase Minimums, Maximums, Extensions, Ped Leaving Periods

☒ Phases A to P

☐

Phase	Min Green	Min Ped Clr	Extensions	Maximums										
				A	B	C	D	E	F	G	H			Pre-timed
A	7	0	0.6	30	35	40	20	0	0	0	0			☐
B	7	0	0.6	30	25	30	15	0	0	0	0			☐
C	7	0	0.6	30	35	40	20	0	0	0	0			☐
D	7	0	0.6	30	25	30	15	0	0	0	0			☐
E	7	0	0.6	30	35	40	20	0	0	0	0			☐
F	7	0	0.6	30	25	30	15	0	0	0	0			☐
G	7	0	0.6	30	30	30	30	0	0	0	0			☐
H	3	0	0.0	0	0	0	0	0	0	0	0			☐
I	3	0	0.0	0	0	0	0	0	0	0	0			☐
J	3	0	0.0	0	0	0	0	0	0	0	0			☐
K	3	0	0.0	0	0	0	0	0	0	0	0			☐
														☐
														☐
														☐
														☐
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Note: For Standalone Streams see Help for use of Max Sets.

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Phase Intergreen Times

Select Stream(s) To Configure

☐ All

☐ 0

☐ 1

☐ 2

☐ 3

☐

☐

☐

☐

Note: On a Stand Alone Pelican/Toucan/Puffin Stream the Intergreens between Pedestrian and Traffic Phases are controlled by the timings (PBT, PIT, CMX, CDY, CRD and PAR), therefore 0 should be entered for the appropriate intergreen times in grid below.

		To Phase										
		A	B	C	D	E	F	G	H	I	J	K
From Phase	A		7						3			
	B	7							3			
	C				7					3		
	D			7						3		
	E						7				3	
	F					7					3	
	G											3
	H	2	2									
	I			2	2							
	J					2	2					
	K							2				

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Intergreen Handset Limits

HIGH

60

Copy Intergreen Values

To Phase

From Phase

	A	B	C	D	E	F	G	H	I	J	K
A		5						3			
B	5							3			
C				5					3		
D			5						3		
E						5				3	
F					5					3	
G											3
H	2	2									
I			2	2							
J					2	2					
K							2				

Phase Timing Handset Ranges

Phase Timing Handset Ranges

Initialise Min Green Limits

Phase	Min. Green		Phase	Min. Green		Max. Green
	Min.	Max.		Min.	Max.	
A	7	30	Q			Min. 0Max. 255
B	7	30	R			Vehicle Extension
C	7	30	S			Min. 0.0Max. 10.0
D	7	30	T			Phase Delay
E	7	30	U			Min. 2Max. 10
F	7	30	V			Starting I/G
G	7	30	W			Min. 8Max. 15
H	0	30	X			Min Pedestrian Clearance (PBT)
I	0	30	Y			Min. 0Max. 12
J	0	30	Z			Traffic Phase Leaving
K	0	30	A2			Min. 3.0Max. 3.0
L			B2			Traffic Phase Red/Amber
M			C2			Min. 2Max. 2
N			D2			
O			E2			
P			F2			

VA Demand and Extend Definitions

VA Demand and Extend Definitions

Phases A to P

Demands

For Unlatched demands precede the name with a #.
Conditioning MUST be used to specify unlatched demands.

A	AX2	AX4	AX6	
B	BX8	BX10	BX13	
C	CX25	CX26	CX27	
D	DX29	DX32	DXSINK34	
E	EX45	EX46	EX47	
F	FX49	FX52	FSL50	FSL53
G	GSL54			
H				
I				
J				
K				

Extensions

AX2	AX4	AX6	
BX8	BX10	BX13	
CX25	CX26	CX27	
DX29	DX32	DXSINK34	
EX45	EX46	EX47	
FX49	FX52	FSL50	FSL53
GSL54			

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Phase Internal/Revertive Demands

Phase Internal/Revertive Demands

Start-up Vehicle Responsive Demands

A☒

B☒

C☒

D☒

E☒

F☒

G☒

H☐

I☐

J☐

K☐

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Demands Inserted When Leaving Manual and Fixed Time Modes

A☒

B☒

C☒

D☒

E☒

F☒

G☒

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J☐

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Unlatched Demands that Start Max Timers

A☒

B☒

C☒

D☒

E☒

F☒

G☒

H☒

I☒

J☒

K☒

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Revertive Phase Demands

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

A

B

C

D

E

F

G

Q

R

S

T

U

V

W

X

Y

Z

A2

B2

C2

D2

E2

F2

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Stage Internal Demands/Pedestrian Window Times

Stage Internal Demands/Pedestrian Window Times

Start-up Vehicle Responsive Demands

0	☐	1	☐	2	☐	3	☐	4	☐	5	☐	6	☐	7	☐	8	☐	9	☐	10	☐	☐	☐	☐	☐	☐	☐	☐
	☐		☐		☐		☐		☐		☐		☐		☐		☐		☐		☐		☐		☐		☐	

Demands Inserted When Leaving Manual and Fixed Time Modes

0	☐	1	☐	2	☐	3	☐	4	☐	5	☐	6	☐	7	☐	8	☐	9	☐	10	☐	☐	☐	☐	☐	☐	☐	☐
	☐		☐		☐		☐		☐		☐		☐		☐		☐		☐		☐		☐		☐		☐	

Unlatched Demands that Start Maximum Timers

0	☒	1	☒	2	☒	3	☒	4	☒	5	☒	6	☒	7	☒	8	☒	9	☒	10	☒	☐	☐	☐	☐	☐	☐	☐
	☐		☐		☐		☐		☐		☐		☐		☐		☐		☐		☐		☐		☐		☐	

Window Times

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	0	0	0	0	0	0	0	0	0	0					
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Exceptional Stages

0	☐	1	☐	2	☐	3	☐	4	☐	5	☐	6	☐	7	☐	8	☐	9	☐	10	☐	☐	☐	☐	☐	☐	☐	☐
	☐		☐		☐		☐		☐		☐		☐		☐		☐		☐		☐		☐		☐		☐	

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Linked Fixed Time

Step Time																																
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
9	6	15	12	3	5																											

Streams	Steps																															
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
	0	1	1	1	2	2	2																									
	1	5	4	4	4	5	5																									
	2	8	8	7	7	7	8																									
3	10	10	10	10	10	10																										

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CLF - Plan(s)

CLF - Plan(s)

0

Plan No.

Copy From

Plan Specifics

0

Influence Set

Copy From

Entry Point (secs)

255

Exit Point (secs)

255

Cycle Time (secs)

50

Slow

Fast

Group Offset Handset Range

Min.

0

Max.

255

Group/Influence

Group No.	Group Offset	Group Influence	Related Stage	Group No.	Group Offset	Group Influence	Related Stage
0	0	1	1	16			
1	30	2	2	17			
2	9	1	4	18			
3	42	2	5	19			
4	15	1	7	20			
5	45	2	8	21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			

CLF Influences

0 - Go To VA

1 - Immediate Move

2 - Demand Dependent Move

3 - Hold

4 - Prevent Except To

5 - Add Immediate Move

6 - Add Demand Dependent Move

7 - Ignore

8 - Stand Alone Inhibited

9 - Stand Alone Ped Allowed

Last Modified 20/01/2016, Issue 5.0.14

Form Ref: 4.2.1 (1)

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CLF - Plan(s)

CLF - Plan(s)

1

Plan No.

Copy From

Plan Specifics

1

Influence Set

Copy From

Entry Point (secs)

255

Exit Point (secs)

255

Cycle Time (secs)

50

Slow

Fast

Group Offset Handset Range

Min.

0

Max.

255

Group/Influence

Group No.	Group Offset	Group Influence	Related Stage	Group No.	Group Offset	Group Influence	Related Stage
0	0	1	1	16			
1	30	2	2	17			
2	9	1	4	18			
3	39	2	5	19			
4	15	1	7	20			
5	45	2	8	21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			

CLF Influences

0 - Go To VA

1 - Immediate Move

2 - Demand Dependent Move

3 - Hold

4 - Prevent Except To

5 - Add Immediate Move

6 - Add Demand Dependent Move

7 - Ignore

8 - Stand Alone Inhibited

9 - Stand Alone Ped Allowed

Last Modified 20/01/2016, Issue 5.0.14

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CLF - Demand Dependent Moves

Clear Grid Data

Notes:
If no data is entered for a stage then a demand for any phases in that stage will be considered. The data specified on this screen will also change the screen CLF - Demands to Consider with Demand Dependent Stage Moves.

		Phases										
		A	B	C	D	E	F	G	H	I	J	K
Stages	0											
	1											
	2											
	3											
	4											
	5											
	6											
	7											
	8											
	9											
	10											

UTC General Data

UTC General Data

Type of UTC

☒ 106

☐ 316

Integral OTUAddress

2

Number of Control Words

4

Number of Reply Words

☐

Controller to respond to TC bit.

☐

Introduction of UTC to be disabled by Priority and LRT M

Non UTC RTC synchronisation input name

RTC Synchronisation Times

Clock Synchronise Time (UTCTS input)

Day

Time

Time Only

12:00:00

Clock Confirm Time (UTC RT output)

Day

Time

Time Only

12:00:00

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UTC Control and Reply Data Format

UTC Control and Reply Data Format

	Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Bit 8
Control Words								
Word 1	F1	#F2	F4	#F5	F7	#F8	F10	DX1
Word 2								TS
Word 3								
Word 4								
Reply Words								
Word 1	G1	G2	G4	G5	G7	G8	G10	SD2
Word 2	SD5	SD8	DF	LF1	LF2	RR		CC
Word 3	MR0	ML0	MF0	MR1	ML1	MF1	MR2	ML2
Word 4	MF2							
Word 5								
Word 6								
Word 7								
Word 8								
Word 9								
Word 10								
Word 11								
Word 12								
Word 13								
Word 14								

UTC Phase Demand and Extend Definitions

UTC Demand and Extend Definitions

Phases A to P

Demands

For Unlatched demands, preceed the name with a #.
Conditioning MUST be used to specify unlatched demands.

A	DX1			
B	DX1			
C	DX1			
D	DX1			
E	DX1			
F	DX1			
G	DX1			
H				
I				
J				
K				

Extensions

DX1			
DX1			
DX1			
DX1			
DX1			
DX1			
DX1			

UTC Stage and Mode Data Definitions

UTC Stage and Mode Data Definitions

Stage	Force Bit	Green Confirm Bit	Demand Confirm Bit	Stage	Force Bit	Green Confirm Bit	Demand Confirm Bit
0				16			
1	F1	G1		17			
2	#F2	G2	SD2	18			
3				19			
4	F4	G4		20			
5	#F5	G5	SD5	21			
6				22			
7	F7	G7		23			
8	#F8	G8	SD8	24			
9				25			
10	F10	G10		26			
11				27			
12				28			
13				29			
14				30			
15				31			

Mode Data Definitions

Manual Mode Operative:

☐ G1/G2☒ RR☐

Manual Mode Selected:

☐ G1/G2☒ RR☐

No Lamp Power, or Lamps Off due to RLM or Part Time:

☐ G1/G2☐☐

Detector Fault:

☐☐☒ DF

Normal NOT selected on the Manual Panel:

☐ G1/G2☒ RR☐

RR Button Selected:

☐ G1/G2☐ RR☐

If UTC Reply Confirms are required for a Controller Fault (CF) OR for separate MC and RR replies, Conditioning must be used.

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

UTC Demand Dependent Forces

Clear Grid Data

Notes:
If no data is entered for a stage then a demand for any phases in that stage will be considered. The data specified on this screen will also change the screen CLF - Demands to Consider with Demand Dependent Stage Moves.

		Phases										
		A	B	C	D	E	F	G	H	I	J	K
Stages	0											
	1											
	2											
	3											
	4											
	5											
	6											
	7											
	8											
	9											
	10											

MOVA Stages

MOVA Stages

Stage	Force Bit	Green Confirm Bit	Stage	Force Bit	Green Confirm Bit
0			16		
1	MOVA0F 1	MOVA0CON1	17		
2	MOVA0F 2	MOVA0CON2	18		
3			19		
4	MOVA1F 1	MOVA1CON1	20		
5	MOVA1F 2	MOVA1CON2	21		
6			22		
7	MOVA2F 1	MOVA2CON1	23		
8	MOVA2F 2	MOVA2CON2	24		
9			25		
10	MOVA3F 1	MOVA3CON1	26		
11			27		
12			28		
13			29		
14			30		
15			31		

NOTE: If a MOVA Kernel does not map to the same numbered stream (0-3), refer to the help.

Mode Data Definitions

Manual Mode Operative:
☐ G1/G2 ☐ RR/CRB

Manual Mode Selected:
☐ G1/G2 ☐ RR/CRB

No Lamp Power, or Lamps Off
due to RLM or Part Time:
☐ G1/G2 ☐ RR/CRB

Normal NOT selected on the
Manual Panel:
☐ G1/G2 ☐ RR/CRB

RR Button Selected:
☐ G1/G2 ☐ RR/CRB

Report as UTC Mode ☐

MOVA Control Timer (x10)

MOVA Deactivate Timer

MOVA Release Timer

UTC and MOVA Detectors

UTC and MOVA Detectors

Detector Mapping

☐ Combined

Set Selection

☒ UTC ☐ MOVA 0 ☐ MOVA 1 ☐ MOVA 2 ☐ MOVA 3

1	SC13	2	SC14	3	SC15	4	SC20	5	SC21	6		7		8	
9		10		11		12		13		14		15		16	
17		18		19		20		21		22		23		24	
25		26		27		28		29		30		31		32	
33		34		35		36		37		38		39		40	EX47
41	SC24	42	SC23	43	SC22	44	EX46	45	EX45	46		47	SC18	48	SC17
49	SC16	50	CX27	51	CX26	52	CX25	53		54	SC11	55	SC10	56	SC9
57	SC8	58	SC7	59	SC6	60	SC5	61	SC4	62	SC3	63	BQ2	64	BQ1

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

UTC and MOVA Detectors

UTC and MOVA Detectors

Detector Mapping

☐ Combined

Set Selection

☐ UTC ☒ MOVA 0 ☐ MOVA 1 ☐ MOVA 2 ☐ MOVA 3

1	AIN1	2	AX2	3	AIN3	4	AX4	5	AIN5	6	AX6	7	BIN7	8	BX8
9	BSL9	10	BX10	11	BSL11	12	BIN12	13	BX13	14	BSL14	15		16	
17		18		19		20		21		22		23		24	
25		26		27		28		29		30		31		32	
33		34		35		36		37		38		39		40	
41		42		43		44		45		46		47		48	
49		50		51		52		53		54		55		56	
57		58		59		60		61		62		63		64	

UTC and MOVA Detectors

UTC and MOVA Detectors

Detector Mapping

☐ Combined

Set Selection

☐ UTC

☐ MOVA 0

☒ MOVA 1

☐ MOVA 2

☐ MOVA 3

1	CX25	2	CX26	3	CX27	4	DIN28	5	DX29	6	DSL30	7	DIN31	8	DX32
9	DSL33	10	DXSINK34	11	DSL35	12		13		14		15		16	
17		18		19		20		21		22		23		24	
25		26		27		28		29		30		31		32	
33		34		35		36		37		38		39		40	
41		42		43		44		45		46		47		48	
49		50		51		52		53		54		55		56	
57		58		59		60		61		62		63		64	

UTC and MOVA Detectors

UTC and MOVA Detectors

Detector Mapping

☐ Combined

Set Selection

☐ UTC ☐ MOVA 0 ☐ MOVA 1 ☒ MOVA 2 ☐ MOVA 3

1	EX45	2	EX46	3	EX47	4	FIN48	5	FX49	6	FSL50	7	FIN51	8	FX52
9	FSL53	10		11		12		13		14		15		16	
17		18		19		20		21		22		23		24	
25		26		27		28		29		30		31		32	
33		34		35		36		37		38		39		40	
41		42		43		44		45		46		47		48	
49		50		51		52		53		54		55		56	
57		58		59		60		61		62		63		64	

UTC and MOVA Detectors

UTC and MOVA Detectors

Detector Mapping

☐ Combined

Set Selection

☐ UTC ☐ MOVA 0 ☐ MOVA 1 ☐ MOVA 2 ☒ MOVA 3

1		2		3		4		5		6		7		8	
9		10		11		12		13		14		15		16	
17		18		19		20		21		22		23		24	
25		26		27		28		29		30		31		32	
33		34		35		36		37		38		39		40	
41		42		43		44		45		46		47		48	
49		50		51		52		53		54	GSL54	55		56	
57		58		59		60		61		62		63		64	

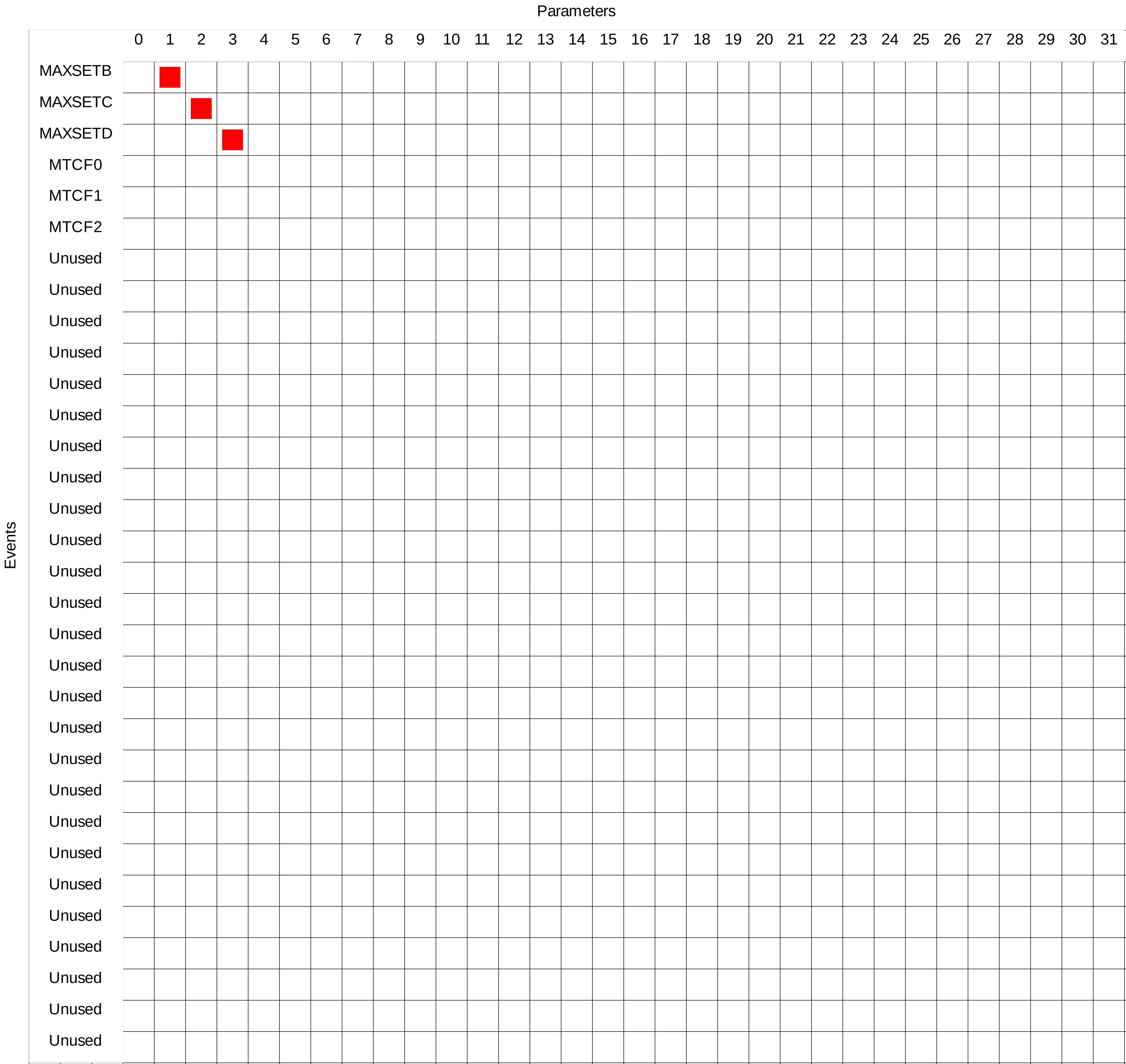
MTC - Time Switch Parameters

MTC - Time Switch Parameters

	Type	Event		Type	Event
0	Alternate Max	MAXSETB	16	No Action	
1	Alternate Max	MAXSETC	17	No Action	
2	Alternate Max	MAXSETD	18	No Action	
3	Conditioning	MTCF0	19	No Action	
4	Conditioning	MTCF1	20	No Action	
5	Conditioning	MTCF2	21	No Action	
6	No Action		22	No Action	
7	No Action		23	No Action	
8	No Action		24	No Action	
9	No Action		25	No Action	
10	No Action		26	No Action	
11	No Action		27	No Action	
12	No Action		28	No Action	
13	No Action		29	No Action	
14	No Action		30	No Action	
15	No Action		31	No Action	

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

MTC - Time Switch Parameters Array



Works Order : 460907478
EM Number : 84052
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MTC - Day Type

MTC - Day Type

No.	Mon	Tue	Wed	Thu	Fri	Sat	Sun
0	☐	☐	☐	☐	☐	☒	☐
1	☐	☐	☐	☐	☐	☐	☒
2	☒	☐	☐	☐	☐	☐	☐
3	☐	☒	☐	☐	☐	☐	☐
4	☐	☐	☒	☐	☐	☐	☐
5	☐	☐	☐	☒	☐	☐	☐
6	☐	☐	☐	☐	☒	☐	☐
7	☒	☒	☒	☒	☒	☒	☒
8	☒	☒	☒	☒	☒	☒	☐
9	☒	☒	☒	☒	☒	☐	☐
10	☐	☐	☐	☐	☐	☐	☐
11	☐	☐	☐	☐	☐	☐	☐
12	☐	☐	☐	☐	☐	☐	☐
13	☐	☐	☐	☐	☐	☐	☐
14	☐	☐	☐	☐	☐	☐	☐
15	☐	☐	☐	☐	☐	☐	☐

Works Order : 460907478
EM Number : 84052
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Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

MTC - Timetable

MTC - Timetable

View Timetable Settings

☒ 0 - 15

☐ 16 - 31

☐ 32 - 47

☐ 48 - 63

No.	Day Type	Time	Description	Function Code	Plan/Parameter
0	9	07:00:00	MAXSET A	2	0
1	9	09:30:00	MAXSET B	2	1
2	9	16:00:00	MAXSET C	2	2
3	9	19:00:00	MAXSET D	2	3
4	0	07:30:00	MAXSET A	2	0
5	0	10:00:00	MAXSET B	2	1
6	0	16:30:00	MAXSET C	2	2
7	0	18:30:00	MAXSET D	2	3
8	1	08:00:00	MAXSET A	2	0
9	1	10:00:00	MAXSET B	2	1
10	1	16:30:00	MAXSET C	2	2
11	1	18:00:00	MAXSET D	2	3
12	7	07:00:00	ENABLE MOVA DET32-STRM0	3	3
13	7	21:00:00	DISABLED MOVA DET32-STRM0	4	3
14	7	07:00:00	ENABLE MOVA DET 28 - 32 STRM1	3	4
15	7	21:00:00	DISABLED MOVA DET 28 - 32-STRM1	4	4

Function Codes:

0 = Isolate From CLF

1 = Introduce a CLF Plan

2 = Introduce a Parameter (Combination of event switches)

3 = Selects an Individual event switch to be set

4 = Selects an Individual event switch to be cleared.

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

MTC - Timetable

MTC - Timetable

View Timetable Settings

☐ 0 - 15

☒ 16 - 31

☐ 32 - 47

☐ 48 - 63

No.	Day Type	Time	Description	Function Code	Plan/Parameter
16	7	07:00:00	ENABLE MOVA DET 29 - 32 - STRM2	3	5
17	7	21:00:00	DISABLED MOVA DET 29 - 32-STRM2	4	5
18	0			0	0
19	0			0	0
20	0			0	0
21	0			0	0
22	0			0	0
23	0			0	0
24	0			0	0
25	0			0	0
26	0			0	0
27	0			0	0
28	0			0	0
29	0			0	0
30	0			0	0
31	0			0	0

Function Codes:

0 = Isolate From CLF

1 = Introduce a CLF Plan

2 = Introduce a Parameter
(Combination of event switches)

3 = Selects an Individual event switch to be set

4 = Selects an Individual event switch to be cleared.

LMU - General

LMU - General

Lamp Monitoring - LMU Voltage

☐

☒ 48

☐

☐

Max Red Bulb Wattage

☐

☐

☐

First Red Lamp Fault Speed

Minimum	Maximum

☐

☐

☐

☐

☐

☐

☐

☐

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Integral LMU Onboard Sensors

Integral LMU Onboard Sensors

No. of LSLS cards fitted
1

HPU Connection
1

Sensor Configuration For LSLS 1 (Cabinet 1)

Phase	Aspect	Sensor #	Sensor Type	Phase	Aspect	Sensor #	Sensor Type
A	Red	1	As Seq.	F	Amber	6	As Seq.
A	Amber	1	As Seq.	F	Green	6	As Seq.
A	Green	1	As Seq.	G	Red	7	As Seq.
B	Red	2	As Seq.	G	Amber	7	As Seq.
B	Amber	2	As Seq.	G	Green	7	As Seq.
B	Green	2	As Seq.	N/A	N/A		
C	Red	3	As Seq.	N/A	N/A		
C	Amber	3	As Seq.	N/A	N/A		
C	Green	3	As Seq.	N/A	N/A		
D	Red	4	As Seq.	N/A	N/A		
D	Amber	4	As Seq.	N/A	N/A		
D	Green	4	As Seq.	N/A	N/A		
E	Red	5	As Seq.	N/A	N/A		
E	Amber	5	As Seq.	N/A	N/A		
E	Green	5	As Seq.	N/A	N/A		
F	Red	6	As Seq.	N/A	N/A		

Note : A(*) character next to a sensor number indicates that the sensor would also be available on the External sensors screen. Please be sure you wish to use these sensors here, as they will then become unavailable for Regulatory Signs.

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Integral LMU External Sensors for Regulatory Signs

Integral LMU External Sensors for Regulatory Signs

External Sensors (1)

Sensor	Sensor Type
96	Regulatory Sign
95	Regulatory Sign
94	Regulatory Sign
93	Regulatory Sign

External Sensors (4)

Sensor	Sensor Type
--------	-------------

External Sensors (2)

Sensor	Sensor Type
--------	-------------

External Sensors (5)

Sensor	Sensor Type
--------	-------------

External Sensors (3)

Sensor	Sensor Type
--------	-------------

External Sensors (6)

Sensor	Sensor Type
--------	-------------

Note: Sensors which have been used as Onboard sensors will not be available here.

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

LMU Sensor Load Types

LMU Sensor Load Types

Screen Select

1

 of 1

Sensor	Phase	Sensor Type	LED R+W	Load Type	LLF Profile
1	A	As Seq.	Auto	1: Siemens Helios ELV	
2	B	As Seq.	Auto	1: Siemens Helios ELV	
3	C	As Seq.	Auto	1: Siemens Helios ELV	
4	D	As Seq.	Auto	1: Siemens Helios ELV	
5	E	As Seq.	Auto	1: Siemens Helios ELV	
6	F	As Seq.	Auto	1: Siemens Helios ELV	
7	G	As Seq.	Auto	1: Siemens Helios ELV	
93	N/A	Regulatory Sign	Auto	4: Siemens ELV Regulatory Sign	
94	N/A	Regulatory Sign	Auto	4: Siemens ELV Regulatory Sign	
95	N/A	Regulatory Sign	Auto	4: Siemens ELV Regulatory Sign	
96	N/A	Regulatory Sign	Auto	4: Siemens ELV Regulatory Sign	

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Hurry Call

Hurry Call

Hurry Call	Stage Called	Call Input Name	Cancel Input Name	Confirm Output Name	Delay Time	Hold Time	Prevent Time
0	1	*SCRT0	*SCRT1		0	20	120
1	2	*SCRT2	*SCRT3		0	20	120
2	2	*SCRT4	*SCRT5		0	20	120
3	4	*SCRT6	*SCRT7		0	20	120
4	5	*2SCRT0			0	20	120
5	5	*2SCRT1			0	20	120
6	7	*2SCRT2			0	20	120
7	8	*2SCRT3			0	20	120

Hurry Call Limit Values

	Min.	Max.
Call Delay	0	255
Call Hold	0	255
Call Prevent	0	255

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Manual Panel

Manual Panel

Stage Buttons and LEDs

Button No.	Title	Called Stage for Stream							
		0	1	2	3	4	5	6	7
0	All Red Stages 0-Strm0, Stage 3-Strm1, Stage 6-Strm2, Stage 9-Strm3	0	3	6	9				
1	All Gyratory + Wide Lane Left	1	4	7	10				
2	M27 Eastbound Off-Slip + Stoneham Lane + Wide Lane	2	5	8	10				
3									
4									
5									
6									
7									

General LEDs

	AUX 1	AUX 2	AUX 3	AUX 4 (Hurry Call)	AUX 5 (Higher Priority)
Conditioned	☒	☒	☒	☒	☒

General Buttons

	None	SW1	SW2	SW3
Momentary		☐	☐	☐
Dim Override	☒	☐	☐	☐
RR	☒	☐	☐	☐

Manual Signals On

☐ Immediate Signals On

☒ As Start-Up

Manual Mode Enable

☒ Always

☐ When Handset Plugged in (Note 1)

☐ When 'MND' Command Entered

NOTE:
For this to operate Special Conditioning is required.

Mode Select Switches Disabled

☐ VA ☐ Fixed Time ☐ CLF

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Reserve State

Reserve State

	Stream	0	1	2	3	4	5	6	7
Entry	Go to Switch Off Stage	☐	☐	☐	☐	☐	☐	☐	☐
	Timeout (seconds) Part Time on App Failure or Timeout	☐	☐	☐	☐	☐	☐	☐	☐
Limited Time	Linked Fixed Time	☒	☒	☒	☒	☒	☒	☒	☒
	Part Time	☐	☐	☐	☐	☐	☐	☐	☐
	Hold Stage	☐	☐	☐	☐	☐	☐	☐	☐
After Timeout	Linked Fixed Time	☒	☒	☒	☒	☒	☒	☒	☒
	Part Time	☐	☐	☐	☐	☐	☐	☐	☐
	Hold Stage	☐	☐	☐	☐	☐	☐	☐	☐

Global Settings

☒ Use Defaults
☐

Timeouts

0 = Use Firmware default

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Conditioning

```

; AUX LED'S
; =====
;
; AUX 1 LED LIT (see special instructions page 2)
; AUX 2 LED NOT USED.
; AUX 3 LED NOT USED.
(MODE0 EQL<5>+(MODE1 EQL<5>+ $
(MODE2 EQL<5>+(MODE3 EQL<5>))))=MIL07
; AUX 4 ( HURRY CALL ) LED LIT WHEN HURRY CALL MODE
; AUX 5 ( HIGHER PRIORITY ) LED (see special instructions page 2)

; ST950 SPECIAL FACILITIES FOR RMS IF AVAILABLE
; ~~~~~
MAXSETB+MAXSETF=ESPTX1
MAXSETC+MAXSETG=ESPTX2
MAXSETD+MAXSETH=ESPTX3
LMPANY0+LMPANY1+LMPANY2+LMPANY3=ESPTX4
LMP2RED0+LMP2RED1+LMP2RED2+LMP2RED3=ESPTX5
FLFCOM=ESPTX6
TRUE=ESPTX7
; MAXSET INFORMATION ALSO SENT ALONG SERIAL LINK
; ANY LAMP FAIL INFORMATION ALSO SENT ALONG SERIAL LINK
; 2ND RED LAMP FAIL INFO ALSO SENT ALONG SERIAL LINK
; CONTROLLER FAULT LOG ENTRY INFO ALSO SENT ALONG SERIAL LINK
; FLAG TO DETECT SERIAL LINK DISCONNECTION

; DOOR SWITCH OMU SERIAL LINK
; ~~~~~
NOT(DOORSW)=ESPTX0
; DOOR OPEN SEND SIGNAL TO OMU VIA SERIAL LINK

; DOOR CLOSED DISABLES MANUAL PANEL
; ~~~~~
DOORSW:=MNCONT
*=MSCONT
; DOOR CLOSED DISABLES MANUAL MODE CONTROL

```

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Conditioning

```
; CONFIGURATION OF THE O.T.U
; =====
;
; THE O.T.U SHOULD BE CONFIGURED SO THAT 'MOVA0T0' IS MAPPED TO 'MOVA0'.
; O.T.U SITE 'A' : MOVATO (AT GEMINI) CORRESPONDS TO MOVA0 ( AT CONTROLLER )
; ~~~~~
;
; UTC REPLY BITS
; =====
; G1/G2 UTC REPLY
; ~~~~~
IFT (MODE0 EQL<16>) THN ; IF IN MOVA 'MODE' THEN NORMAL STAGE CONFIRMS
    NOT(STAGE1) = G1 ; FOR MOVA APPLY I.E. G1/G2 IS NOT REPORTED
    NOT(STAGE2) = G2 ; FOR LAMP SUPPLY FAILURE IN 'MOVA' MODE
ELS
    LMPON.SWLMPS.NOT(FLF17).NOT(STAGE1)=G1 ; IN UTC 'MODE' STAGE CONFIRMS FOR UTC REQUIRE
    LMPON.SWLMPS.NOT(FLF17).NOT(STAGE2)=G2 ; LAMPS OFF CONDITIONING FOR G1 _G2 BITS
END

; MOVA OPERATIONAL REPLY BITS - STREAM 0
; ~~~~~
NOT(MODE0 EQL<16>)=MR0 ; MOVA ACTIVE REPLIES MR0 BIT - STREAM 0

; MOVA OPERATIONAL REPLY BITS - STREAM 1
; ~~~~~
NOT(MODE1 EQL<16>)=MR1 ; MOVA ACTIVE REPLIES MR1 BIT - STREAM 1

; MOVA OPERATIONAL REPLY BITS - STREAM 2
; ~~~~~
NOT(MODE2 EQL<16>)=MR2 ; MOVA ACTIVE REPLIES MR2 BIT - STREAM 2

; MOVA OPERATIONAL REPLY BITS
; ~~~~~
NOT MOVA0T0=ML0 ; MOVA ON CONTROL REPLIES ML0 - STREAM 0.
NOT MOVA1T0=ML1 ; MOVA ON CONTROL REPLIES ML1 - STREAM 1.
NOT MOVA2T0=ML2 ; MOVA ON CONTROL REPLIES ML2 - STREAM 2.

; MOVA FAULT CONTROL REPLY BITS
; ~~~~~
NOT MOVA0MF=MF0 ; MOVA FAULT REPLIES MF0 - STREAM 0.
NOT MOVA1MF=MF1 ; MOVA FAULT REPLIES MF1 - STREAM 1.
NOT MOVA2MF=MF2 ; MOVA FAULT REPLIES MF2 - STREAM 2.

NOT(FLF55)=LF1 ; ANY LAMP FAULT REPLIES UTC LF1
NOT(LMP2RED0+LMP2RED1+LMP2RED2+LMP2RED3)=LF2 ; ANY 2ND RED LAMP FAULT ANY STREAM REPLIES UTC LF2 BIT
```

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Conditioning

```
; MOVA RUNNING LED INDICATION
; =====
;
; MOVA RUNNING LED INDICATION
; =====
; THE FOLLOWING CONDITIONING USES THE AUX 1LED TO INDICATE WHETHER MOVA
; IS RUNNING ON ALL OR ANY OF THE STREAMS.
; ~~~~~~
; HAUX 1 LED FOR MOVA MANUAL PANEL
; ~~~~~~
IFT (MOVA0F1+MOVA0F2.(MOVA1F1+MOVA1F2 $
.(MOVA2F1+MOVA2F2))) THN ; IF ALL STREAMS ARE RUNNING MOVA
TRUE = MIL22 ; THEN ILLUMINATE AUX 1 L.E.D.
ELS

IFT (MOVA0F1+MOVA0F2+(MOVA1F1+MOVA1F2 $
+(MOVA2F1+MOVA2F2))) THN ; IF ONE OR MORE STREAMS ARE NOT RUNNING MOVA
INC 1SCRTCH30 ; THEN FLASH THE AUX 1 LED.
1SCRT240=MIL22
ELS
FALSE =MIL22 ; IF NO STREAMS ARE RUNNING MOVA EXTINGUISH THE LED.
END
END

; UTC RUNNING LED INDICATION
; =====
; THE FOLLOWING CONDITIONING USES THE HIGHER PRIORITY LED TO INDICATE WHETHER UTC
; IS RUNNING ON ALL OR ANY OF THE CONTROLLERS.
; ~~~~~~
IFT (F1+F2.(F4+F5.(F7+F8))) THN ; IF ALL STREAMS ARE RUNNING UTC
TRUE = MIL17 ; THEN ILLUMINATE THE HIGHER PRIORITY L.E.D.
ELS

IFT (F1+F2)+(F4+F5)+(F7+F8) THN ; IF ONE OR MORE STREAMS ARE NOT RUNNING UTC
INC 1SCRTCH31 ; THEN FLASH THE HIGHER PRIORITY LED.
1SCRT248=MIL17
ELS
FALSE =MIL17 ; IF NO STREAMS ARE RUNNING UTC EXTINGUISH THE LED.
END
END
```

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Conditioning

```
; ADDITIONAL DETECTOR FUNCTIONS
; =====
;
      BSL9+BSL11+BSL14=+LCPHB      ; BSL9, 11 _14 DEMAND AND EXTEND PHASE B
BSL9_EXT+BSL11_EXT+BSL14_EXT:=+EX0B
      *=+EXCB

      DSL30+DSL33+DSL35=+LCPHD      ; DSL30, 33 _35 DEMAND AND EXTEND PHASE D
DSL30_EXT+DSL33_EXT+DSL35_EXT:=+EX0D
      *=+EXCD
```

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Special Conditioning

```
; HURRY CALL 0 - ONLY OPERATES FROM VA / HURRY CALL MODE 0
; =====
;
; IFT (MODE0 EQL<2>)+(MODE0 EQL<5>) THN
; CNDTMA0=SCRT0 ; HURRY CALL 0 REQUEST FROM AIN1, AIN3 OR AIN5
END

(MODE0 EQL<4>)=SCRT1 ; MANUAL MODE CANCELS ALL HURRY CALL 0


; HURRY CALL 0
; =====
; AIN HURRY CALLS MOVA
; =====
; QUEUE LOOPS
; ~~~~~
; QUEUE DETECTORS FOLLOWING CALL TIME, PULSE MOVA DETECTOR 15
; ~~~~~
; (DETECTORS ARE AIN1, AIN3 or AIN5)
; =====
; KEY TO FLAGS AND TIMERS
; ~~~~~
; FLAGS TIMERS
; ~~~~~
; 2SCRT200 = 'CALL/CANCEL ACTIVE' FLAG CND TIMER 0 = MOVADET15 PULSE TIMER STREAM 0
; SCRT0 = 'HURRY CALL FLAG' CND TIMER 1 = MOVADET15 OVERRIDE TIMER STREAM 0
; SCRT1 = 'HURRY CANCEL FLAG'
;
; =====
;
; IFT ((CCT00.NOT(AIN1_DFM))+(CCT01.NOT(AIN3_DFM))) $
; +(CCT02.NOT(AIN5_DFM))) .NOT(PHASEA) $
; .NOT(2SCRT200) .NOT(CNDTMA1) THN ; IF CALL / CANCEL UNIT ACTIVE AND IF NOT IN PHASE THEN
; RUN<0> ; RUN MOVADET PULSE TIMER AND
; RUN<1> ; RUN OVERRIDE TIMER.
END

CNDTMA0=+MOVA0DET15 ; IF MOVADET PULSE TIMER ACTIVE OUTPUT TO MOVADET15

CNDTMA0.(MODE0 EQL<2>+MODE0 EQL<5>)=SCRT0 ; AND SET HURRY CALL FLAG IN VA AND HURRY CALL MODES.

(MODE0 EQL<4>)=SCRT1 ; MANUAL MODE CANCELS HURRY CALL 0

((CCT00.NOT(AIN1_DFM))+(CCT01.NOT(AIN3_DFM))) $
+(CCT02.NOT(AIN5_DFM)))=2SCRT200 ; STATE OF CALL / CANCEL TIMER 200MS ;LATER.
```

Works Order : 460907478
EM Number : 84052
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Special Conditioning

```
; HURRY CALL 1 - ONLY OPERATES FROM VA / HURRY CALL MODE 0
; =====
;
; IFT (MODE0 EQL<2>)+(MODE0 EQL<5>) THN
; CNDTMA2=SCRT2 ; HURRY CALL 1 REQUEST FROM BQ1
END
;
; (MODE0 EQL<4>)=SCRT3 ; MANUAL MODE CANCELS ALL HURRY CALL 1

; HURRY CALL 1
; =====
; BQ1 HURRY CALLS MOVA
; =====
; QUEUE LOOPS
; ~~~~~
; QUEUE DETECTORS FOLLOWING CALL TIME, PULSE MOVA DETECTOR 16
; ~~~~~
; (DETECTORS ARE BQ1)
; =====
; KEY TO FLAGS AND TIMERS
; ~~~~~
; FLAGS TIMERS
; ~~~~~
; 2SCRT201 = 'CALL/CANCEL ACTIVE' FLAG CND TIMER 2 = MOVADET16 PULSE TIMER STREAM 0
; SCRT2 = 'HURRY CALL FLAG CND TIMER 3 = MOVADET16 OVERRIDE TIMER STREAM 0
; SCRT3 = 'HURRY CANCEL FLAG'
;
; =====
;
; IFT ((CCT03.NOT(BQ1_DFM))).NOT(PHASEB) $
; .NOT(2SCRT201).NOT(CNDTMA3) THN ; IF CALL / CANCEL UNIT ACTIVE AND IF NOT IN PHASE THEN
; RUN<2> ; RUN MOVADET PULSE TIMER AND
; RUN<3> ; RUN OVERRIDE TIMER.
END

CNDTMA2+=MOVA0DET16 ; IF MOVADET PULSE TIMER ACTIVE OUTPUT TO MOVADET16

CNDTMA2.(MODE0 EQL<2>+MODE0 EQL<5>)=SCRT2 ; AND SET HURRY CALL FLAG IN VA AND HURRY CALL MODES.

(MODE0 EQL<4>)=SCRT3 ; MANUAL MODE CANCELS HURRY CALL 1

((CCT03.NOT(BQ1_DFM)))=2SCRT201 ; STATE OF CALL / CANCEL TIMER 200MS ;LATER.
```

Works Order : 460907478
EM Number : 84052
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Special Conditioning

```
; HURRY CALL 2 - ONLY OPERATES FROM VA / HURRY CALL MODE 0
; =====
;
; IFT (MODE0 EQL<2>)+(MODE0 EQL<5>) THN
; CNDTMA4=SCRT4 ; HURRY CALL 2 REQUEST FROM BQ2
END
;
; (MODE0 EQL<4>)=SCRT5 ; MANUAL MODE CANCELS ALL HURRY CALL 1

; HURRY CALL 2
; =====
; BQ2 HURRY CALLS MOVA
; =====
; QUEUE LOOPS
; ~~~~~
; QUEUE DETECTORS FOLLOWING CALL TIME, PULSE MOVA DETECTOR 17
; ~~~~~
; (DETECTORS ARE BQ2)
; =====
; KEY TO FLAGS AND TIMERS
; ~~~~~
; FLAGS TIMERS
; ~~~~~
; 2SCRT202 = 'CALL/CANCEL ACTIVE' FLAG CND TIMER 4 = MOVADET17 PULSE TIMER STREAM 0
; SCRT4 = 'HURRY CALL FLAG' CND TIMER 5 = MOVADET17 OVERRIDE TIMER STREAM 0
; SCRT5 = 'HURRY CANCEL FLAG'
;
; =====
;
; IFT ((CCT04.NOT(BQ2_DFM))) .NOT(PHASEB) $
; .NOT(2SCRT202) .NOT(CNDTMA5) THN ; IF CALL / CANCEL UNIT ACTIVE AND IF NOT IN PHASE THEN
; RUN<4> ; RUN MOVADET PULSE TIMER AND
; RUN<5> ; RUN OVERRIDE TIMER.
END

CNDTMA4=+MOVA0DET17 ; IF MOVADET PULSE TIMER ACTIVE OUTPUT TO MOVADET17

CNDTMA4.(MODE0 EQL<2>+MODE0 EQL<5>)=SCRT4 ; AND SET HURRY CALL FLAG IN VA AND HURRY CALL MODES.

(MODE0 EQL<4>)=SCRT5 ; MANUAL MODE CANCELS HURRY CALL 2

((CCT04.NOT(BQ2_DFM)))=2SCRT202 ; STATE OF CALL / CANCEL TIMER 200MS ;LATER.
```

Works Order : 460907478
EM Number : 84052
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Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Conditioning

```
; HURRY CALL 3 - ONLY OPERATES FROM VA / HURRY CALL MODE 1
; =====
;
; IFT (MODE1 EQL<2>)+(MODE1 EQL<5>) THN
; CNDTMA6=SCRT6 ; HURRY CALL 1 REQUEST FROM BQ1
END

(MODE1 EQL<4>)=SCRT7 ; MANUAL MODE CANCELS ALL HURRY CALL 3


; HURRY CALL 3
; =====
; CX HURRY CALLS MOVA
; =====
; QUEUE LOOPS
; ~~~~~
; QUEUE DETECTORS FOLLOWING CALL TIME, PULSE MOVA DETECTOR 13
; ~~~~~
; (DETECTORS ARE CX25, CX26 or CX27)
; =====
; KEY TO FLAGS AND TIMERS
; ~~~~~
; FLAGS TIMERS
; ~~~~~
; 2SCRT203 = 'CALL/CANCEL ACTIVE' FLAG CND TIMER 6 = MOVADET13 STREAM 1 PULSE TIMER
; SCRT6 = 'HURRY CALL FLAG' CND TIMER 7 = MOVADET13 STREAM 1 OVERRIDE TIMER
; SCRT7 = 'HURRY CANCEL FLAG'
;
; =====
;
; IFT ((CCT05.NOT(CX25_DFM))+(CCT06.NOT(CX26_DFM)) $
+(CCT07.NOT(CX27_DFM))) .NOT(PHASEC) $
.NOT(2SCRT203) .NOT(CNDTMA7) THN ; IF CALL / CANCEL UNIT ACTIVE AND IF NOT IN PHASE THEN
; RUN<6> ; RUN MOVADET PULSE TIMER AND
; RUN<7> ; RUN OVERRIDE TIMER.
END

CNDTMA6+=MOVA1DET13 ; IF MOVADET PULSE TIMER ACTIVE OUTPUT TO MOVA1DET13

CNDTMA6.(MODE1 EQL<2>+MODE1 EQL<5>)=SCRT6 ; AND SET HURRY CALL FLAG IN VA AND HURRY CALL MODES.

;(MODE1 EQL<4>)=SCRT5 ; MANUAL MODE CANCELS HURRY CALL 3

((CCT05.NOT(CX25_DFM))+(CCT06.NOT(CX26_DFM)) $
+(CCT07.NOT(CX27_DFM)))=2SCRT203 ; STATE OF CALL / CANCEL TIMER 200MS LATER.
```

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Conditioning

```
; ADDITIONAL DETECTOR FUNCTIONS DOUBLED UP AS SCCOT LOOP
; =====
;
DQ1A+DQ1B=+MOVADET53 ; DQ1A OR DQ1B INTO MOVADET53

; QUEUE LOOPS DQ1A LOOPS INTO MOVA
; ~~~~~
; ADDITIONAL CALL CANCEL UNIT 9 FOR DQ1A LOOPS
; ~~~~~
IFT (DQ1A) THN ; IF DQ1A ACTIVE THEN
    RUN<9> ; RUN TIMER 9
END

IFT NOT(CNDTMA9) THN ; IF TIMER 9 NOT ACTIVE THEN
    RUN<8> ; RUN TIMER 8
END

IFT (CNDTER8) THN ; TIMER 8 TERMINATES THEN
    TRUE=+2SCRT0 ; INSERT A FLAG
END

IFT NOT(2SCRT0) THN ; FLAG NOT SET
    RUN<10> ; RUN TIMER 10
END

IFT (CNDTER10+CNDTER13) THN ; IF TIMERS 10 OR 13 TERMINTED THEN
    RUN<14> ; RUN TIMER 14 FOR MOVA1DET12
END

CNDTMA9=.2SCRT0 ; TIMER 9 ACTIVE INTO HURRY CALL

; QUEUE LOOPS DQ1B LOOPS INTO MOVA
; ~~~~~
; ADDITIONAL CALL CANCEL UNIT 10 FOR DQ1B LOOPS
; ~~~~~
IFT (DQ1B) THN ; IF DQ1B ACTIVE THEN
    RUN<12> ; RUN TIMER 12
END

IFT NOT(CNDTMA12) THN ; IF TIMER 12 NOT ACTIVE THEN
    RUN<11> ; RUN TIMER 11
END

IFT (CNDTER11) THN ; TIMER 11 TERMINATES THEN
    TRUE=+2SCRT1 ; INSERT A FLAG
END

IFT NOT(2SCRT1) THN ; FLAG NOT SET
    RUN<13> ; RUN TIMER 13
END

CNDTMA12=.2SCRT1 ; TIMER 12 ACTIVE INTO HURRY CALL
CNDTMA14=MOVA1DET12 ; TIMER 14 ACTIVE INTO MOVA1DET12 FOR STREAM 1
```

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Conditioning

```
; ADDITIONAL DETECTOR FUNCTIONS DOUBLED UP AS SCCOT LOOP
; =====
;
; FQ1A+FQ1B=+MOVADET46 ; FQ1A OR FQ1B INTO MOVADET46

; QUEUE LOOPS FQ1A LOOPS INTO MOVA
; ~~~~~
; ADDITIONAL CALL CANCEL UNIT 13 FOR FQ1A LOOPS
; ~~~~~
IFT (FQ1A) THN ; IF FQ1A ACTIVE THEN
    RUN<26> ; RUN TIMER 26
END

IFT NOT(CNDTMA26) THN ; IF TIMER 26 NOT ACTIVE THEN
    RUN<25> ; RUN TIMER 25
END

IFT (CNDTER25) THN ; TIMER 25 TERMINATES THEN
    TRUE=+2SCRT7 ; INSERT A FLAG
END

IFT NOT(2SCRT7) THN ; FLAG NOT SET
    RUN<27> ; RUN TIMER 27
END

IFT (CNDTER27+CNDTER30) THN ; IF TIMERS 27 OR 30 TERMINTED THEN
    RUN<31> ; RUN TIMER 31
END

CNDTMA26=.2SCRT7 ; TIMER 26 ACTIVE LATCHES A FLAG

; QUEUE LOOPS FQ1B LOOPS INTO MOVA
; ~~~~~
; ADDITIONAL CALL CANCEL UNIT 10 FOR FQ1B LOOPS
; ~~~~~
IFT (FQ1B) THN ; IF FQ1B ACTIVE THEN
    RUN<29> ; RUN TIMER 29
END

IFT NOT(CNDTMA29) THN ; IF TIMER 29 NOT ACTIVE THEN
    RUN<28> ; RUN TIMER 28
END

IFT (CNDTER28) THN ; TIMER 28 TERMINATES THEN
    TRUE=+2SCRT8 ; INSERT A FLAG
END

IFT NOT(2SCRT8) THN ; FLAG NOT SET
    RUN<30> ; RUN TIMER 30
END

CNDTMA29=.2SCRT8 ; TIMER 29 ACTIVE LATCHES A FLAG
CNDTMA31=MOVA2DET10 ; TIMER 31 ACTIVE INTO MOVA2DET10 FOR STREAM 2

2SCRT7+2SCRT8=2SCRT3 ; SCRT BITS ACTIVE ACTIVATES HURRY CALL
```

Works Order : 460907478
EM Number : 84052
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Special Conditioning

```
; ADDITIONAL DETECTOR FUNCTIONS DOUBLED UP AS SCCOT LOOP
; =====
;
;
; QUEUE LOOPS EX45 LOOPS INTO MOVA
; ~~~~~
; ADDITIONAL CALL CANCEL UNIT 10 FOR EX45 LOOP
; ~~~~~
IFT (EX45) THN ; IF EX45 ACTIVE THEN
    RUN<16> ; RUN TIMER 16
END

IFT NOT(CNDTMA16) THN ; TIMER 16 NOT ACTIVE THEN
    RUN<15> ; RUN TIMER 15
END

IFT (CNDTER15) THN ; TIMER 15 TERMINATED THEN
    TRUE=+2SCRT4 ; INSERT A FLAG
END

IFT NOT(2SCRT4) THN ; IF FLAG NOT SET THEN
    RUN<17> ; RUN TIMER 17
END

IFT (CNDTER17+CNDTER20+CNDTER23) THN ; TIMERS 17, 20 OR 23 TERMINATED THEN
    RUN<24> ; RUN TIMER 24
END

CNDTMA16=.2SCRT4 ; TIMER 26 ACTIVE INTO HURRY CALL

;
; QUEUE LOOPS EX46 LOOP INTO MOVA
; ~~~~~
; ADDITIONAL CALL CANCEL UNIT 11 FOR EX46 LOOP
; ~~~~~
IFT (EX46) THN ; IF EX46 ACTIVE THEN
    RUN<19> ; RUN TIMER 19
END

IFT NOT(CNDTMA19) THN ; TIMER 19 NOT ACTIVE THEN
    RUN<18> ; RUN TIMER 19
END

IFT (CNDTER18) THN ; TIMER 18 TERMINATED THEN
    TRUE=+2SCRT5
END

IFT NOT(2SCRT5) THN ; IF FLAG NOT SET THEN
    RUN<20> ; RUN TIMER 20
END

CNDTMA19=.2SCRT5 ; TIMER 19 ACTIVE INTO HURRY CALL

; CONTINUED ON NEXT PAGE
; ~~~~~
```

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Conditioning

```
; CONTINUED FROM PREVIOUS PAGE
; =====
;
; QUEUE LOOPS EX47 LOOP INTO MOVA
; ~~~~~
; ADDITIONAL CALL CANCEL UNIT 12 FOR EX47 LOOP
; ~~~~~
IFT (EX47) THN ; IF EX47 ACTIVE THEN
RUN<22> ; RUN TIMER 22
END

IFT NOT(CNDTMA22) THN ; IF TIMER 22 NOT ACTIVE THEN
RUN<21> ; RUN TIMER 21
END

IFT (CNDTER21) THN ; IF TIMER 21 TERMINATED THEN
TRUE=+2SCRT6 ; INSERT A FLAG
END

IFT NOT(2SCRT6) THN ; IF FLAG NOT ACTIVE THEN
RUN<23> ; RUN TIMER 23
END

CNDTMA22=.2SCRT6 ; TIMER 22 SETS A FLAG
CNDTMA24=MOVA2DET11 ; TIMER 24 ACTIVE INTO MOVA2DET11 - STREAM 2

2SCRT4+2SCRT5+2SCRT6=2SCRT2 ; FLAGS ACTIVE INTO HURRY CALL
```

Works Order : 460907478
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Special Conditioning

```
; INTERNAL MOVA LINKING FOR STREAM 0
; =====
;
;
; STREAM 0
; =====
;
; MOVA DETECTOR 32 ON STREAM 0 IS TO BE HELD ACTIVE WHEN PHASE C LOOSES RIGHT OF WAY,
; AN OVERRIDE TIMER INITIALLY SET TO 30 SECONDS SHALL ALSO BE CONFIGURED,
; MOVA DETECTOR 32 ON STREAM 0 SHALL BE TIMETABLED TO OPERATE BETWEEN THE HOURS
; OF 07:00 AND 21:00 AND SHALL BE DIS / ENABLED BY HANDSET COMMAND, TURNED OFF BY DEFAULT.
; =====
;
;
IFT PHASEC THN ; PHASE C NOT ACTIVE THEN
    RUN<96> ; RUN TIMER 96
END
IFT NOT(PHASEC).1SCRT2 THN ; PHASE C ENDS START HOLD
    TRUE=1SCRT0
END
PHASEC=1SCRT2
IFT NOT(PHASED).1SCRT1 THN ; PHASE D ENDS END HOLD
    FALSE=1SCRT0
    RUN<33> ; START DELAY FOR PULSE DET34
END

IFT CNDTER33 THN
    RUN<34> ; 32 ENDS START PULSE TIMER 34
END

CNDTMA34.MTCF0.CFF34=+MOVA0DET34 ; PULSE DET 34 TO STREAM 0

PHASED=1SCRT1
1SCRT0.CNDTMA96.CFF32.MTCF0=+MOVA0DET32 ; PHASE C NOT AT GREEN, CFF32=1 AND TIMESWITCH MTCF0 ON
; AND TIMER 96 ACTIVE SETS MOVADET32 ON STREAM 0
```

Works Order : 460907478
EM Number : 84052
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Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Conditioning

```
; INTERNAL MOVA LINKING FOR STREAM 1
; =====
;
;
; STREAM 1
; =====
;
;
; MOVA DETECTOR 28 ON STREAM 1 IS TO BE HELD ACTIVE WHEN PHASE E LOOSES RIGHT OF WAY,
; AN OVERRIDE TIMER INITIALLY SET TO 30 SECONDS SHALL ALSO BE CONFIGURED,
; MOVA DETECTOR 28 ON STREAM 1 SHALL BE TIMETABLED TO OPERATE BETWEEN THE HOURS
; OF 07:00 AND 21:00 AND SHALL BE DIS / ENABLED BY HANDSET COMMAND,
; TURNED OFF BY DEFAULT.
; =====
;
;
IFT PHASEE THN                                ; IF PHASE E ACTIVE THEN
    RUN<97>                                    ; RUN TIMER 97
END
NOT(PHASEE) .CNDTMA97.CFF92.MTCF1=+MOVA1DET28 ; PHASE E NOT AT GREEN, CFF92=1 AND TIMESWITCH
; MTCF1 ON AND TIMER 97 ACTIVE SETS MOVADET28
; ON IN STREAM 1
;
;
; =====
;
;
; MOVA DETECTOR 29 ON STREAM 1 IS TO BE PULSED FOR 2 SECONDS, AFTER A USER CONFIGURABLE PERIOD
; INITIALLY SET TO 10 SECONDS AFTER PHASE A GOES TO RIGHT OF WAY, MOVA DETECTOR 29 ON STREAM 1
; SHALL BE TIMETABLED TO OPERATE BETWEEN THE HOURS OF 07:00 AND 21:00 AND SHALL BE DIS / ENABLED
; BY HANDSET COMMAND, TURNED OFF BY DEFAULT.
;
;
IFT NOT(PHASEA) THN                            ; IF PHASE A NOT ACTIVE THEN
    RUN<98>                                    ; RUN TIMER 98
END
IFT CNDTER98 THN                               ; TIMER 98 TERMINATED THEN
    RUN<99>                                    ; RUN TIMER 99
END
CNDTMA99.CFF93.MTCF1=+MOVA1DET29              ; TIMER 99 ACTIVE AND CFF93 AND TIMESWITCH MTCF1 ON
; SETS MOVA1DET29 ON IN STREAM 1
;
;
; CONTINUED ON NEXT PAGE
; ~~~~~
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Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Conditioning

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; CONTINUED FROM PREVIOUS PAGE
; =====
;
; MOVA DETECTOR 30 ON STREAM 1 SHALL BE HELD ACTIVE FOR A MINIMUM PERIOD,
; CONFIGURABLE BY HANDSET COMMAND INITIALLY SET TO 6 SECONDS, AFTER A USER CONFIGURABLE DELAY PERIOD
; INITIALLY SET TO 2, AFTER PHASE A GOES TO RIGHT OF WAY, MOVA DETECTOR 30 ON STREAM 1 SHALL REMAIN
; ACTIVE AFTER THE MINIMUM HOILD PERIOD IF PHASE IS AT ; RIGHT OF WAY AND PHASE EXTENSIONS EXIST
; FOR PHASE C, MOVA DETECTOR 30 ON STREAM 1 SHALL CLEAR AFTER A USER CONFIGURABLE PERIOD INITIALLY
; SET TO 5 SECONDS, AFTER PHASE A LOOSES RIGHT OF WAY, MOVA DETECTOR 30 ON STREAM 1 SHALL BE
; TIMETABLED TO OPERATE BETWEEN THE HOURS OF 07:00 AND 21:00 AND SHALL BE DIS / ENABLED BY HANDSET,
; TURNED OFF BY DEFAULT.
;
IFT PHASEA.2SCRT255 THN ; IF PHASE A AND FLAG SET THEN
    RUN<100> ; RUN DELAY TIMER 100DELAY SET TO 2S
END
NOT(PHASEA)=2SCRT255 ; PHASE A INSERTS A FLAG
IFT CNDTER100 THN ; TIMER 100 TERMINATED THEN
    RUN<101> ; RUN MINIMUM TIMER SET TO 6S
END
IFT PHASEA.EXTAC THN ; PHASE A AND EXTENSIONS FOR C AND TIMER101
    RUN<102> ; NOT ACTIVE THEN RUN TIMER 102 SET TO 1S
END
IFT NOT(PHASEA).CNDTMA102 THN ; IF PHASE A NOT ACTIVE AND TIMER 102 ACTIVE THEN
    RUN<103> ; DELAY AFTER PHASE A TERMINATED SET TO 5S WITH
END ; EXTENSIONS ON C

((CNDTMA101+CNDTMA102+CNDTMA103). $ ; TIMER 101, 102 OR 103 ACTIVE
NOT(CNDTMA100)) $ ; AND TIMER 100 NOT ACTIVE
.CFF94.MTCF1=+MOVA1DET30 ; AND CFF94 AND TIMESWITCH MTCF3 ON SETS MOVA1DET30
;

; =====
;
; MOVA DETECTOR 31 ON STREAM 1 IS TO BE PULSED FOR 2 SECONDS, AFTER A USER CONFIGURABLE PERIOD INITIALLY
; SET TO 10 SECONDS AFTER PHASE B GOES TO RIGHT OF WAY, MOVA DETECTOR 31 ON STREAM 1 SHALL BE TIMETABLED
; TO OPERATE BETWEEN THE HOURS OF 07:00 AND 21:00 AND SHALL BE DIS / ENABLED BY HANDSET COMMAND,
; TURNED OFF BY DEFAULT.
;
IFT NOT(PHASEB) THN ; IF PHASE B NOT ACTIVE THEN
    RUN<104> ; RUN TIMER DELAY 104 DELAY SET TO 10S
END
IFT CNDTER104 THN ; TIMER 104 TERMINATED THEN
    RUN<105> ; RUN TIMER 105 SET TO 2S
END
CNDTMA105.CFF95.MTCF1=+MOVA1DET31 ; TIMER 105 AND CFF95 AND TIMESWITCH MTCF4 ON
; SETS MOVA1DET30 ON STREAM 1

; CONTINUED ON NEXT PAGE
; ~~~~~
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Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Conditioning

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; CONTINUED FROM PREVIOUS PAGE
; =====
;
; MOVA DETECTOR 32 ON STREAM 1 SHALL BE HELD ACTIVE FOR A MINIMUM PERIOD, CONFIGURABLE BY HANDSET
; COMMAND INITIALLY SET TO 6 SECONDS, FOR A USER CONFIGURABLE PERIOD INITIALLY SET TO 2 SECONDS,
; AFTER PHASE B GOES TO RIGHT OF WAY, MOVA DETECTOR 32 ON STREAM 1 SHALL REMAIN ACTIVE AFTER THE
; MINIMUM HOLD PERIOD IF PHASE B IS AT RIGHT OF WAY AND PHASE EXTENSIONS EXIST FOR PHASE C,
; MOVA DETECTOR 32 ON STREAM 1 SHALL CLEAR AFTER A USER CONFIGURABLE PERIOD, INITIALLY SET
; TO 5 SECONDS, AFTER PHASE B LOOSES RIGHT OF WAY, MOVA DETECTOR 32 ON STREAM 1 SHALL ALSO CLEAR
; IF EXTENSIONS FOR PHASE C EXPIRE, MOVA DETECTOR 32 ON STREAM 1 SHALL BE TIMETABLED TO OPERATE
; BETWEEN THE HOURS OF 07:00 AND 21:00 AND SHALL BE DIS / ENABLED BY HANDSET COMMAND,
; TURNED OFF BY DEFAULT
;
IFT NOT(PHASEB).2SCRT254 THN ; IF PHASE B AND FLAG SET THEN
    RUN<106> ; RUN DELAY TIMER SET TO 2S
END
NOT(PHASEB)=2SCRT254 ; PHASE B NOT ACTIVE SETS A FLAG
IFT CNDTER106 THN ; IF TIMER 106 TERMINATED THEN
    RUN<107> ; RUN TIMER 107 MINIMUM TIME SET TO 6S
END
IFT PHASEB.EXTAC THN ; PHASE B AND EXTENSIONS FOR C AND TIMER 107 NOT
    RUN<108> ; ACTIVE THEN RUN TIMER 106 SET TO 1S
END
IFT NOT(PHASEB).CNDTMA108 THN ; IF PHASE B NOT ACTIVE AND TIMER 108 ACTIVE THEN
    RUN<109> ; DELAY AFTER PHASE B TERMINATED SET TO 5S WITH
END ; EXTENSIONS ON C

((CNDTMA107+CNDTMA108+CNDTMA109) $ ; TIMER 107, 108 OR 109 ACTIVE
.NOT(CNDTMA106)) $ ; AND TIMER 106 NOT ACTIVE
.CFF96.MTCF1=+MOVA1DET32 ; AND CFF96 AND TIMESWITCH MTCF5 ON SETS MOVA1DET32
;
; =====
```

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Conditioning

```
; INTERNAL MOVA LINKING FOR STREAM 2
; =====
;
;
; STREAM 2
; =====
;
;
; MOVA DETECTOR 29 ON STREAM 2 IS TO BE PULSED FOR 2 SECONDS, AFTER A USER CONFIGURABLE PERIOD
; INITIALLY SET TO 10 SECONDS AFTER PHASE A GOES TO RIGHT OF WAY, MOVA DETECTOR 29 ON STREAM 2
; SHALL BE TIMETABLED TO OPERATE BETWEEN THE HOURS OF 07:00 AND 21:00 AND SHALL BE
; DIS / ENABLED BY HANDSET COMMAND,
; TURNED OFF BY DEFAULT.
;
;
IFT NOT(PHASEC) THN                                ; IF PHASE C ACTIVE THEN
    RUN<112>                                         ; USER CONFIGURABLE DELAY SET TO 10S
END
IFT CNDTER112 THN                                  ; IF TIMER 112 TERMINATED THEN
    RUN<113>                                         ; RUN TIMER 113 SET TO 2S
END
CNDTMA113.CFF157.MTCF2=+MOVA2DET29                ; TIMER 113 AND CFF157 AND TIMETABLED INTO
;

; =====
;
;
; MOVA DETECTOR 30 ON STREAM 2 SHALL BE HELD ACTIVE FOR A MINIMUM PERIOD, CONFIGURABLE BY HANDSET
; COMMAND INITIALLY SET TO 6 SECONDS, AFTER A USER CONFIGURABLE DELAY PERIOD INITIALLY SET TO 2,
; AFTER PHASE C GOES TO RIGHT OF WAY, MOVA DETECTOR 30 ON STREAM 1 SHALL REMAIN ACTIVE AFTER
; THE MINIMUM HOILD PERIOD IF PHASE IS AT RIGHT OF WAY AND PHASE EXTENSIONS EXIST FOR PHASE E,
; MOVA DETECTOR 30 ON STREAM 2 SHALL CLEAR AFTER A USER CONFIGURABLE PERIOD INITIALLY SET
; TO 5 SECONDS, AFTER PHASE C LOOSES RIGHT OF WAY, MOVA DETECTOR 30 ON STREAM 2 SHALL ALSO CLEAR
; IF EXTENSIONS FOR E EXPIRE, MOVA DETECTOR 30 ON STREAM 2 SHALL BE TIMETABLED TO OPERATE BETWEEN
; THE HOURS OF 07:00 AND 21:00 AND SHALL BE DIS / ENABLED BY HANDSET,
; TURNED OFF BY DEFAULT.
; =====
;
;
IFT PHASEC.2SCRT253 THN                            ; IF PHASE C ACTIVE THEN
    RUN<114>                                         ; DELAY SET TO 2S
END
NOT(PHASEC)=2SCRT253                               ; PHASE C NOT ACTIVE INSERTS A FLAG
IFT CNDTER114 THN                                  ; IF TIMER 114 TERMINATED THEN
    RUN<115>                                         ; MINIMUM TIME SET TO 6S
END
IFT PHASEC.EXTAE THN
    RUN<116>                                         ; SET TO 1S
END
IFT NOT(PHASEC).CNDTMA116 THN                      ; NOT PHASE C AND TIMER ACTIVE THEN
    RUN<117>                                         ; RUN TIMER 117 SET TO 5S WITH EXTENSIONS ON E
END
((CNDTMA115+CNDTMA116+CNDTMA117) $                ; TIMER 115, 116 OR 117 ACTIVE
.NOT(CNDTMA114)).CFF158.MTCF2=+MOVA2DET30          ; TIMER 114 NOT ACTIVE AND CFF158 AND TIMESWITCH
;

;
; CONTINUED ON NEXT PAGE
; =====
```

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Conditioning

```
; CONTINUED FROM PREVIOUS PAGE
; =====
;
; MOVA DETECTOR 31 ON STREAM 2 IS TO BE PULSED FOR 2 SECONDS, AFTER A USER CONFIGURABLE PERIOD
; INITIALLY SET TO 10 SECONDS AFTER PHASE D GOES TO RIGHT OF WAY, MOVA DETECTOR 31 ON STREAM 2
; SHALL BE TIMETABLED TO OPERATE BETWEEN THE HOURS OF 07:00 AND 21:00 AND SHALL BE
; DIS / ENABLED BY HANDSET COMMAND,
; TURNED OFF BY DEFAULT.
;
;
IFT NOT(PHASED) THN ; PHASE D ACTIVE THEN
  RUN<118> ; RUN DELAY TIMER SET TO 10S
END
IFT CNDTER118 THN ; DELAY TIMER TERMINATED THEN
  RUN<119> ; SET TO 2S
END
CNDTMA119.CFF159.MTCF2=+MOVA2DET31 ; TIMER 119 AND CFF159 AND TIMESWITCH MTCF2 ON
;

; =====
;
; MOVA DETECTOR 32 ON STREAM 2 SHALL BE HELD ACTIVE FOR A MINIMUM PERIOD, CONFIGURABLE BY HANDSET
; COMMAND INITIALLY SET TO 6 SECONDS, AFTER A USER CONFIGURABLE DELAY PERIOD INITIALLY SET TO 2,
; AFTER PHASE D GOES TO RIGHT OF WAY, MOVA DETECTOR 32 ON STREAM 2 SHALL REMAIN ACTIVE AFTER
; THE MINIMUM HOLD PERIOD IF PHASE D IS AT RIGHT OF WAY AND PHASE EXTENSIONS EXIST FOR PHASE E,
; MOVA DETECTOR 32 ON STREAM 2 SHALL CLEAR AFTER A USER CONFIGURABLE PERIOD INITIALLY SET
; TO 5 SECONDS, AFTER PHASE D LOOSES RIGHT OF WAY, MOVA DETECTOR 32 ON STREAM 2 SHALL ALSO CLEAR
; IF EXTENSIONS FOR E EXPIRE, MOVA DETECTOR 32 ON STREAM 2 SHALL BE TIMETABLED TO OPERATE BETWEEN
; THE HOURS OF 07:00 AND 21:00 AND SHALL BE DIS / ENABLED BY HANDSET,
; TURNED OFF BY DEFAULT.
; =====
;
;
IFT PHASED.2SCRT252 THN ; IF PHASE D AND FLAG ACTIVE THEN
  RUN<120> ; RUN DELAY TIMER SET TO 2S
END
NOT(PHASED)=2SCRT252 ; IF PHASE D NOT ACTIVE SETS A FLAG
IFT CNDTER120 THN ; IF DELAY TIMER TERMINATED
  RUN<121> ; MINIMUM TIME SET TO 6S
END
IFT PHASED.EXTAE THN ; IF PHASE D AND EXTENSIONS ACTIVE FOR PHASE E
  RUN<122> ; RUN TIMER 122 SET TO 1S
END
IFT NOT(PHASED).CNDTMA122 THN ; IF PHASE D NOT ACTIVE AND TIMER 122 ACTIVE THEN
  RUN<123> ; RUN DELAY TIMER 123
END
((CNDTMA121+CNDTMA122+CNDTMA123) $ ; TIMER 121, 122 OR 123 ACTIVE
.NOT(CNDTMA120)).CFF160.MTCF2=+MOVA2DET32 ; TIMER 120 NOT ACTIVE AND CFF160 AND TIMESWITCH
;

; =====
```

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Conditioning

```
; OUTPUTS FROM EASTBOUND CONTROLLER TO WESTBOUND CONTROLLER
; =====

; EBCPHE OUTPUT
; ~~~~~
IFT ETOROW THN ; WHEN PHASE E TO RIGHT OF WAY THEN SET A FLAG
TRUE=2SCRT30
ELS
IFT TERME THN ; WHEN PHASE E TERMINATES CLEAR THE FLAG
FALSE=2SCRT30
END
END

2SCRT30=EBCPHE ; WHEN FLAG SET OUTPUT EBCPHE

; EBCPHF OUTPUT
; ~~~~~
IFT FTOROW THN ; WHEN PHASE F TO RIGHT OF WAY THEN SET A FLAG
TRUE=2SCRT31
ELS
IFT TERMF THN ; WHEN PHASE F TERMINATES CLEAR THE FLAG
FALSE=2SCRT31
END
END

2SCRT31=EBCPHF ; WHEN FLAG SET OUTPUT EBCPHF

; EBCPHA OUTPUT
; ~~~~~

PHASEA=EBCPHA ; WHEN PHASE A AT ROW SEND EBCPHA
```

Works Order : 460907478
EM Number : 84052
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Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Conditioning

```
; STREAM 2 BACKWARD LINKING
; =====
;
; MOVA DETECTOR 28 ON STREAM 2 IS TO HELD ACTIVE UPON RECEIPT OF WBCPHABL, AFTER A USER CONFIGURABLE PERIOD
; INITIALLY SET TO 30 SECONDS AFTER WBCPHABL ACTIVE, MOVA DETECTOR 28 ON STREAM 2
; SHALL BE TIMETABLED TO OPERATE BETWEEN THE HOURS OF 07:00 AND 21:00 AND SHALL BE
; DIS / ENABLED BY HANDSET COMMAND,
; TURNED OFF BY DEFAULT.
;
;
IFT NOT(WBCPHABL) THN ; IF WBCPHABL ACTIVE THEN
    RUN<124> ; USER CONFIGURABLE DELAY SET TO 0.4S
END
IFT CNDTER124 THN ; IF TIMER 124 TERMINATED THEN
    RUN<125> ; RUN TIMER 125 SET TO 30
END
CNDTMA125.CFF156.MTCF2=+MOVA2DET28 ; TIMER 125 AND CFF156 AND TIMETABLED INTO

; STREAM 0 BACKWARD LINKING
; =====
;
; MOVA DETECTOR 33 ON STREAM 0 IS TO HELD ACTIVE UPON RECEIPT OF WBAR, AFTER A USER CONFIGURABLE PERIOD
; INITIALLY SET TO 30 SECONDS AFTER WBAR ACTIVE, MOVA DETECTOR 33 ON STREAM 0
; SHALL BE TIMETABLED TO OPERATE BETWEEN THE HOURS OF 07:00 AND 21:00 AND SHALL BE
; DIS / ENABLED BY HANDSET COMMAND,
; TURNED OFF BY DEFAULT
;
;
IFT WBAR.NOT(1SCRT48) THN ; WBAR GONE ACTIVE
    RUN<110> ; RUN TIMER 110 (OVERRIDE)
    IFT PHASEA THN
        TRUE=1SCRT49
    END
END
IFT (1SCRT48.NOT(WBAR))+(NOT(PHASEA).1SCRT50) THN ; WBAR OR PHASE A ENDS, CANCEL
    FALSE=1SCRT49
END
WBAR=1SCRT48
PHASEA=1SCRT50

PHASEA.CNDTMA110.CFF33.MTCF0.1SCRT49=+MOVA0DET33 ; PHASE A AT GREEN, CFF33=1 AND TIMESWITCH MTCF0 ON
; AND TIMER 110 ACTIVE SETS MOVADET33 ON STREAM 0
```

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Conditioning Timers

Special Conditioning Timers

Timers

0-31

No	Value	Min	Max	200ms	Description	No	Value	Min	Max	200ms	Description
0	2	0	255	☐	AIN MOVADET 15 Pulse Timer	16	2	0	255	☐	EX45 Cancel Delay
1	120	0	255	☐	AIN MOVADET 15 Inhibit Timer	17	0.4	0	31.8	☒	TIMER 15 TMER PULSE
2	2	0	255	☐	BQ1 MOVADET 16 Pulse Timer	18	10	0	255	☐	EX46 Call Delay
3	120	0	255	☐	BQ1 MOVADET 16 Inhibit Timer	19	2	0	255	☐	EX46 Cancel Delay
4	2	0	255	☐	BQ2 MOVADET 17 Pulse Timer	20	0.4	0	31.8	☒	TIMER TMER PULSE
5	120	0	255	☐	BQ2 MOVADET 17 Inhibit Timer	21	10	0	255	☐	EX47 Call Delay
6	2	0	255	☐	CX MOVADET 18 Pulse Timer	22	2	0	255	☐	EX47 Cancel Delay
7	120	0	255	☐	CX MOVADET 18 Inhibit Timer	23	0.4	0	31.8	☒	TIMER 21 TMER PULSE
8	10	0	255	☐	DQ1A Call Delay	24	2	0	255	☐	EX Pulse MOVADET11 Timer
9	2	0	255	☐	DQ1A Cancel Delay	25	10	0	255	☐	FQ1A Call Delay
10	0.4	0	31.8	☒	TIMER 8 TERM PULSE	26	2	0	255	☐	FQ1A Cancel Delay
11	10	0	255	☐	DQ1B Call Delay	27	0.4	0	31.8	☒	TIMER 25 TMER PULSE
12	2	0	255	☐	DQ1B Cancel Delay	28	10	0	255	☐	FQ1B Call Delay
13	0.4	0	31.8	☒	TIMER 11 TMER PULSE	29	2	0	255	☐	FQ1B Cancel Delay
14	2	0	255	☐	DQ Pulse MOVADET19 Timer	30	0.4	0	31.8	☒	TIMER 28 TMER PULSE
15	10	0	255	☐	EX45 Call Delay	31	2	0	255	☐	FQ Pulse MOVADET17 Timer

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Conditioning Timers

Special Conditioning Timers

Timers

32-63

No	Value	Min	Max	200ms	Description	No	Value	Min	Max	200ms	Description
32		0	255	☐		48		0	255	☐	
33	3	0	255	☐	DELAY FOR DET34 ST0	49		0	255	☐	
34	2	0	255	☐	PULSE DET 34 ST0	50		0	255	☐	
35		0	255	☐		51		0	255	☐	
36		0	255	☐		52		0	255	☐	
37		0	255	☐		53		0	255	☐	
38		0	255	☐		54		0	255	☐	
39		0	255	☐		55		0	255	☐	
40		0	255	☐		56		0	255	☐	
41		0	255	☐		57		0	255	☐	
42		0	255	☐		58		0	255	☐	
43		0	255	☐		59		0	255	☐	
44		0	255	☐		60		0	255	☐	
45		0	255	☐		61		0	255	☐	
46		0	255	☐		62		0	255	☐	
47		0	255	☐		63		0	255	☐	

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Conditioning Timers

Special Conditioning Timers

Timers

64-95

No	Value	Min	Max	200ms	Description	No	Value	Min	Max	200ms	Description
64		0	255	☐		80		0	255	☐	
65		0	255	☐		81		0	255	☐	
66		0	255	☐		82		0	255	☐	
67		0	255	☐		83		0	255	☐	
68		0	255	☐		84		0	255	☐	
69		0	255	☐		85		0	255	☐	
70		0	255	☐		86		0	255	☐	
71		0	255	☐		87		0	255	☐	
72		0	255	☐		88		0	255	☐	
73		0	255	☐		89	1	0	255	☐	FLASH TIMER HOLD
74		0	255	☐		90	1	0	255	☐	FLASH TIMER ON STREAMS
75		0	255	☐		91	1	0	255	☐	FLASH TIMER OFF STREAMS
76		0	255	☐		92		0	255	☐	
77		0	255	☐		93		0	255	☐	
78		0	255	☐		94		0	255	☐	
79		0	255	☐		95		0	255	☐	

Works Order : 460907478
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Special Conditioning Timers

Special Conditioning Timers

Timers

96-127

No	Value	Min	Max	200ms	Description	No	Value	Min	Max	200ms	Description
96	35	0	255	☐	STREAM0 MDET32 OVERRIDE	112	10	0	255	☐	STREAM2 MDET29 DELAY
97	30	0	255	☐	STREAM1 MDET28 OVERRIDE	113	2	0	255	☐	STREAM2 MDET29 PULSE
98	10	0	255	☐	STREAM1 MDET29 DELAY	114	0	0	255	☐	STM2 MDET30 DELAY TIMER
99	2	0	255	☐	STREAM1 MDET29 PULSE	115	22	0	255	☐	STM2 MDET30 MINIMUM TIMER
100	0	0	255	☐	STM1 MDET30 DELAY TIMER	116	2.2	0	28	☒	STM2 MDET30 E EXT HOLD
101	15	0	255	☐	STM1 MDET30 MINIMUM TIMER	117	2	0	255	☐	STM1 MDET30 PHASEC CUT
102	1	0	28	☒	STM1 MDET30 C EXT HOLD	118	10	0	255	☐	STREAM2 MDET31 DELAY
103	5	0	255	☐	STM1 MDET30 PHASEA CUT	119	2	0	255	☐	STREAM2 MDET31 PULSE
104	10	0	255	☐	STREAM1 MDET31 DELAY	120	2	0	255	☐	STM2 MDET32 DELAY TIMER
105	2	0	255	☐	STREAM1 MDET31 PULSE	121	6	0	255	☐	STM2 MDET32 MINIMUM TIMER
106	2	0	255	☐	STM1 MDET32 DELAY TIMER	122	0.4	0	28	☒	STM2 MDET32 E EXT HOLD
107	6	0	255	☐	STM1 MDET32 MINIMUM TIMER	123	5	0	255	☐	STM1 MDET32 PHASED CUT
108	0.4	0	28	☒	STM1 MDET32 C EXT HOLD	124	0.4	0	28	☒	STM2 DET 28 DELAY TIMER
109	5	0	255	☐	STM1 MDET32 PHASEB CUT	125	30	0	255	☐	STM2 DET 28 OVERRIDE TIMER
110	10	0	255	☐	STREAM0 MDET33 OVERRIDE	126	4	0	255	☐	STREAM0 MDET33 DELAY
111	2	0	255	☐	STREAM0 MDET33 PULSE	127		0	255	☐	

Works Order : 460907478
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Special Instructions

84052						
Card Type	Rack Posn	Addr.	Port	Type	Line	Term Posn
Intelligent Backplane 16/0	Rack	01	0	I	000 - 007	2 LT1
Intelligent Backplane 16/0	Rack	01	1	I	008 - 015	2 LT1
Intelligent Backplane 16/0	Rack	02	2	I	016 - 023	2 LT2
Intelligent Backplane 16/0	Rack	02	3	I	024 - 031	2 LT2
Intelligent Backplane 16/0	Rack	03	4	I	032 - 039	2 LT3
Intelligent Backplane 16/0	Rack	03	5	I	040 - 047	2 LT3
Intelligent Backplane 16/0	Rack	04	6	I	048 - 055	2 LT4
Intelligent Backplane 16/0	Rack	04	7	I	056 - 063	2 LT4
Intelligent Backplane 16/0	Rack	05	8	I	064 - 071	2 LT5
Intelligent Backplane 16/0	Rack	05	9	I	072 - 079	2 LT5
Serial IO 24/4	1 I/01	06	10	I	080 - 087	1 I/01
Serial IO 24/4	1 I/01	06	11	I	088 - 095	1 I/01
Serial IO 24/4	1 I/01	06	12	I	096 - 103	1 I/01
Serial IO 24/4	1 I/01	06	13	0	104 - 107	1 I/01
CPU	A					

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Instructions

ST900 ELV CONTROLLER ITEMS LIST SHEET 2 (*I*L*)

ITEM	DRAWING NUMBER	DESCRIPTION	QTY	TOT	REMARKS
41					
42	667/1/45990/000	ST950ELV CUCK00 KIT - T400L			
43	667/1/45991/000	ST950ELV CUCK00 KIT - ST800			
44	667/1/45992/000	ST950ELV CUCK00 KIT - MICROSENSE MTC			
45	667/1/45993/000	ST950ELV CUCK00 KIT - MICROSENSE SENTNL			
46	667/1/45994/000	ST950ELV CUCK00 KIT - PEEK TSC3			
47	667/1/45995/000	ST950ELV CUCK00 KIT - PEEK TRX			
48					
49					
50					
51					
52	667/1/33073/000	ST900 Isolator locking kit			
53	667/2/20234/000	Screw Lock Key			
54					
55					
56	667/1/27104/000	ST800 / ST900 DFM Lens Kit			
57	667/7/46690/000	NAL CONTROLLER CABINET BASE GREY			
58	667/7/46690/001	NAL CONTROLLER CABINET BASE BLACK			
59	667/2/27096/000	ST800 / ST900 Mounting Stool			
60					
61					
62	667/1/26271/000	Telephone Kit (Lightning protection)			
63	667/1/27118/000	Surge Arrester (Lightning protection)			
64					
65	667/1/45950/120	ST950 ELV Cabinet Export 20A 1 LSLS - Grey			
66	667/1/45950/140	ST950 ELV Cabinet Export 40A 1 LSLS - Grey			
67	667/1/45950/951	ST950 ELV RACK 19" 1LSLS			
68	667/1/32945/000	ST900 ELV additional LSLS rack wiring kit			
69					
70	667/1/45980/000	ST900 ELV to ST950 ELV conversion kit			
71	667/1/27056/300	Manual Panel Signals off only			
72	667/1/45966/001	Temporary USB Wi-Fi Dongle			
73	667/1/45970/000	ST950 RTC backup battery			
74	667/1/33080/100	Mains kit (ST950ELV) - No maint sockets			
75	667/1/31625/019	2U 19" UTMCM communications tray			
76	667/6/46680/000	Anti graffiti coating			
77	667/1/33080/000	Mains kit (ST950ELV)			
78	667/1/33075/000	ELV 24V detector supply kit (2A)			
79	667/1/27018/950	GPS Clock Kit			
80					

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Instructions

Works Order : 460907478
EM Number : 84052
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Special Instructions

```
; SPECIAL INTRUCTIONS FOR AUX LED INDICATION
; =====
; MOVA RUNNING INDICATION OF AUX 1 LED
; =====
;
; IF ALL STREAMS ARE RUNNING MOVA THEN ILLUMINATE AUX 1 L.E.D.
;
; IF ONE OR MORE STREAMS ARE NOT RUNNING MOVA THEN FLASH THE AUX 1 LED.
;
; IF NO STREAMS ARE RUNNING MOVA EXTINGUISH THE LED.
;
; =====
;
; UTC RUNNING INDICATION OF AUX 5 LED
; =====
;
; IF ALL STREAMS ARE RUNNING UTC THEN ILLUMINATE THE HIGHER PRIORITY L.E.D.
;
; IF ONE OR MORE STREAMS ARE NOT RUNNING UTC THEN FLASH THE HIGHER PRIORITY LED.
;
; IF NO STREAMS ARE RUNNING UTC EXTINGUISH THE LED.
;
; =====
```

Works Order : 460907478
EM Number : 84052
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Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Special Instructions

; FUNCTIONS OF CONDITIONING SWITCHES			
; ~~~~~			
;			
; USE OF CONDITIONING SWITCHES FOR ENABLING / DISABLING PURPOSES			
; ~~~~~			
***** CFF HANDSET OPERATIONS *****			
;			
;			
CFF NUMBER	DEFAULT STATUS	HANDSET	FUNCTION
=====	=====	=====	=====
CFF0-CFF31	NOT USED		
CFF32	DISABLED	CFF32=1 (TO ENABLE)	PHASE C LOOSES R.O.W INTO MOVA0DET32 - STREAM 0
;			
=====			
;			
CFF92	DISABLED	CFF92=1 (TO ENABLE)	PHASE E DELAY TIMER INTO MOVA1DET28 - STREAM 1
CFF93	DISABLED	CFF93=1 (TO ENABLE)	PULSED INTO MOVA1DET29 - STREAM 1
CFF94	DISABLED	CFF94=1 (TO ENABLE)	PHASE A DELAY TIMER WITH EXTENSIONS ON PHASE C INTO MOVA1DET30 - STREAM 1
CFF95	DISABLED	CFF95=1 (TO ENABLE)	PULSED INTO MOVA1DET31 - STREAM 1
CFF96	DISABLED	CFF96=1 (TO ENABLE)	PHASE B DELAY TIMER WITH EXTENSIONS ON PHASE C INTO MOVA1DET32 - STREAM 1
;			
=====			
;			
CFF156	DISABLED	CFF156=1 (TO ENABLE)	ACTIVE WHEN WBCPHABL INPUT ACTIVE MOVA2DET28 - STREAM 2
CFF157	DISABLED	CFF157=1 (TO ENABLE)	PULSED INTO MOVA2DET29 - STREAM 2
CFF158	DISABLED	CFF158=1 (TO ENABLE)	PHASE C DELAY TIMER WITH EXTENSIONS ON PHASE E INTO MOVA2DET30 - STREAM 2
CFF159	DISABLED	CFF159=1 (TO ENABLE)	PULSED INTO MOVA2DET31 - STREAM 2
CFF160	DISABLED	CFF160=1 (TO ENABLE)	PHASE D DELAY TIMER WITH EXTENSIONS ON PHASE E INTO MOVA2DET32 - STREAM 2
;			
;			
;			
;			
=====			

Works Order : 460907478
EM Number : 84052
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Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Call Cancel

Call Cancel

Unit No.	Input Name	Call Delay	Cancel Delay	Phase Demanded (Unlatched Demand)
0	AIN1	10	2	
1	AIN3	10	2	
2	AIN5	10	2	
3	BQ1	10	2	
4	BQ2	10	2	
5	CX25	10	2	
6	CX26	10	2	
7	CX27	10	2	

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

☐ Manual Allocation

Port Number & Type

Port:

☐ Inputs

☐ Outputs

☒ Inputs & Outputs

Card Type & Address

Intelligent Backplane 16/0

Card Address: 1

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Phs	UTC	SDE	Pri	Used By HC	CC	IG	UD	LRT	Term Block	Terminal No
☐	0	0	I	AIN1	☒	☒	☐	☐	☐	A	0	0.0	☒	☐	☐	☐	☐	☒	☐	☐	☐	2 LT1	A1
☐	1	1	I	AIN3	☒	☒	☐	☐	☐	A	0	0.0	☒	☐	☐	☐	☐	☒	☐	☐	☐	2 LT1	A2
☐	2	2	I	AX2	☒	☒	☐	☐	☐	A	0	3.2	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	A3
☐	3	3	I	AX4	☒	☒	☐	☐	☐	A	0	3.2	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	A4
☐	4	4	I	AIN5	☒	☒	☐	☐	☐	A	0	0.0	☒	☐	☐	☐	☐	☒	☐	☐	☐	2 LT1	B1
☐	5	5	I	AX6	☒	☒	☐	☐	☐	A	0	3.2	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	B2
☐	6	6	I	BIN7	☒	☒	☐	☐	☐	A	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	B3
☐	7	7	I	BIN12	☒	☒	☐		☐	A	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	B4

Add

Delete

Move

Clear Used By

Move to/from backplane

Manual Map Optimisation

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required
Check boxes

☐ Manual Allocation

Port Number & Type

Port:

☐ Inputs

☐ Outputs

☒ Inputs & Outputs

Card Type & Address

Intelligent Backplane 16/0
Card Address: 1

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Phs	UTC	SDE	Pri	Used By HC	CC	IG	UD	LRT	Term Block	Terminal No
☐	8	0	I	BX8	☒	☒	☐	☐	☐	A	0	3.2	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	C1
☐	9	1	I	BX10	☒	☒	☐	☐	☐	A	0	3.2	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	C2
☐	10	2	I	BSL9	☒	☒	☐	☐	☐	A	0	0.2	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	C3
☐	11	3	I	BSL11	☒	☒	☐	☐	☐	A	0	0.2	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	C4
☐	12	4	I	BX13	☒	☒	☐	☐	☐	A	0	3.2	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	D1
☐	13	5	I	BSL14	☒	☒	☐	☐	☐	A	0	0.2	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	D2
☐	14	6	I	SPARE4-3	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	D3
☐	15	7	I	SPARE4-4	☒	☒	☐		☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT1	D4

AddDeleteMoveClear Used ByMove to/from backplane

Manual Map Optimisation

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required
Check boxes

☐ Manual Allocation

Port Number & Type

Port:

☐ Inputs

☐ Outputs

☒ Inputs & Outputs

Card Type & Address

Intelligent Backplane 16/0
Card Address: 2

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Phs	UTC	SDE	Pri	Used By HC	CC	IG	UD	LRT	Term Block	Terminal No
☐	16	0	I	CX25	☒	☒	☐	☐	☐	A	0	2.8	☒	☐	☐	☐	☐	☒	☐	☐	☐	2 LT2	A1
☐	17	1	I	CX26	☒	☒	☐	☐	☐	A	0	2.8	☒	☐	☐	☐	☐	☒	☐	☐	☐	2 LT2	A2
☐	18	2	I	CX27	☒	☒	☐	☐	☐	A	0	2.8	☒	☐	☐	☐	☐	☒	☐	☐	☐	2 LT2	A3
☐	19	3	I	DX29	☒	☒	☐	☐	☐	A	0	2.8	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	A4
☐	20	4	I	DIN28	☒	☒	☐	☐	☐	A	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	B1
☐	21	5	I	DIN31	☒	☒	☐	☐	☐	A	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	B2
☐	22	6	I	DX32	☒	☒	☐	☐	☐	A	0	2.8	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	B3
☐	23	7	I	DXSINK34	☒	☒	☐		☐	A	0	2.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	B4

Add

Delete

Move

Clear Used By

Move to/from backplane

Manual Map Optimisation

Works Order : 460907478
EM Number : 84052
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Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required
Check boxes

☐ Manual Allocation

Port Number & Type

Port:

☐ Inputs

☐ Outputs

☒ Inputs & Outputs

Card Type & Address

Intelligent Backplane 16/0
Card Address: 2

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Phs	UTC	SDE	Pri	Used By HC	CC	IG	UD	LRT	Term Block	Terminal No
☐	24	0	I	DSL30	☒	☒	☐	☐	☐	A	0	0.2	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	C1
☐	25	1	I	DSL33	☒	☒	☐	☐	☐	A	0	0.2	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	C2
☐	26	2	I	DSL35	☒	☒	☐	☐	☐	A	0	0.2	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	C3
☐	27	3	I	SPARE7-4	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	C4
☐	28	4	I	EX45	☒	☒	☐	☐	☐	A	0	2.4	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	D1
☐	29	5	I	EX46	☒	☒	☐	☐	☐	A	0	2.4	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	D2
☐	30	6	I	EX47	☒	☒	☐	☐	☐	A	0	2.4	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	D3
☐	31	7	I	SPARE8-4	☒	☒	☐		☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT2	D4

AddDeleteMoveClear Used ByMove to/from backplane

Manual Map Optimisation

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required
Check boxes

☐ Manual Allocation

Port Number & Type

Port:

☐ Inputs

☐ Outputs

☒ Inputs & Outputs

Card Type & Address

Intelligent Backplane 16/0
Card Address: 3

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Phs	UTC	SDE	Pri	Used By HC	CC	IG	UD	LRT	Term Block	Terminal No
☐	32	0	I	FIN48	☒	☒	☐	☐	☐	A	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT3	A1
☐	33	1	I	FIN51	☒	☒	☐	☐	☐	A	0	0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT3	A2
☐	34	2	I	FX49	☒	☒	☐	☐	☐	A	0	2.8	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT3	A3
☐	35	3	I	FX52	☒	☒	☐	☐	☐	A	0	2.8	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT3	A4
☐	36	4	I	FSL50	☒	☒	☐	☐	☐	A	0	0.2	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT3	B1
☐	37	5	I	FSL53	☒	☒	☐	☐	☐	A	0	0.2	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT3	B2
☐	38	6	I	GSL54	☒	☒	☐	☐	☐	A	0	0.2	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT3	B3
☐	39	7	I	SPRE10-4	☒	☒	☐		☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT3	B4

Add

Delete

Move

Clear Used By

Move to/from backplane

Manual Map Optimisation

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required
Check boxes

☐ Manual Allocation

Port Number & Type

Port:

☐ Inputs

☐ Outputs

☒ Inputs & Outputs

Card Type & Address

Intelligent Backplane 16/0
Card Address: 3

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Phs	UTC	SDE	Pri	Used By HC	CC	IG	UD	LRT	Term Block	Terminal No
☐	40	0	I	SPRE11-1	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT3	C1
☐	41	1	I	SPRE11-2	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT3	C2
☐	42	2	I	SPRE11-3	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT3	C3
☐	43	3	I	SPRE11-4	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT3	C4
☐	44	4	I	SPRE12-1	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT3	D1
☐	45	5	I	SPRE12-2	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT3	D2
☐	46	6	I	SPRE12-3	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT3	D3
☐	47	7	I	SPRE12-4	☒	☒	☐		☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT3	D4

AddDeleteMoveClear Used ByMove to/from backplane

Manual Map Optimisation

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required
Check boxes

☐ Manual Allocation

Port Number & Type

Port:

☐ Inputs

☐ Outputs

☒ Inputs & Outputs

Card Type & Address

Intelligent Backplane 16/0
Card Address: 4

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Phs	UTC	SDE	Pri	Used By HC	CC	IG	UD	LRT	Term Block	Terminal No
☐	48	0	I	BQ1	☒	☒	☐	☐	☐	I	3	0.0	☒	☐	☐	☐	☐	☒	☐	☐	☐	2 LT4	A1
☐	49	1	I	BQ2	☒	☒	☐	☐	☐	I	3	0.0	☒	☐	☐	☐	☐	☒	☐	☐	☐	2 LT4	A2
☐	50	2	I	SC3	☒	☒	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT4	A3
☐	51	3	I	SC4	☒	☒	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT4	A4
☐	52	4	I	SC5	☒	☒	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT4	B1
☐	53	5	I	SC6	☒	☒	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT4	B2
☐	54	6	I	SC7	☒	☒	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT4	B3
☐	55	7	I	SC8	☒	☒	☐		☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT4	B4

Add

Delete

Move

Clear Used By

Move to/from backplane

Manual Map Optimisation

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

☐ Manual Allocation

Port Number & Type

Port:

☐ Inputs

☐ Outputs

☒ Inputs & Outputs

Card Type & Address

Intelligent Backplane 16/0

Card Address: 4

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Phs	UTC	SDE	Pri	Used By HC	CC	IG	UD	LRT	Term Block	Terminal No
☐	56	0	I	SC9	☒	☒	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT4	C1
☐	57	1	I	SC10	☒	☒	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT4	C2
☐	58	2	I	SC11	☒	☒	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT4	C3
☐	59	3	I	SC15	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT4	C4
☐	60	4	I	DQ1A	☒	☒	☐	☐	☐	I	4	0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT4	D1
☐	61	5	I	DQ1B	☒	☒	☐	☐	☐	I	4	0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT4	D2
☐	62	6	I	SC13	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT4	D3
☐	63	7	I	SC14	☒	☒	☐		☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT4	D4

Add

Delete

Move

Clear Used By

Move to/from backplane

Manual Map Optimisation

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

☐ Manual Allocation

Port Number & Type

Port:

☐ Inputs

☐ Outputs

☒ Inputs & Outputs

Card Type & Address

Intelligent Backplane 16/0

Card Address: 5

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Phs	UTC	SDE	Pri	Used By HC	CC	IG	UD	LRT	Term Block	Terminal No
☐	64	0	I	SC16	☒	☒	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT5	A1
☐	65	1	I	SC17	☒	☒	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT5	A2
☐	66	2	I	SC18	☒	☒	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT5	A3
☐	67	3	I	SC20	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT5	A4
☐	68	4	I	FQ1A	☒	☒	☐	☐	☐	I	5	0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT5	B1
☐	69	5	I	FQ1B	☒	☒	☐	☐	☐	I	5	0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT5	B2
☐	70	6	I	SC21	☒	☒	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT5	B3
☐	71	7	I	SC22	☒	☒	☐		☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT5	B4

Add

Delete

Move

Clear Used By

Move to/from backplane

Manual Map Optimisation

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

☐ Manual Allocation

Port Number & Type

Port:

☐ Inputs

☐ Outputs

☒ Inputs & Outputs

Card Type & Address

Intelligent Backplane 16/0

Card Address: 5

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Phs	UTC	SDE	Pri	Used By HC	CC	IG	UD	LRT	Term Block	Terminal No
☐	72	0	I	SC23	☒	☒	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT5	C1
☐	73	1	I	SC24	☒	☒	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	2 LT5	C2
☐	74	2	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT5	C3
☐	75	3	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT5	C4
☐	76	4	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT5	D1
☐	77	5	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT5	D2
☐	78	6	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT5	D3
☐	79	7	I		☐	☐	☐		☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	2 LT5	D4

AddDeleteMoveClear Used ByMove to/from backplane

Manual Map Optimisation

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

☐ Manual Allocation

Port Number & Type

Port:

☐ Inputs

☐ Outputs

☒ Inputs & Outputs

Card Type & Address

Serial IO 24/4

Card Address: 6

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Phs	UTC	SDE	Pri	Used By HC	CC	IG	UD	LRT	Term Block	Line No
☐	80	0	I	PHCBL	☒	☐	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-0
☐	81	1	I	PHEBL	☒	☐	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-1
☐	82	2	I	PHAPUL	☒	☐	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-2
☐	83	3	I	PHAHOLD	☒	☐	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-3
☐	84	4	I	PHBPUL	☒	☐	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-4
☐	85	5	I	PHBHOLD	☒	☐	☐	☐	☐	N		0.0	☒	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-5
☐	86	6	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-6
☐	87	7	I		☐	☐	☐		☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-7

Add

Delete

Move

Clear Used By

Move to/from backplane

Manual Map Optimisation

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required Check boxes

☐ Manual Allocation

Port Number & Type

Port:

☐ Inputs

☐ Outputs

☒ Inputs & Outputs

Card Type & Address

Serial IO 24/4
Card Address: 6

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Phs	UTC	SDE	Pri	Used By HC	CC	IG	UD	LRT	Term Block	Line No
☐	88	0	I	WBCPHA	☒	☐	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-8
☐	89	1	I	WBCPHB	☒	☐	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-9
☐	90	2	I	WBCPHABL	☒	☐	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-10
☐	91	3	I	WBAR	☒	☐	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-11
☐	92	4	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-12
☐	93	5	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-13
☐	94	6	I		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-14
☐	95	7	I		☐	☐	☐		☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	I-15

AddDeleteMoveClear Used ByMove to/from backplane

Manual Map Optimisation

Works Order : 460907478
EM Number : 84052
Engineer : Kevin L Roberts
Intersection : M27 Junction 5 E-Bnd Off-Slip / Stoneham Way / A335 Wide Lane - Eastleigh Site HAS008

Inputs and Outputs

Inputs and Outputs

☐ Enable Signal Required
Check boxes

☐ Manual Allocation

Port Number & Type

Port:

☐ Inputs

☐ Outputs

☒ Inputs & Outputs

Card Type & Address

Serial IO 24/4
Card Address: 6

	DET No	Bit No	Type I or O	Name	Req'd	BP	Inv	U/D	Misc	DFM	DFM Group	Ext time	Phs	UTC	SDE	Pri	Used By HC	CC	IG	UD	LRT	Term Block	Line No
☐	104	0	O	EBCPHE	☒	☐	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	O-0
☐	105	1	O	EBCPHF	☒	☐	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	O-1
☐	106	2	O	EBCPHA	☒	☐	☐	☐	☐	N		0.0	☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	O-2
☐	107	3	O		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	O-3
☐	108	4	O		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	O-4
☐	109	5	O		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	O-5
☐	110	6	O		☐	☐	☐	☐	☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	O-6
☐	111	7	O		☐	☐	☐		☐				☐	☐	☐	☐	☐	☐	☐	☐	☐	1I/O1	O-7

Add

Delete

Move

Clear Used By

Move to/from backplane

Manual Map Optimisation

Works Order : 460907478
EM Number : 84052
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Aspect Drives (ELV Controllers)

Aspect Drives (ELV Controllers)

☐ Card Reversed

HPU Connection

1

Aspect Drive Configuration for LSLS 1 of 1 cards (Cabinet 1)

Output	Phase	Aspect	Use	Output	Phase	Aspect	Use
32	A	Red	Phase	16	F	Amber	Phase
31	A	Amber	Phase	15	F	Green	Phase
30	A	Green	Phase	14	G	Red	Phase
29	B	Red	Phase	13	G	Amber	Phase
28	B	Amber	Phase	12	G	Green	Phase
27	B	Green	Phase	11	N/A	N/A	N/A
26	C	Red	Phase	10	N/A	N/A	N/A
25	C	Amber	Phase	9	N/A	N/A	N/A
24	C	Green	Phase	8	N/A	N/A	N/A
23	D	Red	Phase	7	N/A	N/A	N/A
22	D	Amber	Phase	6	N/A	N/A	N/A
21	D	Green	Phase	5	N/A	N/A	N/A
20	E	Red	Phase	4	N/A	N/A	N/A
19	E	Amber	Phase	3	N/A	N/A	N/A
18	E	Green	Phase	2	N/A	N/A	N/A
17	F	Red	Phase	1	N/A	N/A	N/A

Works Order : 460907478
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I/O - DFM Group Timings

I/O - DFM Group Timings

Input Group	State	SET A	SET B	SET C	SET D
Group 0	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 1	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 2	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 3	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 4	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 5	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 6	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18
Group 7	Active (Mins)	30	30	30	30
	InActive (Hrs)	18	18	18	18

Note - 255 or blank disables DFM monitoring of that state (active or inactive) during that timeset (A to D)

Handset Limiting Values

State	Min	Max
Active (Mins)	0	254
InActive (Hrs)	0	254

Index

1	General Junction Data
1.1	Administration
1.2	Phases, Stages and Streams
1.3	Facilities/Modes Enabled and Mode Priority Levels
1.4	Phases in Stages
1.5	Stages in Streams
2	Phases
2.1	Phase Type and Conditions
2.2	Opposing and Conflicting Phases
2.3	Timings
2.3.1	Phase Minimums, Maximums, Extensions, Ped Leaving Periods
2.3.2	Phase Intergreen Times
2.3.3	Intergreen Handset Limits
2.3.4	Phase Timing Handset Ranges
2.4	VA Demand and Extend Definitions
2.5	Phase Internal/Revertive Demands
3	Stage Movements
3.1	Stages - Prohibited, Alternative, Ignored Moves (No configuration data to print)
3.2	Stage Internal Demands/Pedestrian Window Times
3.3	Phase Delays (No configuration data to print)
3.4	Intergreen Delays (No configuration data to print)
4	Modes and Facilities - Detailed
4.1	Linked Fixed Time
4.2	Cableless Linking
4.2.1	CLF - Plan(s)
4.2.2	CLF - Demand Dependent Moves
4.3	UTC and MOVA
4.3.1	UTC General Data
4.3.2	UTC Control and Reply Data Format
4.3.3	UTC Data Definitions
4.3.3.1	UTC Phase Demand and Extend Definitions
4.3.3.2	UTC Stage and Mode Data Definitions
4.3.3.3	UTC Demand Dependent Forces
4.3.4	MOVA Stages
4.3.5	UTC and MOVA Detectors
4.4	Master Time Clock
4.4.1	MTC - Time Switch Parameters
4.4.2	MTC - Time Switch Parameters Array
4.4.3	MTC - Day Type
4.4.4	MTC - Timetable
4.5	Integral Lamp Monitoring
4.5.1	LMU - General
4.5.2	Integral LMU Onboard Sensors
4.5.3	Integral LMU External Sensors for Regulatory Signs
4.5.4	LMU Sensor Load Types
4.6	Hurry Call
4.7	Manual
4.7.1	Manual Panel
4.7.2	Manual Mode - Optional Phases Appearance (No configuration data to print)
4.8	Reserve State
5	Conditioning Data
5.1	Special Conditioning
5.2	Special Conditioning Timers
5.3	Fault Log Flags (No configuration data to print)
6	Special Instructions
7	I/O
7.1	Call Cancel
7.2	Inputs and Outputs
7.3	Aspect Drives (ELV Controllers)
7.4	I/O - DFM Group Timings