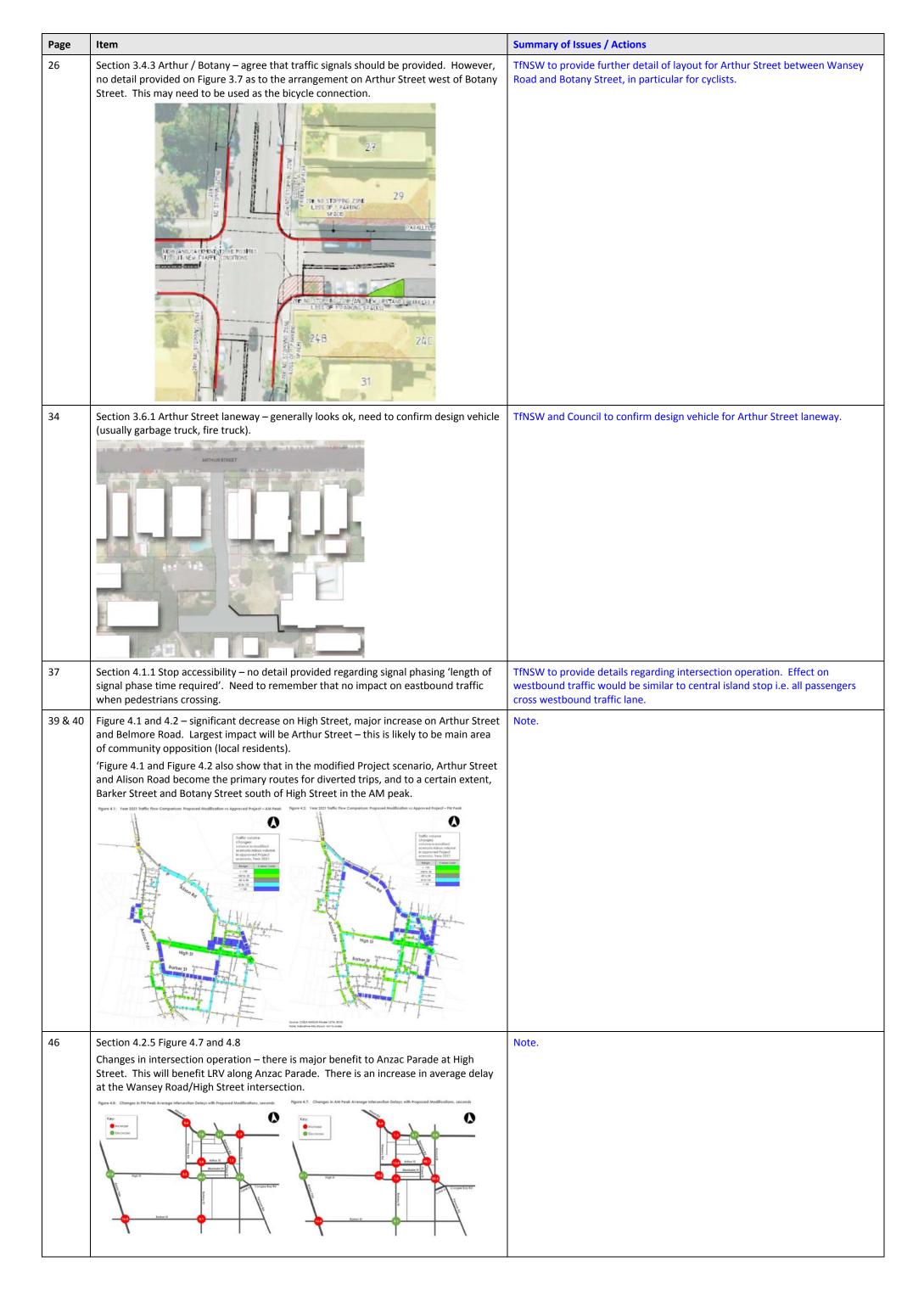
Page	Item	Summary of Issues / Actions Summary of Issues / Actions
n/a	Overall There is little detail regarding the reasons why these changes are proposed, and what the benefits are for the LRV. This would help to 'sell' the proposal as it is likely to receive opposition from the local residents, in particular those affected by the closures such as along Arthur Street.	Total Company of the Access Report Access re
6	Section 2.4 Figure 2.2 90% of traffic along Todman Avneue seems very high. I would have expected more to head north along Anzac Parade (but maybe they travel along Alison Road). Figure 2.2: Distribution of Inbound hips (towards CBD) – Approved Project Scenario, AM Peak	TfNSW to confirm that trip distribution refelcts existing travel patterns.
11	Figure 2.8 Botany Street identified as key cycle route. Need to develop connection between Wansey Road and Botany Street. Rayal Randwick Raccourse Street S	TfNSW and Council to develop bicycle connection between Wansey Road and Botany Street so that cyclists do not use High Street.
16 & 17	Section 3.2.2 Southern platform proposed to be 6m wide (text from page 16). Figure 3.2 is not scaled. Figure 3.3 shows a 4.1m wide southern platform. There is clearly inconsistency. The wider platform requires more land take from UNSW and as this will mainly be a boarding stop, 6m may be too wide. The proposed modification to the UNSW High Street stop would change the configuration of the approved stop from a single island platform to two side platforms. The northern platform would be integrated as part of the existing pedestrian footpath with a combined width of approximately 4.5m. The southern platform would consist of a platform approximately 6m wide with a fenced barrier between the southern edge of the platform and the westbound traffic lane along High street. The stop would be located approximately 5-6m north of the previously approved location. Regure 3.2 is devotion of the revised UNISW High theef stop arrangement	TfNSW to confirm proposed stop layout cross section.
16	Section 3.2.2 Recommend a small canopy on the northern platform.	TfNSW to consider provision a small canopy on northern side for those passengers that will travel east on LRV to connect with bus services.



Page	Item						Summary of Issues / Actions			
49	Table 4.4 trav exception of t surrounding r	he route al oad netwoi	ong High S k.	Street. Th	nerefore,	, change:	s have m	inimal im		Note.
			Estimated		(7–9am) I Time, sec		PM Peak (4–6pm) Average Travel Time, seconds			
	Road Section	Direction	Distance (m)	Approved Project Scenario	Modified Project Scenario	Percent change	Approved Project Scenario	Modified Project Scenario	Percent change	
	Anzac Pde,	Northbound	3,600	582	567	-2.6%	546	548	0.4%	
	between Alison Rd and Rainbow St	Southbound	3,450	442	442	0.0%	472	466	-1.3%	
	Alison Rd,	Westbound	3,675	483	482	-0.2%	495	509	2.8%	
	Anzac Pde and Avoca St	Eastbound	3,200	423	401	-5.2%	472	491	4.0%	
	Perouse Rd-	Westbound	2,950	449	462	2.9%	467	465	-0.4%	
54	Todman Ave via High St, between Kensington Rd and St Pauls St	Eastbound	3,650	449	556	23.8%	430	543	26.3%	
	Section 4.5.2 investigated.	– agree, alt	ernative c	yclist acco	ess away	from Hi	gh Street	needs to	be	TfNSW and Council to develop bicycle connection between Wansey Road and Botany Street so that cyclists do not use High Street.

STOP CAPACITY

Stop capacity calculations have been undertaken based on information presented in Altrac's Pedestrian Modelling Design report from June 2015. Using the same methodology (shown below), it is considered that:

- Southbound stop proposed 3.2m + 1.5m footpath is adequate for BOARDING passengers (design capacity of 500 per hour) to achieve LOS C.
- Southbound stop proposed 3.2m + 1.5m footpath is NOT adequate for ALIGHTING passengers (design capacity of 3,000 per hour) to achieve LOS C, but achieves LOS D which is considered appropriate for short amount of time when large numbers of alighting passengers get off LRV.
- Northbound stop proposed 4.1m side platform is NOT adequate for BOARDING passengers (design capacity of 3,000 per hour) to achieve LOS C, but achieves LOS D. Based on the calculations, a stop of 6.0m width would be required to achieve LOS C. NB: The Altrac report considered a 4.65m wide central island stop was adequate.
- Northbound stop proposed 4.1m side platform is adequate for ALIGHTING passengers (design capacity of 500 per hour) to achieve LOS C.

ACTION: TfNSW to confirm platform widths.







																					LOS C LOS D LOS E LOS F	0.9 0.6 0.2 0.1	55 0.28 28 0.19
BOARDING																							
As per GTA document																							
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2 1 1 1 1 1 1 1 1		NB Alighting	SB Boarding	SB Alighting	Pea	ak 15		Per 7.5 Min			Av Pax per m	Peak Plat S		Plat Width	Edge Effect		_	Pax per m2	_			LOS C	LOS E
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RANDWICK - 4.7m SB Platform																						Min Thre	shold
	NB Boarding	NB Alighting	SB Boarding	SB Alighting	Pea	ak 15	1 Min	Per 7.5 Min		Plat Length	Av Pax per m	Peak Plat S	ection	Plat Width	Edge Effect	s Effective Wi	dth	Pax per m2	m2 per per	son		LOS C	LOS E
Boarding (excluding extra space in median)			500)		135	9	67.5		67	1.	0	1.4	4.7	1.	2	3.5	0.40		2.48		OK	ОК
Boarding (extra 10m near Wansey Road)			500			135	9	67.5		77	0.	9	1.2	4.7	1.	2	3.5	0.35		2.85		ОК	ОК
	00.01																					-	+
Revised widths (to meet design volumes at L RANDWICK - ##m NB Platform	.US C)																					Min Thre	
RANDWICK - ##III NB Platform	NR Boarding	NB Alighting	SR Roarding	SR Alighting	Pos	ak 15	1 Min	Per 7.5 Min		Plat Length	Av Pax per m	Peak Plat S	ection	Plat Width	Edge Effect	s Effective Wi	dth	Pax per m2	m2 ner ner	rson		LOS C	LOS E
Boarding (excluding extra space in median)	3000		55 Boarding	SE Alighting	rec	810	54			67			8.5	60	1.		4.8	1.76		0.57	1	fail	OK
Boarding (extra 10m near Wansey Road)	3000					810	54			77	-		7.4	6.0	1.		4.8	1.53		0.65		ОК	ОК
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RANDWICK - ##m SB Platform																						Min Thre	shold
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Boarding (excluding extra space in median)			500			135	9	67.5		67	1.	-	1.4	3.2	1.	_	2	0.71		1.42		OK	ОК
Boarding (extra 10m near Wansey Road)			500			135	9	67.5		77	0.	9	1.2	3.2	1.	2	2	0.61		1.63		ОК	ОК
ALICUTING																						-	+
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As per GTA document RANDWICK - 4.1m NB Platform																						Min Thre	shold
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Boarding (extra 10m near Wansey Road)		500				135	9	67.5		77			1.2	4.1	1.		2.9	0.42		2.36		ОК	ОК
RANDWICK - 4.7m SB Platform																						Min Thre	
	NB Boarding	NB Alighting	SB Boarding		Pea		1 Min	Per 7.5 Min			Av Pax per m	Peak Plat S		Plat Width	Edge Effect	s Effective Wi		Pax per m2				LOS C	LOS E
Boarding (excluding extra space in median)				3000		810	54			67	6.	-	8.5	4.7	1.		3.5	2.42		0.41		fail	ОК
Boarding (extra 10m near Wansey Road)				3000		810	54			77			7.4	4.7	1.		3.5	2.10		0.48		fail	OK
Boarding (excluding extra space in median)				3000				466		67			9.7	4.7	1.		3.5	2.78		0.36	_	fail	OK
Boarding (extra 10m near Wansey Road)				3000				if 466 is ma		77	6.	1	8.5	4.7	1.	2	3.5	2.42		0.41		fail	ОК
Revised widths (to meet design volumes at L	OS C)							11 400 IS IIId	Capacity	JI EdCII LKV												+	+
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Boarding (excluding extra space in median)		500				135	9	67.5		67			1.4	6.0	1.		4.8	0.29		3.40		ОК	ОК
Boarding (extra 10m near Wansey Road)		500				135	9			77			1.2	6.0	1.		4.8	0.26		3.91		ОК	ОК
RANDWICK - ##m SB Platform				I																		Min Thre	
	NB Boarding	NB Alighting	SB Boarding		Pea			Per 7.5 Min			Av Pax per m	Peak Plat S		Plat Width	Edge Effect		_		m2 per per			LOS C	LOS E
Boarding (excluding extra space in median)	+			3000		810	54	-		67	+		8.5	4.7	1.	+	3.5	2.42		0.41	+	fail	OK
Boarding (extra 10m near Wansey Road)	-	-		3000 3000		810	54	405		77 67			7.4 9.7	4.7	1.		3.5	2.10		0.48		fail fail	OK OK
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FURTHER OPTIONS

Implications of the closure of westbound traffic lane of High Street at the UNSW stop. The detailed results (Appendix A of the GTA report) provide a comparison of the predicted volumes on each of the road links.



High Street westbound between Botany Street and Hospital Road drops (Approved to Modified) as follows:

AM Peak – 'unreadable' to 262, and

PM Peak - 387 to 268.

This indicates a 30% reduction in westbound volumes on High Street as a result of closing the westbound traffic lane on High Street at the High Street Terminus.

High Street westbound (under the Modified Scheme) between Botany Street and Wansey Road is expected to carry (Modified) as follows:

AM Peak - 272, and

PM Peak - 397.

Traffic volume changes along Arthur Street were also presented in Table 4.3. For the section between Wansey and Botany, the volumes are predicted to change as follows:

		AM Peak		PM Peak					
Direction	Approved Project Scenario	Modified Project Scenario	Percent difference	Approved Project Scenario	Modified Project Scenario	Percent difference			
Eastbound	486	784	61%	414	786	90%			
Westbound	374	580	55%	168	208	24%			

The closure of the westbound lane on High Street between Botany Street and Wansey Road will require the diversion of up to 400 vehicles (272 in the AM Peak and 397 in the PM Peak). The westbound traffic volumes on Arthur Street are expected to increase as follows:

AM Peak – 375 (approved proejct) to 580 (modififed) to 852 (westbound lane closed).

PM Peak – 168 (approved proejct) to 208 (modififed) to 605 (westbound lane closed).

As most of the westbound trafffic using this section of High Street is likely to be very local in nature i.e. originating from the hospital or Botany Street, the closure of the westbound lane will significantly increase the westbound traffic volumes on Arthur Street.

The diversion route for those wanting to travel further west on High Street will be Botany Street, Arthur Street, Wansey Road and High Street. This will add further traffic to Arthur Street. However, the intersection operation at Wansey Road/High Street can be simplified once the westbound traffic lane is removed. However, as the High Street/Botany Street intersection, there will be an increase in the number of right turn vehicles. However, this intersection could also be simplified with the removal of all traffic on the western leg.

The function of Arthur Street will change as part of the Modified Project with additional traffic using it in the eastbound direction. In addition, the predicted westbound traffic volumes are simlar to those in the estbound direction of the Modified Project.

Therefore, the propoposed removal of the High Street eastbound lane between Botany Street and Wansey Road is feasible and should be considered further.

TfNSW requested to further consider the closure of High Street westbound between Botany Street and Wansey Road.

TfNSW requested to model the closure of the westbound traffic lane on High Street between Botany Street and Wansey Road to assess the potential impacts.