

		ACTION	DATE
TO	1. SENIOR ENGINEER, CONTROLLER APPLICATIONS		
	2. ANDREW WILLIAMS, AJ WILLIAMS GROUP PTY LTD		
FROM	NECATI UYAR	DATE	1/08/19
SITE	KOROIT STREET NR LIEBIG STREET	SITE NO.	6823
REGION	SOUTH WESTERN	MUNICIPALITY	WARRNAMBOOL

GENERAL

Works Program Job?	Yes	Project Number	AL327AF
Classification	SIMPLE	Works Order Number	4A006534
Description	<input type="checkbox"/> New intersection signals <input type="checkbox"/> New pedestrian operated signals <input checked="" type="checkbox"/> Controller swap. Reason for swap	Maintenance swap	

CONTROLLER DETAILS

Type	ATSC4	Software Version & Release	V5 R20	Lanterns	LED
Number of Signal Groups	Vehicle	1	Pedestrians	1	Total
					2
Number of special outputs / Pedestrian Wait State Outputs					
Controller capacity	4				
Number of detectors	Vehicle	2	Pedestrians	1	Total
	Tram		Other		3

CONTROLLER APPLICATIONS

Target Date for Draft Opsheet	02/08/19
Target Date for completion of Program	09/08/19
Prepare Interlocking	

PERSONALITY CHECKSUMS

	Hex	Octal
Total	39	71
Times	17	27
Pers	2E	56
Dispatched	12/11/19	

AJ WILLIAMS GROUP PTY LTD - SIGNAL INSTALLATION

If switch-on of a metro site is to occur without a Telstra line, seek approval of the T/L Signal Services

SCATS connection	Connection to existing controller must be transferred to the new controller
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PRIOR NOTICE

A job must be entered into RAI Action database before this switch on will be allowed.

<input checked="" type="checkbox"/>	SCATS data changes - notify	NECATI UYAR	Ext	1327
	OR	DARREN VAUGHAN	Ext	1210
before 3:00pm on the day before switch on.				

SCATS Data Changes - Slot data

TRAFFIC MANAGEMENT CENTRE

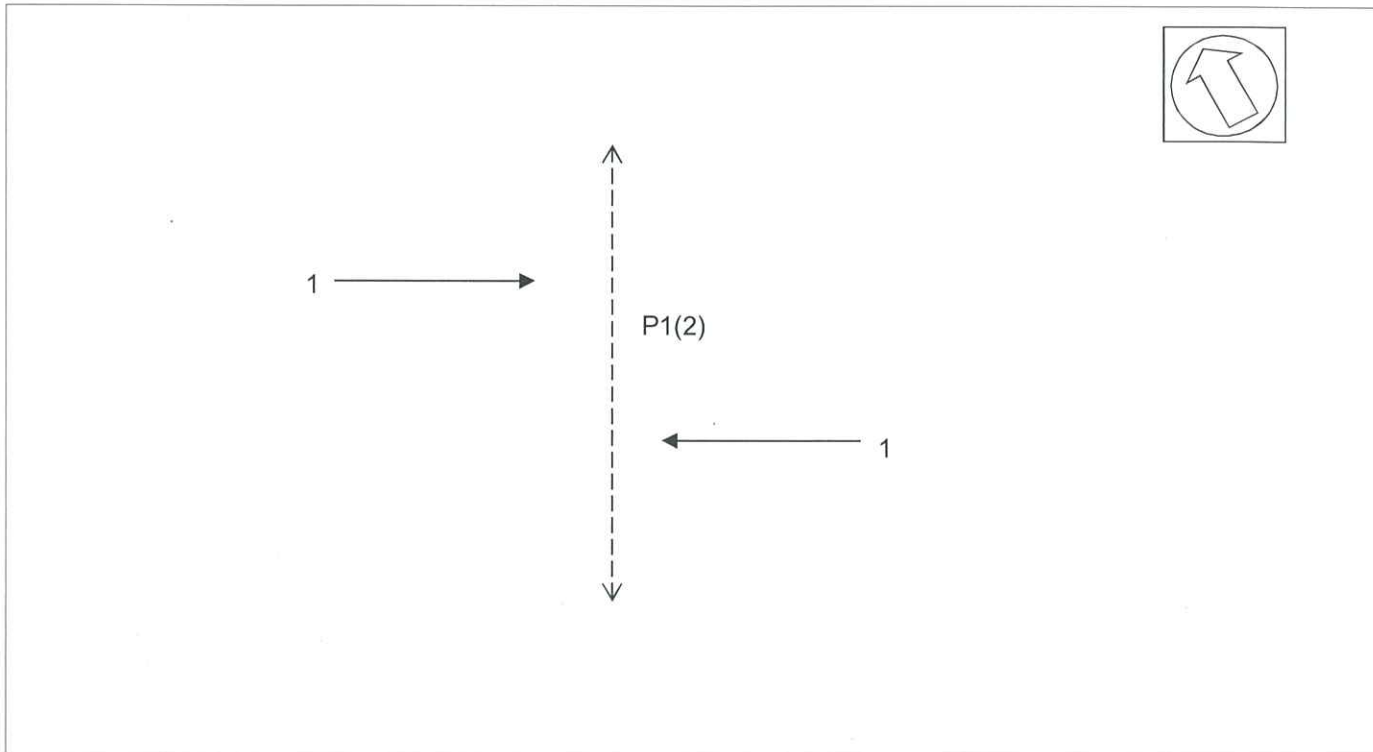
<input checked="" type="checkbox"/>	Please notify NECATI UYAR (x1327) on job completion.
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DATE OF NEW CONTROLLER SWITCH ON

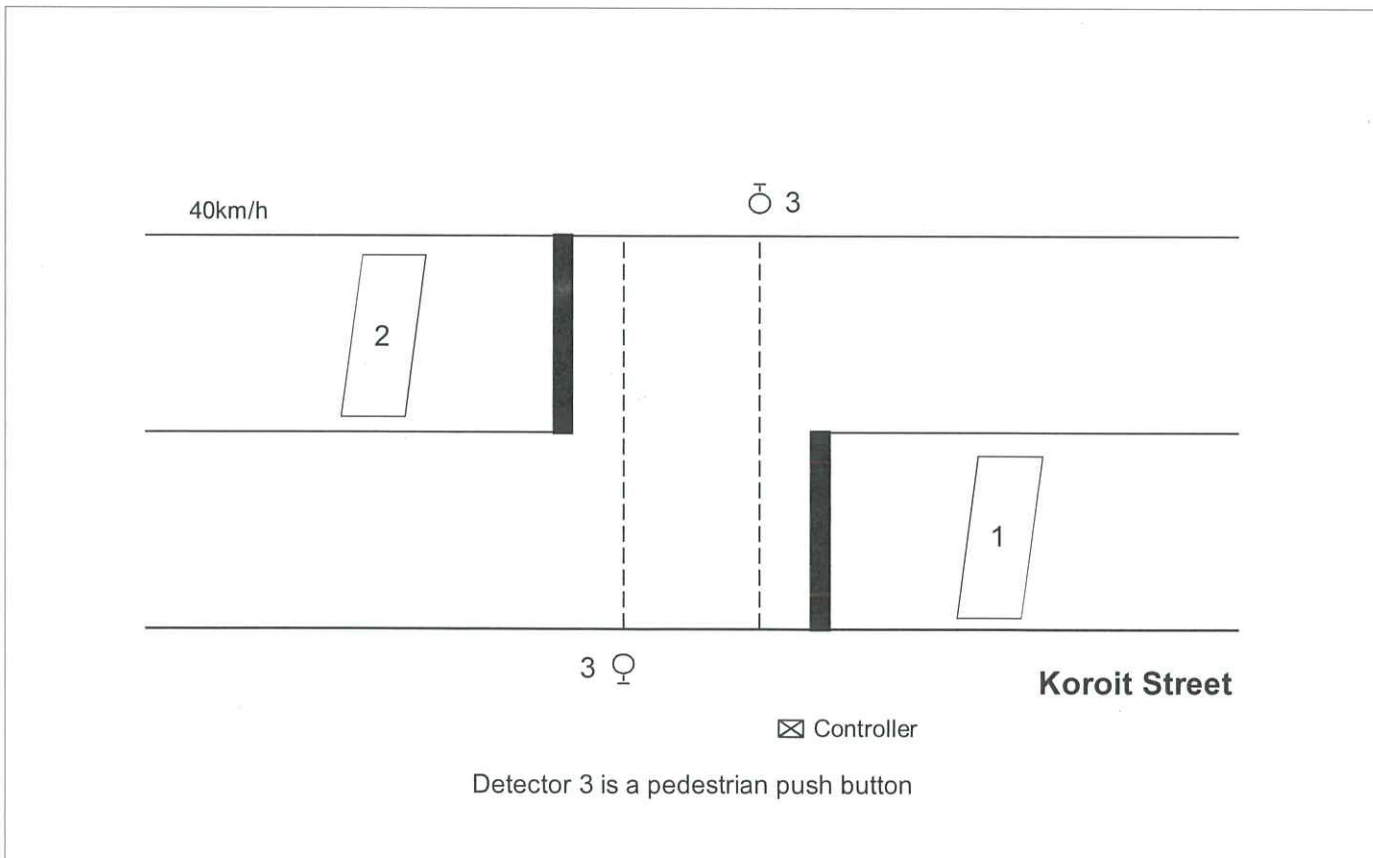
CONTROLLER OPERATION SPECIFICATION

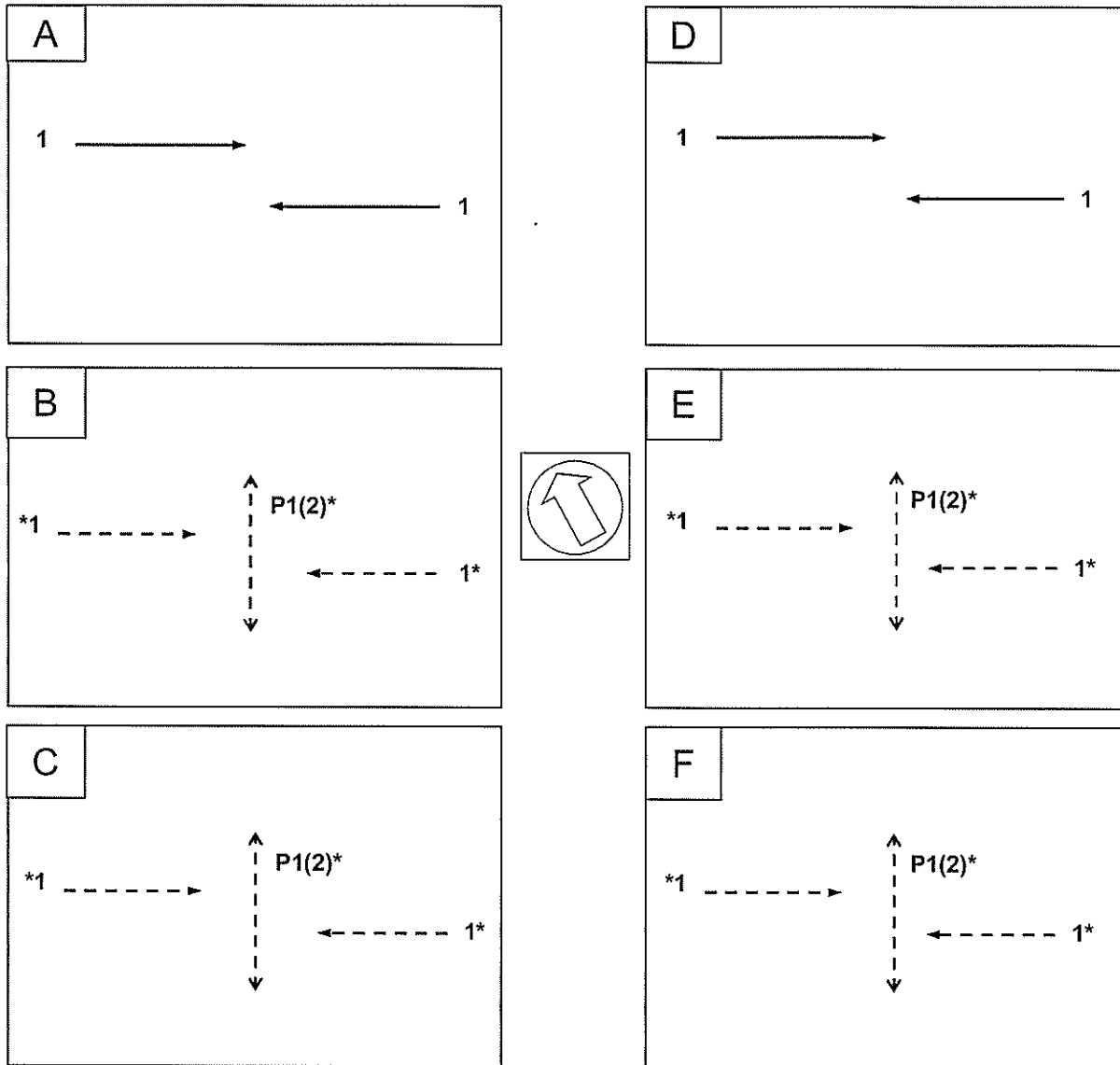
SITE NAME	KOROIT STREET NR LIEBIG STREET		SITE NO.	6823	
MUNICIPALITY	WARRNAMBOOL	DESIGNED BY	NECATI UYAR	DATE	1/08/19
PLAN NO.	G-2026-A	DESIGN CHECKED	<i>[Signature]</i>	DATE	5/8/19
CONTROLLER TYPE	ATSC4	PROM CHECKED	<i>[Signature]</i>	DATE	12/11/19

GROUP ALLOCATION



DETECTOR MAP



PHASING DIAGRAM**OPERATION IN LINK MODE**

1. Signal groups are independent of phasing. All phases have a permanent demand in Masterlink & Flexilink
2. SG1 cannot close down during BØ (refer note 6 below for the exception).
- * 3. SG1 can close down at any time during BØ green, provided SG1 minimum green has expired and both approaches gap or waste. If SG1 closes down at the end of BØ green (i.e. at the start of BØ yellow), P1 introduces at the start of CØ
- * 4. SG1 cannot close down during CØ
5. Any ped demand placed during BØ intergreen or during CØ will not be serviced until the next cycle.
6. If BØ is left out of the sequence in Masterlink or Flexilink, SG1 can close down at the start of AØ yellow and P1 introduces at the start of CØ.
7. The operation of DØ, EØ, FØ are the same as for AØ, BØ, CØ respectively. DØ, EØ and FØ are only used when double phasing.
8. When XSF3 (Master & Flexi) is set, P1 uses Special Purpose Timesetting No. 9 for its walk time.

OPERATION IN V.A. AND FLEXI ISOLATED MODES

1. Controller runs AØ and CØ.
2. AØ is extended by the vehicle detectors. When AØ gaps or wastes, AØ and SG1 closes down together.
3. CØ is called by P1. P1 introduces at the start of CØ (SG1 closes down at the start of AØ yellow). CØ runs for the duration of P1 walk, clearance and solid don't walk time.

V.A. SEQUENCE AC

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DETECTOR FUNCTIONS

DETECTOR No.	Internal / External	Input Number	SPECIAL FUNCTION	DETECTOR ALARMS					
				DA Category	Disable	DA on S/C only	Fault Simulation		
							Call & Extend	Call Only	Ignore
1	I	1	Extend SG1, Approach 1 *	0			✓		
2	I	2	Extend SG1, Approach 2 *	0			✓		
3	E	1	Call CØ. Places demand for Ped 1**.	6		✓			
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									

* For Queuing Feature, refer notes on page 6.

** MSS11 is set for the duration of P1 demand.

INTERGREEN AND PEDESTRIAN TIMES**INTERGREEN TIMES**

	LEGAL SPEED	DESIGN SPEED		INTERGREEN		
		YELLOW	RED	YELLOW	RED	TOTAL
SG1	40	40	-	3.0	2.0	5.0

PEDESTRIAN TIMES

	WALK			CLEARANCE			MINIMUM SOLID DON'T WALK
	DISTANCE (m)	TIME		DISTANCE (m)	TIME		
		GRAPH	ADOPTED		GRAPH	ADOPTED	
P1	12.0	8	8	12.0	8	8	3.0

CONTROLLER TIMESETTINGS - 1**PHASE TIMESETTINGS**

Front Panel Command: Phase No.Timesetting No (e.g. 1.6 accesses A phase maximum extension green)

DESCRIPTION	Timesetting No	PHASE						
		A (1)	B (2)	C (3)	D (4)	E (5)	F (6)	G (7)
RED / YELLOW	1	-	-	-	-	-	-	-
LATE START	2	-	-	-	-	-	-	-
MINIMUM GREEN (1)	3	3.0	0.0	3.0	3.0	0.0	3.0	-
INCREMENT	4	-	-	-	-	-	-	-
MAXIMUM INITIAL GREEN	5	-	-	-	-	-	-	-
MAXIMUM EXTENSION GREEN (4)	6	30	-	-	-	-	-	-
EARLY CUT OFF	7	-	-	-	-	-	-	-
YELLOW (2)	8	3.0	3.0	3.0	3.0	3.0	3.0	-
ALL RED (2)	9	2.0	2.0	0.0	2.0	2.0	0.0	-
SPECIAL ALL RED	10	0*	-	-	-	-	-	-
GAP 1 (3)	11	3.0	-	-	-	-	-	-
GAP 2 (3)	12	3.0	-	-	-	-	-	-
GAP 3	13	-	-	-	-	-	-	-
GAP 4	14	-	-	-	-	-	-	-
HEADWAY 1	15	1.6	-	-	-	-	-	-
HEADWAY 2	16	1.6	-	-	-	-	-	-
HEADWAY 3	17	-	-	-	-	-	-	-
HEADWAY 4	18	-	-	-	-	-	-	-
WASTE 1	19	7	-	-	-	-	-	-
WASTE 2	20	7	-	-	-	-	-	-
WASTE 3	21	-	-	-	-	-	-	-
WASTE 4	22	-	-	-	-	-	-	-

1. For SG1 minimum green in Isolated mode, refer Special Purpose Timesetting 10.

* Special all red for AØ → BØ, DØ → EØ.

For SG1 minimum green in link mode, refer Special Purpose Timesetting 11.

2. When SG1 closes down it uses the phase yellow time & the all-red specified in Special Movement Timesettings 1 (AØ all-red).

3. SG1 uses the gap, headway and waste times specified in AØ timesettings.

4. AØ maximum extension green is used only in Isolated mode.

PEDESTRIAN TIMESETTINGS

Front Panel Command: Pedestrian No.Timesetting No (e.g. 18.2 accesses P2 walk)

DESCRIPTION	Timesetting No	PEDESTRIAN							
		P1 (17)	P2 (18)	P3 (19)	P4 (20)	P5 (21)	P6 (22)	P7 (23)	P8 (24)
DELAY	1	-	-	-	-	-	-	-	-
WALK*	2	8	-	-	-	-	-	-	-
CLEARANCE 1	3	8	-	-	-	-	-	-	-
CLEARANCE 2	4	0	-	-	-	-	-	-	-

SITE NAME **KOROIT STREET NR LIEBIG STREET**

SITE NO. **6823**

CONTROLLER TIMESETTINGS - 2

SPECIAL MOVEMENT TIMESETTINGS Front Panel Command: B.Timesetting No (e.g. B.5 accesses Special Movement Timesetting No 5)

Timesetting No	Timesetting (Range: 0-5)	FUNCTION
1	2.0	SG1 ALL RED (SUBSTITUTE AØ ALL RED)
2		
3		
4		
5		
6		
7		
8		

SPECIAL PURPOSE TIMESETTINGS Front Panel Command: B.Timesetting No (e.g. B.19 accesses Special Movement Timesetting No 19)

Timesetting No	Timesetting (Range: 0-200)	FUNCTION
9	8.0	P1 WALK TIME SUBSTITUTION
10	10	SG1 MINIMUM GREEN IN ISOLATED MODE
11	10	SG1 MINIMUM GREEN IN LINK MODE
12		
13		
14		
15		
16		
17		
18	0	LIMIT GREEN WATCHDOG TIMER
19	0	SPECIAL FACILITY CONTROLS ALARM TIMER
20		
21		
22		
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CONTROLLER TIMESETTINGS - 3**PRESENCE TIMESETTINGS**

Front Panel Command: D.Detector No (e.g. D.7 accesses Presence time for detector 7)

DETECTOR No	TIMESETTING (Range: 0-10)
1	6.0
2	6.0
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

QUEUING FEATURE**APPROACH 1:**

- If XSF9 (Masterlink) or R- (Flexilink) is set, and the presence time for detector 1 is expired in BØ, and there is a demand for P1, expire approach 1
- If XSF9 (Masterlink) or Q- (Flexilink) is set, and the presence time for detector 1 is expired in EØ, and there is a demand for P1, expire approach 1

APPROACH 2:

- If XSF10 (Masterlink) or R+ (Flexilink) is set, and the presence time for detector 2 is expired in BØ, and there is a demand for P1, expire approach 2
- If XSF10 (Masterlink) or Q+ (Flexilink) is set, and the presence time for detector 2 is expired in EØ, and there is a demand for P1, expire approach 2

DAILY EVENT TIMESETTINGS

FUNCTION	TIMESETTING
Daily start time (Hours)	
Daily start time (Minutes)	
Daily finish time (Hours)	
Daily finish time (Minutes)	

FLEXILINK OPERATION**PHASE SEQUENCES**

No	PHASE SEQUENCE
1 (No Y+)	ABCDEF (Only ABC run)
2 (Y+)	ABCDEF

NOTES:

1. All phases must be specified in the phase sequence
2. Only specify phase sequence 2 if it is different from phase sequence 1.

LOOK AHEADS & RELEASES

PHASE SEQUENCE 1		
PHASE	LOOK AHEAD*	RELEASE
A	No	No
B	No	No
C	No	No
D	No	No
E	No	No
F	No	No
G	No	No

PHASE SEQUENCE 2		
PHASE	LOOK AHEAD*	RELEASE
A	No	No
B	No	No
C	No	No
D	No	No
E	No	No
F	No	No
G	No	No

* Specify the phases to which look ahead is permitted, e.g. Yes (to E, F, G, A)

INHIBIT PHASES

The following phases can be inhibited in flexilink by setting the call pulse one step before the call pulse of the next phase in sequence B, E

PULSE STEP LENGTH

☐ One Second ☒ Two Second

MASTERLINK & FLEXILINK SPECIAL FLAGS

FLAG	FUNCTION
Y- Flexi	The site will operate in flexilink mode if the signal is continuously sent (C) or is used as an offset (e.g. 25)
Y- Master	
Y+ Flexi	Double phasing, i.e. Run ABCDEF
Z- Flexi	
Z- Master	
Z+ Flexi	
Z+ Master	
R- Flexi	Queuing Feature (refer notes on page 6)
R+ Flexi	Queuing Feature (refer notes on page 6)
Q- Flexi	Queuing Feature (refer notes on page 6)
Q+ Flexi	Queuing Feature (refer notes on page 6)

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SCATS INTERSECTION DATA

The data shown on this page is typical data that can be used for testing controller operations.

This data is not necessarily applicable when the site is switched on in the field

TYPICAL SLOT DATA

SLOT <i>n</i>	=	6	,	1	,	0
(phases) (split plans) (walks)						
INT	=	6823				
VC	=	5				
CS	=					
COM	=	NET				
PK	=	!				
S#	=					
LM	=	.				
RMN	=	0				
DCL	=	0				
AT	=	3				
BT	=	5				
CT	=	3				
DT	=	3				
ET	=	5				
FT	=	3				
PP1	=	0,0A				
PP2	=	0,0A				
PP3	=	0,0A				
PP4	=	0,0A				

TYPICAL SPLIT PLAN DATA

PHASE SEQUENCE 1	
A =	0PDB
B =	50NGC
C* =	19#NGA
D =	1E
E =	1F
F =	1A

* CØ = WALK + CLEARANCE + 3 SECONDS

PED NO	PED NO		P1	
	GROUP NO		1	2
	1			X
P1	2	X		

TYPICAL VARIATION PARAMETERS

VP1	=		VP22	=		VP43	=	
VP2	=		VP23	=		VP44	=	
VP3	=		VP24	=		VP45	=	
VP4	=		VP25	=		VP46	=	
VP5	=		VP26	=		VP47	=	
VP6	=		VP27	=		VP48	=	
VP7	=		VP28	=		VP49	=	
VP8	=		VP29	=		VP50	=	
VP9	=		VP30	=		VP51	=	
VP10	=		VP31	=		VP52	=	
VP11	=		VP32	=		VP53	=	
VP12	=		VP33	=		VP54	=	
VP13	=		VP34	=		VP55	=	
VP14	=		VP35	=		VP56	=	
VP15	=		VP36	=		VP57	=	
VP16	=		VP37	=		VP58	=	
VP17	=		VP38	=		VP59	=	
VP18	=		VP39	=		VP60	=	
VP19	=		VP40	=		VP61	=	
VP20	=		VP41	=		VP62	=	
VP21	=		VP42	=				