Ped Protection Dilemma

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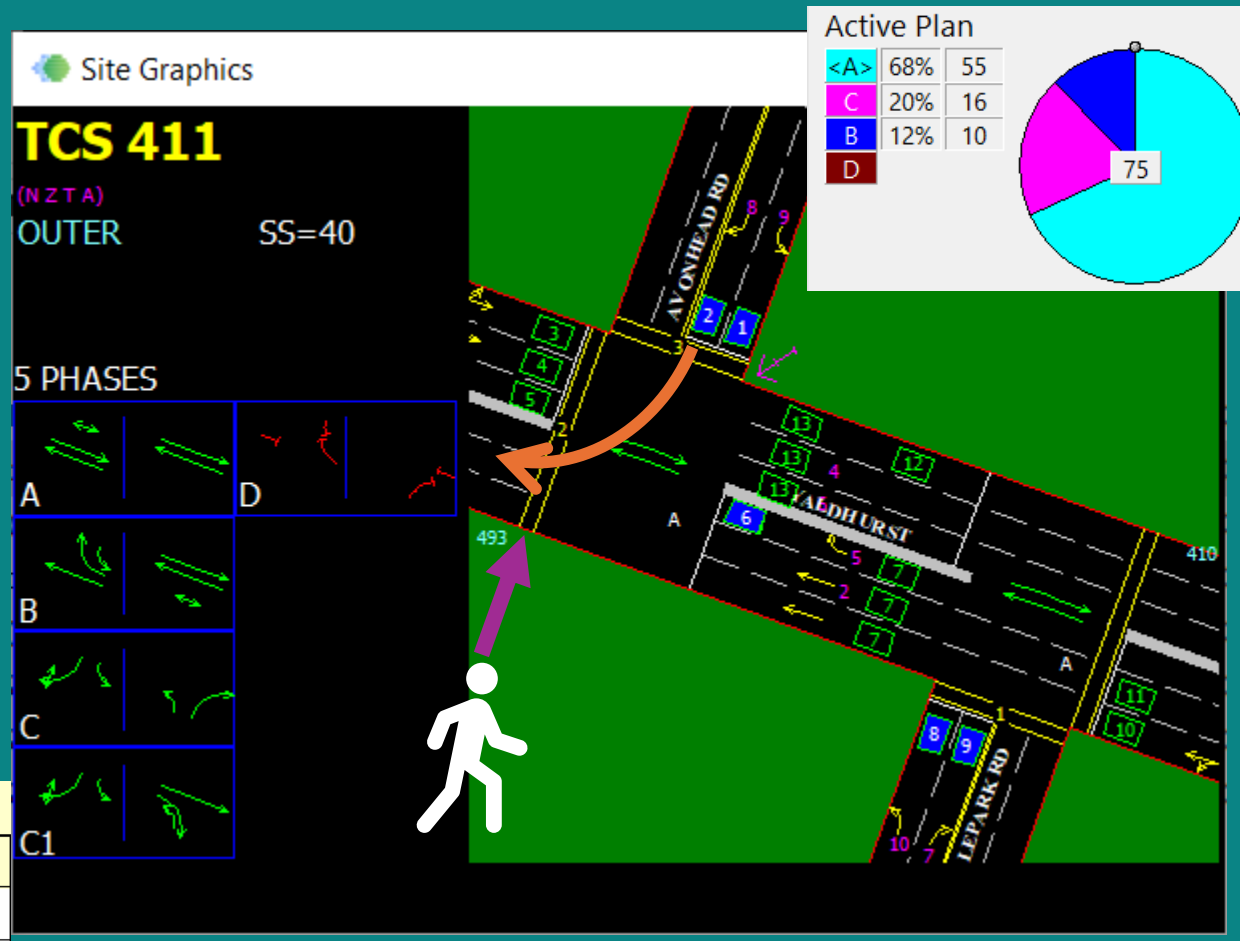
Real Time Operations Team

Christchurch City Council

We have some long Ped Xings in the way of a vehicle turn movement

W2 runs in C ph and has LS & ped protection



Late Start Notes

Phase	Description of Use
A	Hold SG5 Red from B & hold SG6 Red from C
B	Hodl SG2 Red from A & hold SG4 Red from C
C	Hold SG8 Red if P2 WK or CL

Ped No	Crossing Distance	Main Grn Phase	Other Phases	Speed (m/s)	Walk Time	Clearance 1 Time	Clearance 2 Time	WALK + CL1/2
1	20	A		1.2	6	11	3.5	12
2	26	C		1.2	6	17	3.0	14
3	22	A		1.2	6	13	3.5	12

Vehicle Times

Phase	ALT	LST	MIN	INC	MVG	MAX	ECG	AMB	RED	SRED
A		5	8			60		4.5	1.0	
B		3	5			25		4.5	1.0	
C		10	5			30		4.0	1.0	
D			5			10		3.0	0.0	

Three schools nearby

Getting complaints from drivers there is not enough time to RT from det 2 during school start and finish times

Also the stacking room WB is short

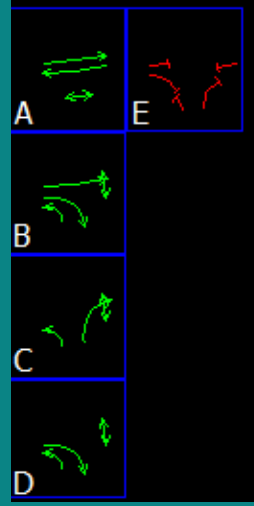
How do you manage these?

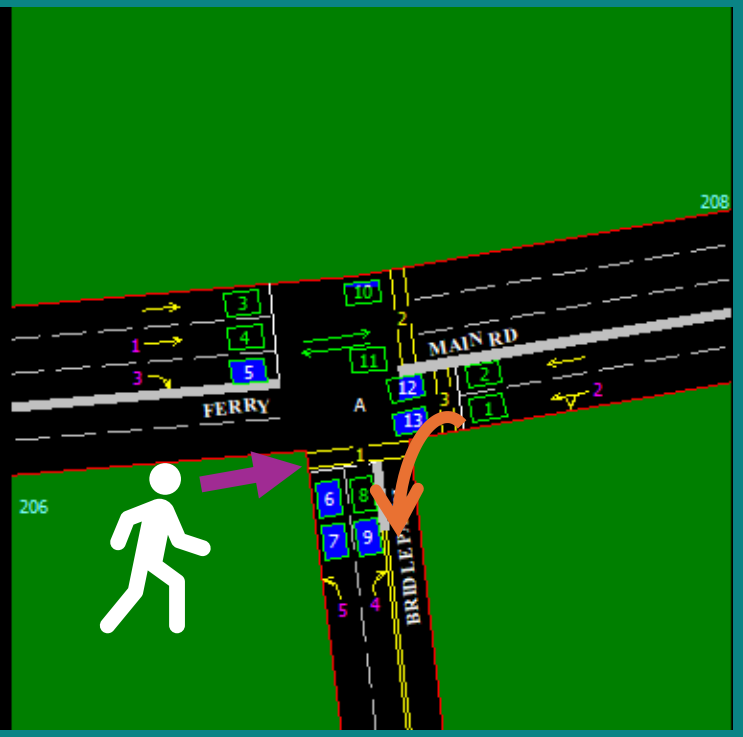
TCS 207

FERRYMEAD

REMOTE SS=30

5 PHASES



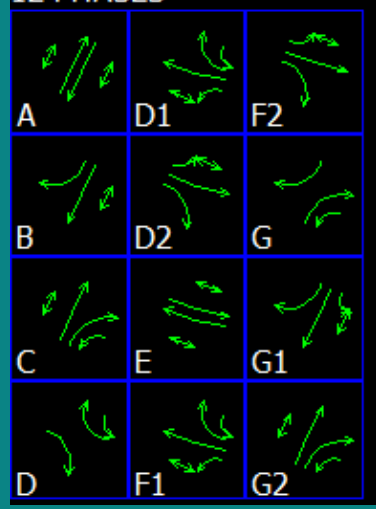


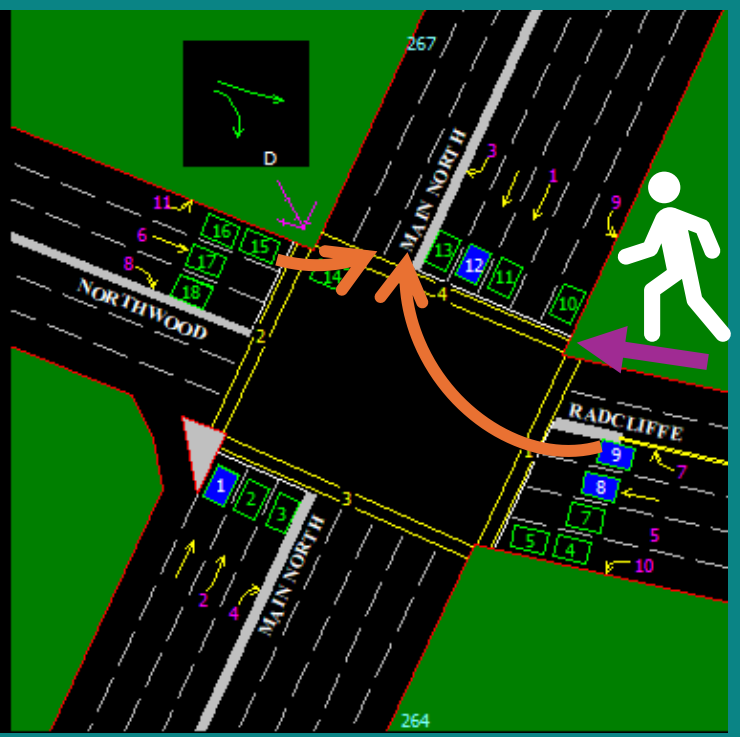
Ped No	Crossing Distance	Main Grn Phase	**Other Phases**	Speed (m/s)	Walk Time	Clearance 1 Time	Clearance 2 Time	WALK + CL1/2
1	27	A		1.2	6	**17**	**4.0**	**14**
2	9	D		1.2	6	**3**	**3.0**	**7**
3	9	B	CD	1.2	6	**3**	**3.0**	**7**
4								
5								
6								
7								
8								

TCS 265

OUTER SS=74

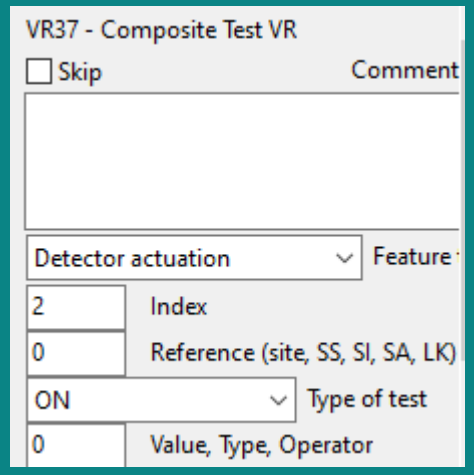
12 PHASES

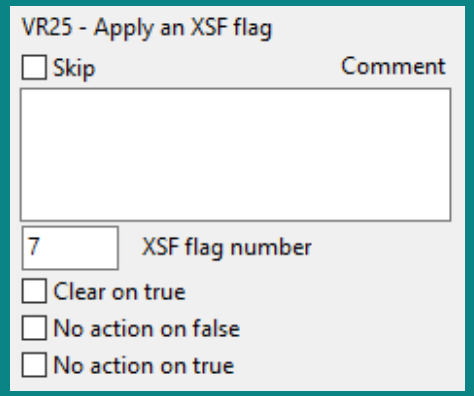


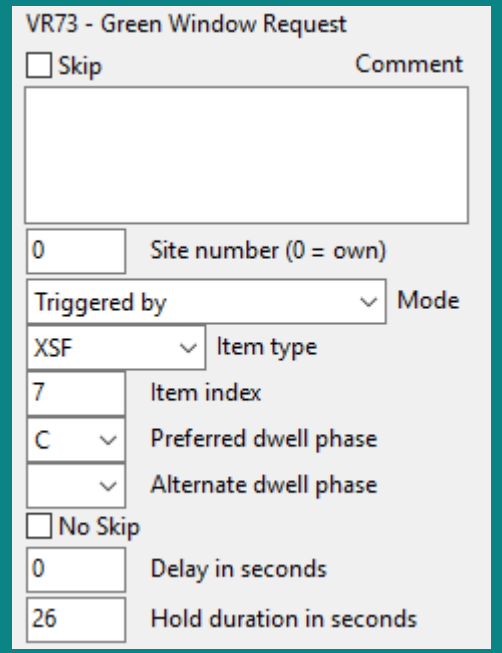


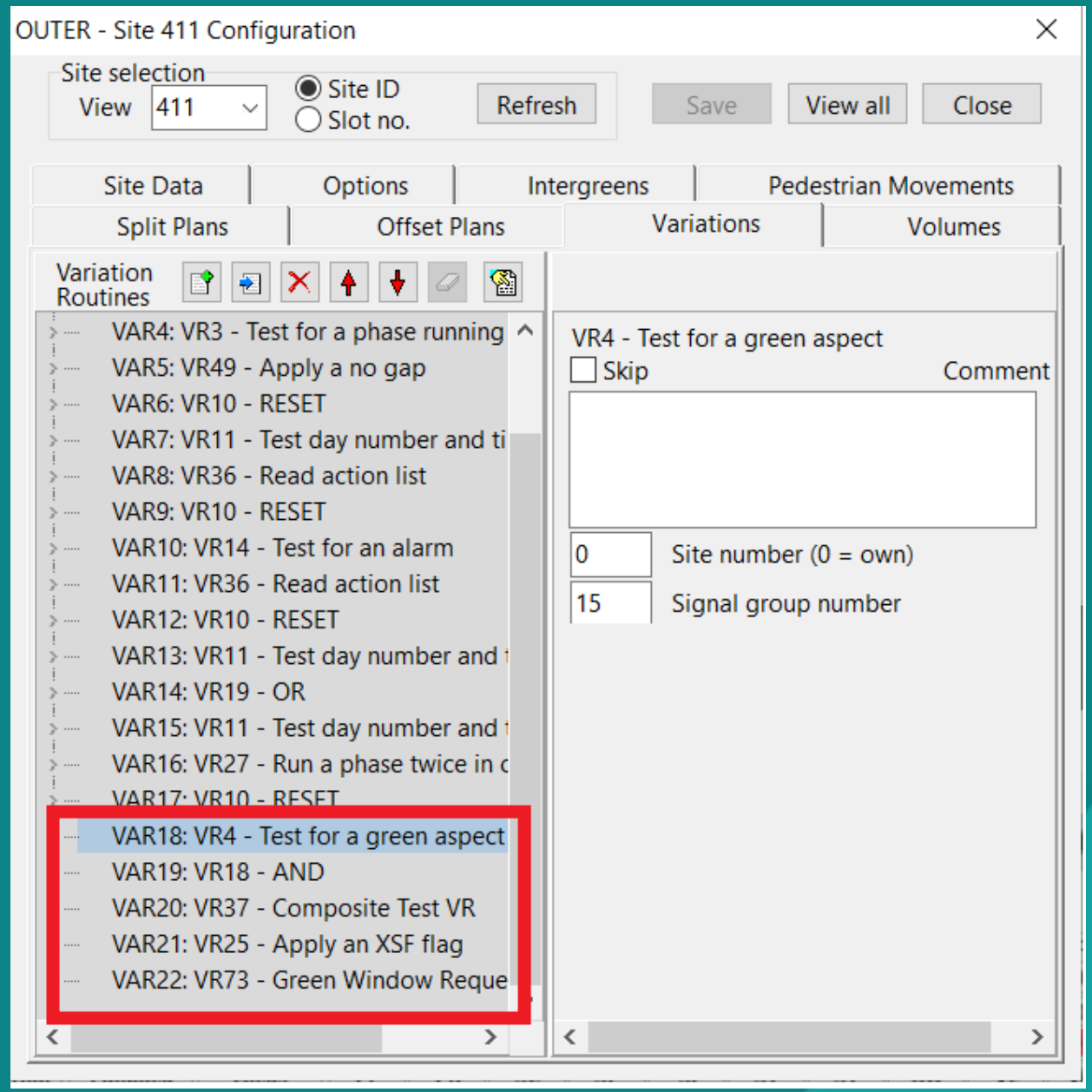
Ped No	Crossing Distance	Main Grn Phase	Other Phases	Speed (m/s)	Walk Time	Clearance 1 Time	Clearance 2 Time	WALK + (CL1)/2
1	20	A	BG1	1.2	6	**10**	**4.5**	**11**
2	22	A	CG2	1.2	6	**12**	**4.5**	**12**
3	25	E	D1F1	1.2	6	**15**	**4.0**	**13**
4	27	E	D2F2	1.2	6	**17**	**4.0**	**14**
5	20	A		1		**14**	**P1 long push CL1**	
6	22	A		1		**16**	**P2 long push CL1**	
7	25	E		1		**19**	**P3 long push CL1**	
8	27	E		1		**21.0**	**P4 long push CL1**	

We run a VR73 Green Window Request (Chris calls this Fire Station Green) to extend the Grn time for that C ph









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Count Routine

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Our customer wanted something between Masterlink and Master Isolated

Master Iso runs CL <51, generally 1900-0600hrs

Masterlink CL 60-120

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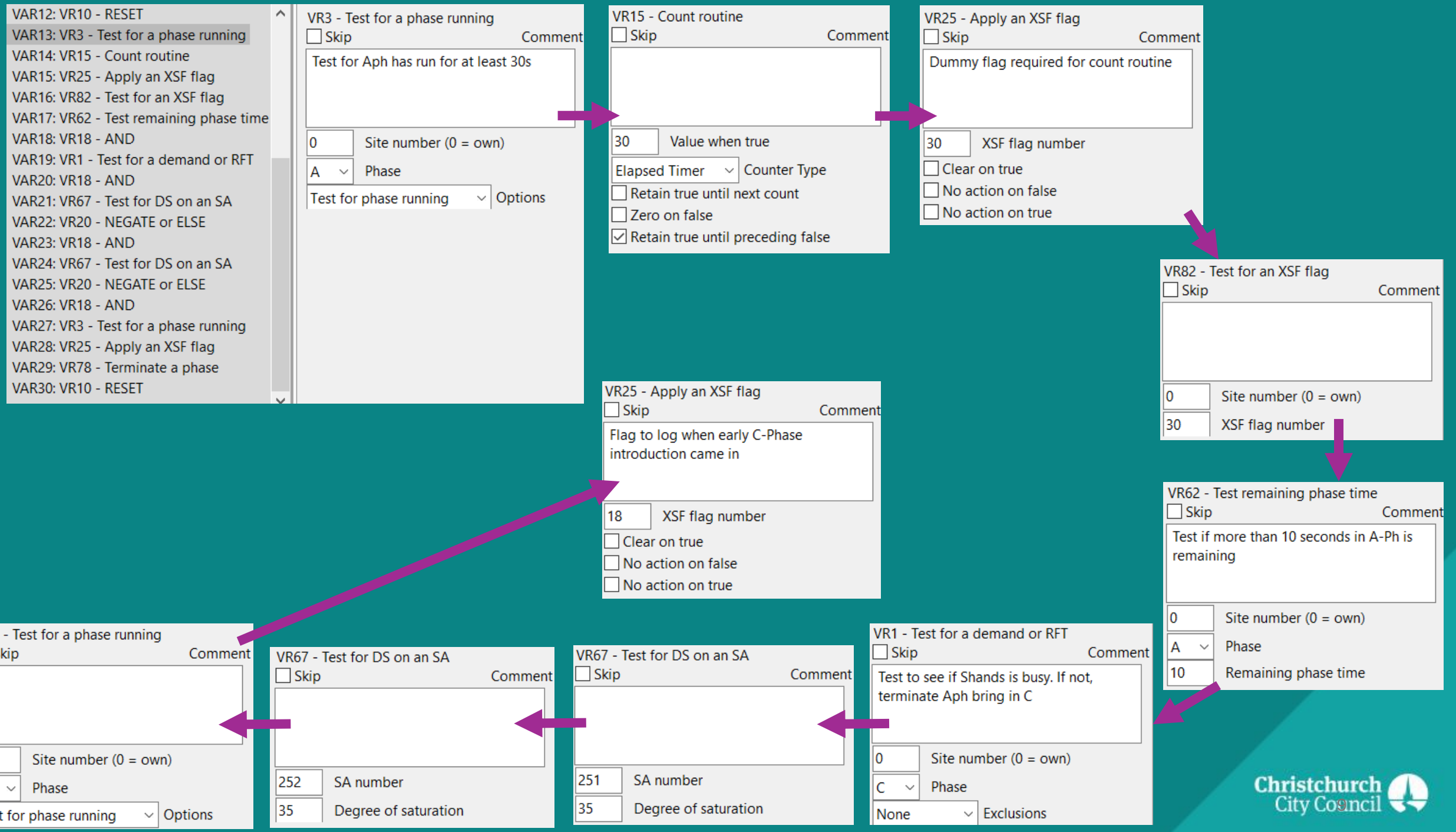
Essentially during the day, the side road has to wait for more than a minute to get out

How can we let these vehicles out while keeping corridor coordination?

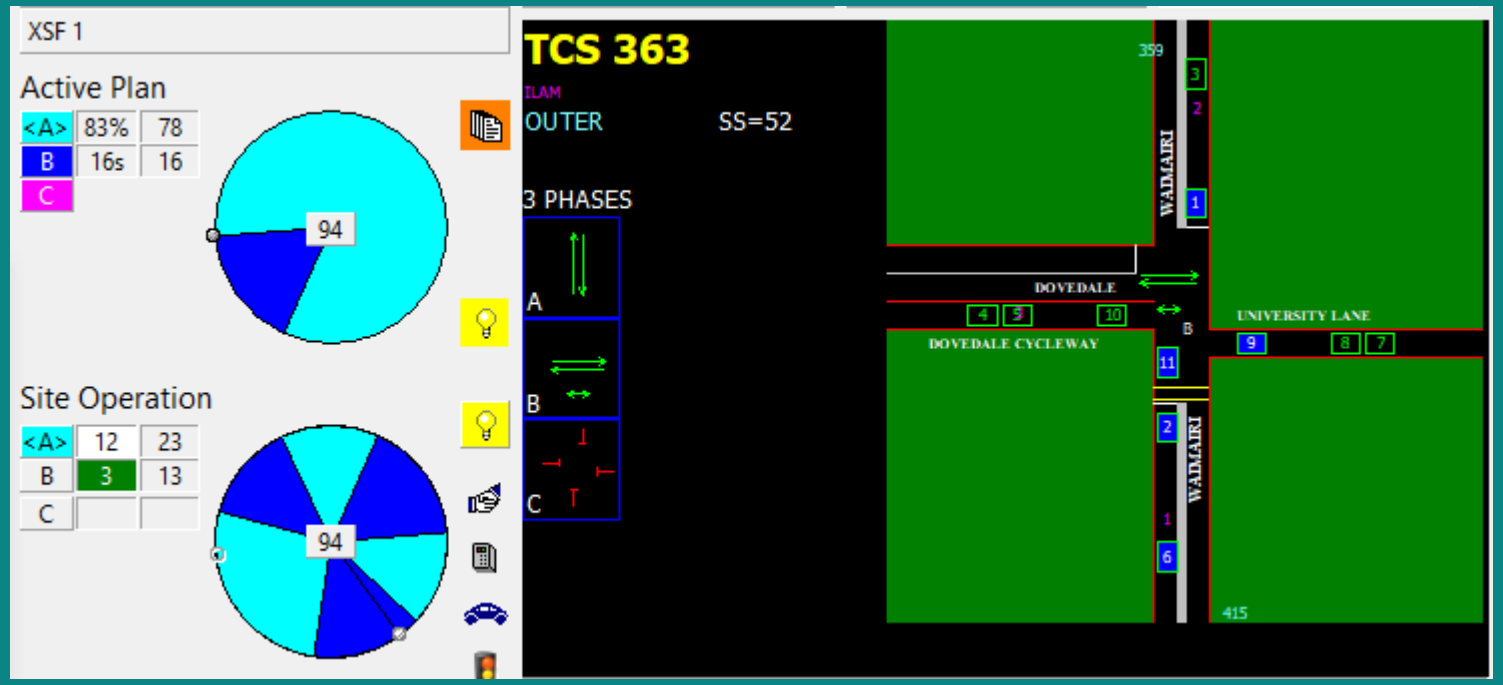

VAR12: VR10 - RESET
VAR13: VR3 - Test for a phase running
VAR14: VR15 - Count routine
VAR15: VR25 - Apply an XSF flag
VAR16: VR82 - Test for an XSF flag
VAR17: VR62 - Test remaining phase time
VAR18: VR18 - AND
VAR19: VR1 - Test for a demand or RFT
VAR20: VR18 - AND
VAR21: VR67 - Test for DS on an SA
VAR22: VR20 - NEGATE or ELSE
VAR23: VR18 - AND
VAR24: VR67 - Test for DS on an SA
VAR25: VR20 - NEGATE or ELSE
VAR26: VR18 - AND
VAR27: VR3 - Test for a phase running
VAR28: VR25 - Apply an XSF flag
VAR29: VR78 - Terminate a phase
VAR30: VR10 - RESET
VR3 - Test for a phase running
Skip
Comment
Test for Aph has run for at least 30s
0
Site number (0 = own)
A
Phase
Test for phase running
Options
VR15 - Count routine
Skip
Comment
30
Value when true
Elapsed Timer
Counter Type
Retain true until next count
Zero on false
Retain true until preceding false
VR25 - Apply an XSF flag
Skip
Comment
Dummy flag required for count routine
30
XSF flag number
Clear on true
No action on false
No action on true
VR82 - Test for an XSF flag
Skip
Comment
0
Site number (0 = own)
30
XSF flag number
VR62 - Test remaining phase time
Skip
Comment
Test if more than 10 seconds in A-Ph is remaining
0
Site number (0 = own)
A
Phase
10
Remaining phase time
VR1 - Test for a demand or RFT
Skip
Comment
Test to see if Shands is busy. If not, terminate Aph bring in C
0
Site number (0 = own)
C
Phase
None
Exclusions
VR67 - Test for DS on an SA
Skip
Comment
251
SA number
35
Degree of saturation
VR67 - Test for DS on an SA
Skip
Comment
252
SA number
35
Degree of saturation
VR25 - Apply an XSF flag
Skip
Comment
Flag to log when early C-Phase introduction came in
18
XSF flag number
Clear on true
No action on false
No action on true
VR3 - Test for a phase running
Skip
Comment
0
Site number (0 = own)
A
Phase
Test for phase running
Options

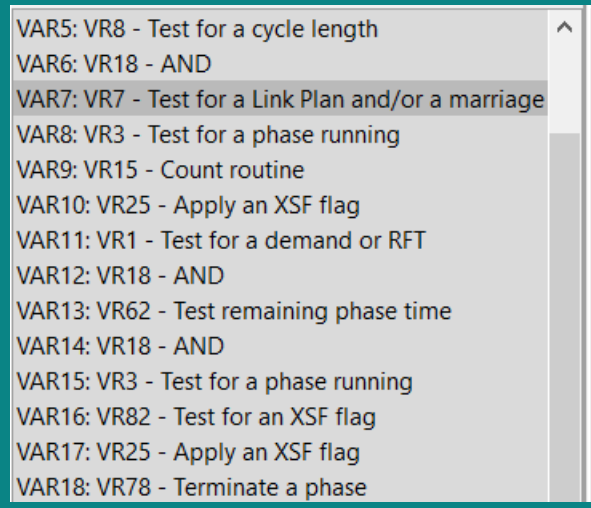
This also works well at midblocks

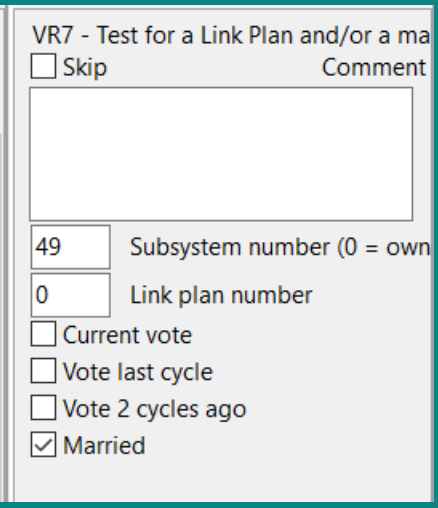
This side road in graphics isn't part of the site

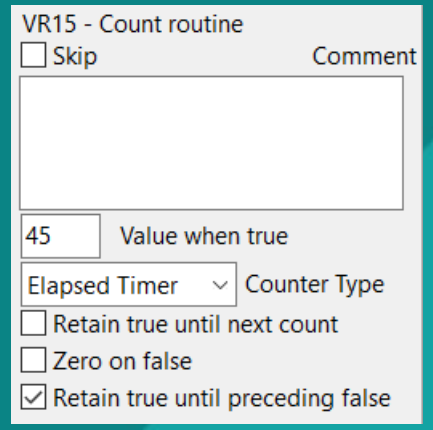
Just managing the road vs MCR & Ped Xing here

Without the count routine, it goes off three times each CL, min Grn for vehicles









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Ngā mihi
Thank you

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