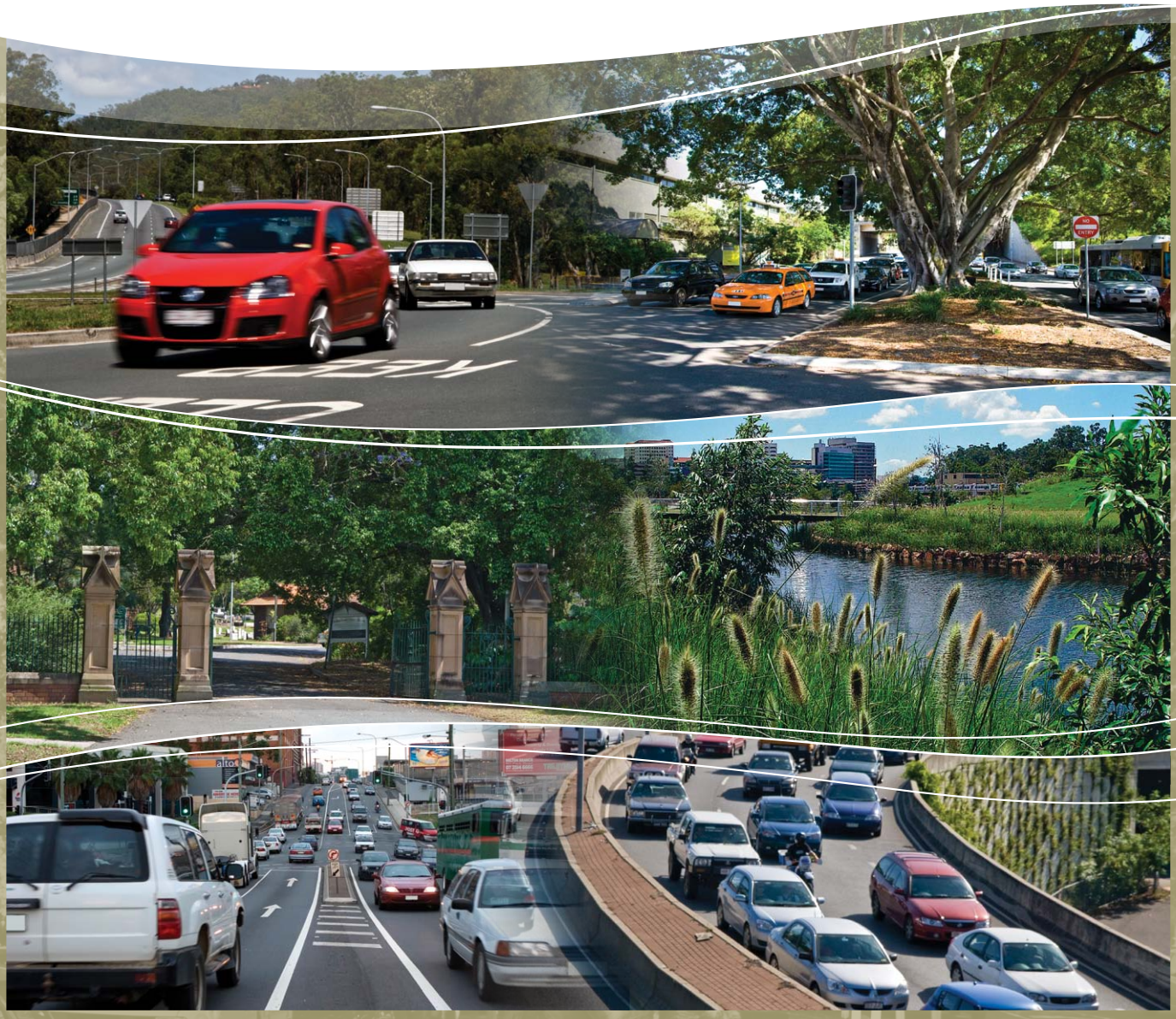
Northern Link

environmental impact statement
supplementary report

Appendix A:
Submission Analysis



Northern Link
Environmental Impact Statement

Supplementary Report

APPENDIX A

SUBMISSION ANALYSIS

■ June 2009

A.Submission Analysis

Note:

Issue No refers to a subset of issues drawn from the submissions generally relating to a particular concern or point being made in the submission.

EIS Reference refers to a reference made in the submission to a particular area of the EIS documents.

Response refers to the location in Appendix B where a response to the issue has been provided. "B" refers to Appendix B. The first number refers to the chapter headings of the responses based on the same chapters provided in the EIS Volume 1. The second number refers to the second level heading. The number following the backslash refers to the Issue

Public Submission Summaries

Submission No.		1	
Issue No.	EIS Reference	Issue Summary	Response
1	EIS Newsletter, October, 2008	The EIS does not establish broad community support for actually implementing Northern Link as indicated in the EIS newsletter.	**B.1.7 / 2**
2	EIS Newsletter, October, 2008	Statement in newsletter that "project without connections is popular and accepted" attempts to generate impression that Northern Link, in some form or other, is inevitable, which without any evidence is not true. Was the 'no project' question ever asked?	**B.2.5 / 1**
3	EIS Newsletter, October, 2008	Improvement in west to east travel will never be achieved without river crossing to relieve congestion on Coronation Drive and Riverside Expressway heading east.	**B.2.5 / 6**
4	EIS Newsletter, October, 2008	Statements that imply that the tendering process may find improved solutions hardly inspire confidence in the thoroughness of Northern Link's evaluation. What negatives remain to be identified?	**B.1.3 / 2**
5	EIS Newsletter, October, 2008	Vehicle distances and travel times in 2026 are utterly meaningless guesses.	**B.5.6 / 29**
6	EIS Newsletter, October, 2008	There are no corresponding estimates of the enormous debt burden which will be imposed on Brisbane's ratepayers and taxpayers by 2026.	**B.15.8 / 1**
7	EIS Newsletter, October, 2008	The estimate of travel time savings from Toowong to the airport is dishonest. Travel times were previously decreased by Hale Street and Inner City Bypass, and Northern Link will not contribute anything new.	**B.5.6 / 29**
8	EIS Newsletter, October, 2008	Brisbane would benefit from de-privatising the Air Train, quicker and at modest costs long before Northern Link become operational.	**B.2.5 / 2**

9	EIS Newsletter, October, 2008	Wording regarding the impacts of Northern Link is deceptive. There is an acknowledgement that noise and vibration could involve temporary relocation of residents and possibly some permanent structural modifications.	**Statement**
10	EIS Newsletter, October, 2008	Some buildings will be permanently destroyed. The "suitable management and mitigation techniques" do not disclose the likely fate of the occupants of the permanently destroyed buildings.	**B.1.3 / 10**
11	EIS Newsletter, October, 2008	Northern Link proceeding weighs on the minds of some long-established citizens who are angry at what Council is doing in the twilight of their lives.	**B.1.3 / 20**
12	EIS Newsletter, October, 2008	The Lord Mayor's vision appears to be a city for cars, not a city for people.	**B.2.1 / 7**

Submission No.		**2**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	1.3.1 (p. 11)	The EIS creates room for the private sector to potentially override the consensus reached between the community and local government.	**B.1.3 / 2**
2	1.3.1 (p. 11)	The justification for seeking innovation through the PPP tendering process is problematic because it: 1. Provides opportunity for the private sector to 'override' the shared community and local government preference (i.e. straight through option). 2. Overlooks the shadowy side of free enterprise. This move will increase the scope for rent-seeking behaviour (i.e. traffic funnelling, imposition of legal limits on Council Roads, introduction of T3 lanes on Milton Road and/or Coronation Drive) by the consortia expressing interest.	**B.1.3 / 2**
3	1.3.1 (p. 11)	Innovation is unlikely in a monopolised market. There is evidence that insufficient genuine competition exists in the south-east Queensland large-scale road infrastructure market, with Leighton Holding achieving a (*defacto*) monopoly. This situation raises the fundamental question of why the PPP continues to be the preferred delivery model. "Seeking innovation through tender process" is misguided as it increases scope for rent-seeking behaviour, particularly in a *defacto* monopoly.	**B.1.3 / 2**

Submission No.		**3**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The EIS appears to be incomplete, as the study area for the EIS does not include most of the Western Freeway corridor. The study ignored residents who live along this corridor.	**B.1.3 / 1**
2		Increased traffic noise from haulage of spoil westward down the Western Freeway and other construction vehicles has been ignored in the EIS?	**B.9.3 / 1**
3		There are no effective noise barriers along the Western Freeway. In many places, there is only a chain link fence between the	**B.9.5 / 2**

		freeway and the nearest properties.	
4		Noise mitigation measures along the Western Freeway should be specified as part of the design brief for the EIS. These should include full height noise barriers and reduction in speed limit to 80 km/hr.	**B.9.5 / 2**

Submission No.		**4**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		A strong protest is registered against the proposed Toowong entrances and exits to the tunnels. Existing issues with parking and traffic on Bayliss Street, Toowong would be made worse by the Project. Widening of Croydon Street will increase traffic volumes, noise and fumes.	**B.8.1 / 1** **B.9.5 / 3** **B.5.6 / 11**

Submission No.		**5**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The apparent plan to increase the traffic flow on Jephson Street leading to and from Croydon Street will severely impact the quality of life for residents in this area. As this is not in the scope of the current plans, one can only infer that the impact on Jephson Street residents is not of concern to planners.	**B.4.2 / 9**
2		At present, the plans only show the widening of Croydon Street, however, it is obvious that the seven lanes from the current four is designed to increase the flow of traffic from Moggill Road through [Jephson Street] to the western links. Concerned that the seven lanes finish at the junction of Sylvan Road.	**B.4.2 / 9**

Submission No.		**6**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Will have no security and will be exposed to noise of patrons leaving the Normanby Hotel, which is already high. Currently have a natural buffer with houses between Kelvin Grove Road and our property. There will be a significant increase in the potential for vandalism, crime and safety.	**B.13.3 / 9**
2		The uncertainty of the final design is having detrimental effects on our health. We need security and peace of mind as we are about to retire.	**B.13.3 / 20**

Submission No.		**7**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Strongly oppose the proposed secondary local access to the Northern Link Tunnel at Toowong. Urge Queensland Government and Brisbane City Council to remove the Toowong connection from the Northern Link Project.	**B.3.4 / 2**
2		The Northern Link Tunnel, in aiming to improve traffic flow and decrease congestion, appears to be aimed at enhancing our city's liveability. Its primary value will be to take traffic away from	**B.2.2 / 2**

		existing local roads.	
3		The anticipated benefits of the Northern Link tunnel will be achieved through the Western Freeway connection, without needing to construct the secondary access at Toowong.	**B.3.4 / 3**
4		The Toowong access is not needed for people beyond the inner suburbs as the tunnel can be accessed from the Western Freeway. A secondary access at Toowong is unnecessary and illogical.	**B.3.4 / 3**
5		A secondary access point at Toowong would lead to division of the suburb through the radical widening of Milton Road and Croydon Street.	**B.13.3 / 14**
6		A secondary access point at Toowong would lead to the resumption and demolition of more than 100 properties that are considered Character Homes in the Brisbane City Plan 2000.	**B.11.2 / 6** **B 12.2 / 1**
7		A secondary access point at Toowong would lead to nine permanent disruptions to the flow of local vehicular or pedestrian traffic affecting Milton Road, Morley Street, Croydon Street, St Osyth Street, Bayliss Street, Sylvan Road, Valentine Street, Quinn Street, Frederick Street and Gregory Street.	**B.4.2 / 12**
8		A secondary access point at Toowong would lead to reduced ease of local travel across Toowong, particularly to Toowong State School.	**B.13.3 / 16**
9		A secondary access point at Toowong would lead to loss of visual amenity, including the reduction of Quinn Park, in a character suburb through the loss of trees, parkland and character housing.	**B.13.3 / 8** **B.13.3 / 13** **B.14.5 / 1**
10		There is no way to construct the access point at Toowong without an extensive loss of amenity to the community.	**B.13.3 / 8**
11		The secondary access at Toowong will drastically decrease liveability in Toowong and do nothing good for the liveability of my community.	**B.13.3 / 8**

Submission No.		**8**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The Northern Link Tunnel, in aiming to improve traffic flow and decrease congestion, appears to be aimed at enhancing our city's liveability. Its primary value will be to take traffic away from existing local roads. This will be achieved through the Western Freeway connection without constructing a secondary access at Toowong.	**B.3.4 / 3**
2		A secondary access point at Toowong would lead to division of the suburb through the radical widening of Milton Road and Croydon Street.	**B.13.3 / 14**
3		A secondary access point at Toowong would lead to the resumption and demolition of more than 100 properties and permanent disruption to the lives of potentially hundreds of people (in many cases elderly people with longstanding and significant local community connections, whose lives could not be re-established elsewhere in the same way).	**B.11.4 / 2** **B.13.3 / 10** **B.13.3 / 7**
4	4.2.5 (pp. 14-15)	A secondary access point at Toowong would lead to nine permanent disruptions to the flow of local vehicular or pedestrian traffic affecting Milton Road, Morley Street, Croydon Street, St Osyth Street, Bayliss Street, Sylvan Road, Valentine Street, Quinn Street, Frederick Street and Gregory Street.	**B.4.2 / 12**
5		A secondary access point at Toowong would lead to reduced ease of local travel across Toowong, particularly to Toowong State	**B.13.3 / 16**

		School.	
6	13.3.4 (p. 26) 22.7.1 (p.13)	A secondary access point at Toowong would lead to loss of visual amenity, including the reduction in size of Quinn Park, in a character suburb through the loss of trees, parkland and character housing.	**B.13.3 / 8** **B.13.3 / 13** **B.14.5 / 1**
7	13.3.4 (p. 26) 13.3.5 (p. 27)	The EIS concedes that "significant long-term changes would be introduced to the local community in the vicinity of the Toowong connection" and that "regardless of the measures implemented to soften the impact, the new road infrastructure in Milton would change the character of this location. It concedes that the visual impact is unlikely to be successfully reduced by the proposed landscaping and design treatments."	**B.14.7 / 4** **B.14.5 / 2**
8		EIS discusses redressing impacts on community cohesion through the "provision of attractive and usable public space." "There is no conceivable action of this type that would mitigate the loss of half of Quinn Park and the widening of Milton Road to 10 lanes." The support that may be provided to people will never be enough to compensate for dislocating them from the communities of which they are a part.	**B.13.3 / 14**
9		Potential benefits from the Northern Link tunnel will not come through having a secondary access point at Toowong. Benefits will come from offering an alternative to inbound and outbound traffic to and from suburbs further west.	**B.3.4 / 3**
10		It is nonsensical to drastically decrease the liveability of Toowong as part of implementing the Northern Link tunnel.	**B.13.3 / 8**
11		Tunnels may be in the interests of citizens through improvements to traffic flow, but wrecking a neighbourhood to create an unnecessary tolling point is not.	**B.13.3 / 14**
12		The inner city needs more trees and green spaces and it needs to preserve its character and communities. The EIS acknowledges that a Toowong tunnel connection would bring about irreparable losses to all in these areas.	**B.14.5 / 1**
13		There is no way to construct the access point at Toowong without an extensive loss of amenity to the community. Urge the Proponent to remove the Toowong connection from the Northern Link Project.	**B.13.3 / 8**

Submission No.		**9**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		All for improved infrastructure and transport systems for the community, however, very concerned about the proposed local access (at Toowong) with 10 lanes for Milton Road and 7 lanes for Croydon Street.	**B.4.2 / 9**
2		Both the Lord Mayor and Councillor Matic stated that they dislike the Toowong connection, which would add $1 billion to the cost of the Project. This additional cost will far outweigh the benefits of the project. Why is this option left on the proposed plan and not removed before the project goes out to tender.	**B.1.6 / 2** **B.15.7 / 1**
3	2	Toowong connection will cause congestion. Milton Road traffic flows smoothly now, even during peak hours. Do not need the proposed expansions on Milton Road and Croydon Street. An alternative solution would be to provide Indooroopilly and Taringa with access to Northern Link via the Western Freeway.	**B.5.6 / 11**
4	2	The Toowong community should not be put through the loss of quality lifestyle of inner city living for an inefficient and poorly	**B.13.3 / 8**

		conceived Project.	
5	5	Rat-running in the Toowong streets as a result of the Project has been acknowledged by the EIS. Suggest that a Local Area Traffic Management Plan should be implemented.	**B.5.6 / 18**
6	5	A 60% increase in traffic on Croydon Street as a result of the Project in 2026 will destroy the now very liveable community. Keep Croydon Street as four lanes.	**B.13.3 / 8** **B.5.6 / 16**
7	13	10 lanes along Milton Road will divide and socially dislocate the Toowong community. North Toowong will be further isolated from the original town core and access to schools will be inhibited.	**B.13.3 / 4**
8	13	The proposed local access points at Toowong will result in the loss of the existing character homes and will reduce the attractiveness and liveability of the area.	**B.13.3 / 6** **B.12.2 / 1**
9	8	During construction, residents located close to the construction sites will have to deal with noise and dust.	**B.8.2 / 1**
10	8	Suggest that filtration should be incorporated into the ventilation outlets.	**B.8.5 / 1**
11	8	The positioning and height of the ventilation outlets should be made public now. Any development must not be made at the expense of some people.	**B.3.5 / 1** **B.4.2 / 22**

Submission No.		**10**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	9	Concerned that the dust, noise and inconvenience of this over-sized construction will make living a health hazard. Health hazards will not only be an issue during construction, but also in operation with increased traffic through our suburb.	**B.8.2 / 1** **B.18.2 / 1** **B.18.4 / 1** **B.18.6 / 1** **B.18.7 / 1**
2	9	If people want to come into the city from the outer west they should find a way that is not at the expense of the health of Toowong residents. How about a rail service?	**B.2 / 1** **B.18.4 / 1**
3	8	The air quality assessment around Toowong State School appears to be incomplete, as some aspects seem left out. Do not want air quality to decrease at the school.	**B.8.1 / 1**
4	8	Worried about dust during construction.	**B.8.2 / 1**
5	8	Worried about the heat that excess bitumen creates.	**B.4.2 / 7**
6	14	Government keeps encouraging people to move to Queensland, but at the expense of existing residents.	**Statement**
7	14	Access to the school and other areas in Toowong will be difficult.	**B.13.3 / 16**

Submission No.		**11**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	Access from Toowong is designed to ease congestion on Milton Road and Coronation Drive. However, good public transport already exists, so why would people pay money to use the tunnel? Suggest that money for the Toowong connection should be used for improving and increasing existing public transport.	**B.2.5 / 2**
2	5	Widening of Croydon Street will lead to an increase in traffic and	**B.5.6 / 39**

		will disrupt local pedestrian and cycle access. Pedestrian/cycle/handicapped access should be marked on maps.	
3	5	Widening of Croydon Street will encourage rat-running and will result in flow-on impacts for other local streets (e.g. Jephson Street and Burns Road will need to be widened).	**B.5.6 / 18**
4	4	With locals unlikely to use the tunnel, there is no need for Croydon Street to be 7 lanes wide.	**B.5.6 / 2** **B.5.6 / 16**
5	14	Character houses should be protected or moved.	**B.12.2 / 1**
6	14	Disagree with placing commercial properties on land that becomes available at the end of the Project's construction. Suggest that this land should be used to increase community facilities (e.g. BBQ areas, pools, tennis courts, etc).	**B.20.4 / 2**
7	13	Access to local shops or businesses will be restricted. Suggest that more pedestrian accesses should be implemented, possibly in the form of tunnels or overpasses.	**B.5.6 / 38**
8	14	The linking of the community north of Milton Road with the cycle route at Sylvan Road is not shown. How will this be achieved? Money should be used to improve cycle/pedestrian/handicapped accesses.	**B.5.6 / 39**
9	14 Fig 14-11	Noise barriers have only been proposed for one side of Croydon Street. They should be implemented on both.	**B.9.5 / 1**
10	13	Noise barriers along Croydon Street will divide the local community, as the barriers will make it more difficult to cross the road. Pedestrian/cycle access tunnels/bridges across Croydon Street should be provided.	**B.9.5 / 1** **B.13.4 / 2**
11		Feel that all submissions made in protest by Toowong Tunnel Solutions have been ignored. Explanation as to why protests are being ignored should be provided.	**B.1.7 / 1**

Submission No.		**12**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	13	Family home in Toowong is a character home and is nearly 100 years old. Council always states that character homes should be protected and yet are happy to demolish mine.	**B.12.2 / 1**
2	2	Have always used the local school, garage and shops. The access tunnel at Toowong will be devastating for the suburb.	**B.13.3 / 3**

Submission No.		**13**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	5	Inappropriate planning solution to provide the local access amid the residential area of Toowong. It should be provided further west (e.g. at Dean Street or further west).	**B.3.3 / 3** **B.5.6 / 11**
2	13	A 10 lane roadway dividing Toowong residents is inappropriate and akin to a freeway feeding into a bottle neck. It would result in producing a system of rat-running.	**B.5.6 / 18**

Submission No.		14	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	14	Regarding the visual environment/urban design measures in Toowong, the old, established trees should be mapped and retained and character housing should be retained as well.	**B.14.4 / 4** **B.12.2 / 1**
2	13	Need to find alternatives to the unsightly noise barriers to preserve the interconnection of community members locally.	**B.13.3 / 2** **B.14.6 / 1**
3	13	The Project will result in social disruption, particularly in the Toowong area, as a result of reduced access to shops, schools and pedestrian and cycle paths. The major impact on this social disruption will be the noise barriers that will be implemented along the roadsides.	**B.13.3 / 2**
4	13	The Project should be downsized so that the community is not dislocated or otherwise affected. Full assessment of the current social networks and pathways should be undertaken.	**B.13.3 / 1**

Submission No.		15	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	There is a lack of emphasis on public transport and in fact, the Project encourages more private vehicle usage. Suggest that at least one lane each way in the tunnel should be devoted exclusively to public transport.	**B.2.5 / 2**
2	5	The rationale for the tunnel conflicts with the "local access" impacts, which will increase congestion.	**B.5.6 / 33**
3	5	The scale and scope of the Toowong ramps seem to be predicated upon growing traffic flows from future projects (e.g. East-West [Tunnel]). This may or may not occur under future administrations, but in the meantime, Toowong bears all the impacts.	**B.4.2 / 6**
4	8	As the filtration technology of the ventilation outlets is stated as not sufficient for petrol fumes, the Project should not proceed until the filtration issues have been solved. Suggest that ventilation outlets should be located further away from residential properties.	**B.3.5 / 1** **B.8.5 / 1**
5	9	Sound levels only need to be kept at current levels and not reduced. Suggest more sound barriers (e.g. Croydon Street and Western Freeway approach into the tunnel).	**B.9.2 / 1** **B.9.1 / 1**
6	13	The suburban living of Toowong will be replaced by a traffic transport corridor. School and shops will be isolated from the community.	**B.13.3 / 3**
7	14	"The plans for Croydon Street and Milton Road reduce the area to a visual wasteland" Produced photos of proposed visual impact are, at best, inaccurate and deceptive (i.e. 10 lanes are shown to look like 7 lanes).	**B.14.8 / 3**

Submission No.		16	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	Northern Link will only increase cars on the road, resulting in heavy pollution, more environmental damage, increase in accidents and higher risk to children crossing roads.	**B.2.1 / 7**

2	2	Northern Link will also cause an increase in accidents and a higher risk to children crossing roads, particularly as there are many schools where Northern Link is located.	**B.13.3 / 4**
3	2	Suggests that the number of lanes on roads [Croydon Street and Milton road] should be decreased, replaced with wider footpaths, bikeways and greenery.	**B.5.6 / 39**
4	5	The tunnel will limit access to the already scarce number of walkways and bikeways. Suggests that we should be encouraging more people to use bikes as a means of transport by increasing safety and enjoyment.	**B.5.6 / 39**

Submission No.		**17**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	The tunnel will be an impost for future generations and the company charging the toll will go bust and both users and non-users of the tunnel will be paying.	**B.15.8 / 1**
2	2	Railway, bus and bike access is what is required.	**B.2.5 / 2**
3	2	Cut and fill Payne Road (or alternatively Waverley Road), Indooroopilly for access from Moggill Road. This would cause the least disruption on residents anywhere.	**B.3.3 / 3**

Submission No.		**18**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	Congestion will be worse for Toowong residents if there is a Toowong local access.	**B.5.6 / 11**
2	5	Rat running in the suburban streets of Toowong is already a significant problem, which will increase if the Toowong local access is constructed. Why has this not been addressed?	**B.5.6 / 18**
3	8	Amazed that air quality and greenhouse gases are not the top priority for the EIS. What about "Liveable Brisbane"?	**B.8.6 / 1**
4	9	Concerned that there will be construction noise for three years and increased noise from operational traffic, which is already a problem.	**B.9.3 / 1**
5	13	Northern Link and the Toowong local access will cause a loss of community feeling in Toowong. There is already a loss of community existing and it will only be exacerbated with the tunnel. Walking to different locations in the area will no longer be a viable or pleasant way to get around.	**B.13.3 / 4** **B.13.3 / 14**
6	14	More cement and bitumen, less greenery to mitigate exhaust fumes and loss of old timber houses is an issue.	**B.14.5 / 1**

Submission No.		**19**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		With 7 lanes across Croydon Street, I will not be able to access Toowong State School.	**B.5.6 / 39**
2		The Project will result in excessive noise and pollution that will affect both people and wildlife in the area.	**B.9.3 / 1** **B.8.3 / 3** **B.10.2 / 1**

			B.10.2 / 4
3		There will be too much traffic making a detour to the city on Bayliss Street. It will be dangerous on the street for people and domestic animals.	**B.5.6 / 18**
4		Dust and noise will increase in the Toowong area causing health impacts for residents.	**B.18.2 / 1** **B.18.4 / 1** **B.18.6 / 1** **B.18.7 / 1**

Submission No.		**20**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	13	Although the sound barriers may mitigate the noise, they will not enhance the streetscape or provide a scenic place to walk.	**B.14.8 / 5**
2	13	10 lanes will divide Toowong. Through looking at other cities, it appears that 10 lanes is out of the ordinary.	**B.4.2 / 7**
3	13	Quinn Park, of which one third will be lost, is used for social gathering by nearby residents.	**B.13.3 / 13**
4	13	Access to Toowong State School, Preschool and the Cat and Fiddle shops will be difficult due to the increased level of traffic on the local roads.	**B.13.3 / 3** **B.5.6 / 32**
5	14	Traditional houses that were built between 1900 and 1946 will be lost as a result of the Project and can never be replaced.	**B.12.2 / 1**
6	14	The proposed expansions to Milton Road and Croydon Street will make crossing the roads difficult and will divide Toowong.	**B.13.3 / 4**

Submission No.		**21**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	5	The EIS has accepted the projected traffic volumes at Croydon Street and Milton Road and has therefore proposed the widening of these roads. However, the EIS has not addressed the traffic 'bottle-neck' that will occur at the city end of Milton Road.	**B.5.6 / 20**
2	14	The widening of Milton Road and Croydon Street will have a detrimental effect on the Toowong community. Apart from the inconsiderate resumption of old homes, the Project will disrupt shops and restaurants through increased traffic noise and limited access.	**B.11.4 / 2** **B.13.3 / 15**
3	14	The character of the Morley Street, Milton Road and Croydon Street intersection will be affected by the Toowong tunnel access.	**B.13.3 / 7** **B.14.8 / 1**

Submission No.		**22**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	14	Views from Sylvan Road will be over cars, concrete and the fly over. Suggests that there should not be a Toowong access.	**B.14.8 / 1**
2	13	Noise barriers are "visually ugly." Suggests that the 10 lanes on Milton Road should be reduced so that fewer cars use the road. This would result in decreased noise levels and the noise barriers	**B.14.8 / 5**

		would not be required.	
3	2	The EIS states that Northern Link will ease congestion on Milton Road and Coronation Drive. However, the Toowong connection will increase more traffic on these roads.	**B.5.6 / 20**
4	8	Horrified at the lack of concern expressed by the Northern Link EIS for air quality issues. There are a number of babies and children living in the area, as well as Toowong State School, that will be affected by the Project.	**B.8.1 / 1**
5	8	Why only sound barriers on one side of Croydon Street?	**B.9.5 / 1**

Submission No.		**23**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	8	No air quality impacts have been determined around Toowong State School and there has been inadequate reporting on air pollution in the whole of the study corridor. Has recommended that a full air pollution study be implemented.	**B.8.1 / 1**
2	8	Dust created during construction will impact on older homes which get their ventilation via cross breezes. This is not acceptable for an increase in dust volumes or providing air conditioning.	**B.8.2 / 1**
3	8	The Toowong ventilation stack will be unsightly due to its height. It will also be unfiltered and should only expel filtered air.	**B.8.5 / 1** **B.14.8 / 4**
4	8	No investigation has been done relating to the type of vehicles that will use the tunnel. If it is mainly freight, there will be an increase in diesel fumes and noise and air pollution. Investigate the effects of change of vehicle type to use the tunnel.	**B.8.4 / 4** **B.5.6 / 3**
5		The proposed widening of Milton Road and Croydon Street will increase heat from the bitumen.	**B.4.2 / 7**
6	14	The examples of urban design are not attractive and are not in keeping with the design of the suburb. Suggest the project should be scaled back.	**B.14.7 / 4**
7	8	Has anyone considered the concentration of air pollution in one area that will be emitted from the unfiltered stack?	**B.8.5 / 1**
8		Feels that the local community's views were not taken into account when this project was proposed or as the project progressed from a proposal to a design state.	**B.1.7 / 1**
9	5	There will be an increase in rat running due to the absolution of the right hand turn from Jephson Street to Sylvan Road. Suggests that the right hand turn should remain.	**B.5.6 / 18**
10	14	Developing commercial premises on available land at the end of the project is not in keeping with the historical character housing and residential nature.	**B.20.4 / 2**
11	9	Why doesn't BCC, in these projects, aim for a better than status quo on noise levels, air pollution etc? It is not acceptable to have noise barriers on only one side of Croydon Street. Suggest that noise could be further decreased by using special road surfaces and implementing noise barriers on both sides of Croydon Street.	**B.9.2 / 1**
12	13	The construction of the Toowong access will result in the dislocation and division of Toowong due to road widening and the implementation of noise barriers. This will cause decreased access to local parks, ferry, bus and train stations, and local shops (i.e. Cat and Fiddle). Suggest that more pedestrian crossings should be included in the design, such as overbridges and underpasses.	**B.13.3 / 3**
13	5	There will be an increase of traffic volumes on Croydon Street which is unacceptable due to the residential nature of the suburb.	**B.5.6 / 16**

		This will lead to increased rat running through suburban streets. Suggests that there should be no widening of Jephson Street and that a better local traffic study should be implemented.	
14	2	Croydon Street has been widened to improve access the University of Queensland, but no other roads have been widened to accommodate the increase in traffic.	**B.5.6 / 16**
15	2	There is no bike access along Croydon Street. This does not enhance cycle routes in the Toowong area. Suggests that a bikeway along Croydon Street should be incorporated in the design.	**B.5.6 / 39**
16	2	Project rationale is to ease congestion and the EIS shows that local traffic on roads around Toowong (i.e. Croydon Street) will increase. This is not an easing of traffic congestion. Suggests that a plan should be implemented to ensure the seven lanes on Croydon Street can go somewhere, i.e. widen Jephson Street.	**B.5.6 / 16**

Submission No.		**24**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	5	Cycle access is diminished due to Croydon Street being heavily arterialised and no access has been provided for north Toowong and Auchenflower to access the bikeway on Sylvan Road.	**B.5.6 / 39**
2	8	No air quality assessment has been made around Toowong State School.	**B.8.1 / 1**
3	8	Dust during construction.	**B.8.2 / 1**
4	9	There will be impacts from construction noise.	**B.9.3 / 1**
5	9	Noise barriers are only on one side of Croydon Street.	**B.9.5 / 1**
6	13	Noise barriers provide acoustic benefits. They will result in social dislocation, particularly along Croydon Street. Social dislocation will occur through: 1. Division of an old community. 2. Loss of one third of Quinn Park. 3. Access restricted to school and pre-school. 4. Loss of necessary amenities (i.e. service station or viability of Cat and Fiddle shops).	**B.13.3 / 2**
7		BCC work vehicles are often parked in our street when works are being done in the local area. During the construction of the Project, will we have Council work cars continually parked in our street?	**B.4.3 / 19** **B.5.7 / 3**

Submission No.		**25**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	Tunnel is designed to reduce congestion on Milton Road and Coronation Drive, however, the local access at Toowong draws more traffic into the area to access the tunnel.	**B.5.6 / 20**
2	5	Rat-running through local streets will occur if the Toowong connection proceeds. The EIS ignored this fact even though it was raised by the community.	**B.5.6 / 18**
3	5	Cycle and pedestrian access throughout the suburb will be reduced by the widening of Milton Road and Croydon Street to 'freeway' proportions.	**B.5.6 / 39**
4	8	No air quality testing was undertaken on Milton Road and Croydon	**B.8.1 / 1**

		Street where widening is proposed, especially around the school.	
5	8	What about dust during three years of construction?	**B.8.2 / 1**
6	8	No filtration on stacks - who is responsible if we all get cancer?	**B.8.5 / 1** **B.18.3 / 1**
7	8	The western stack will dump emissions close to residential areas, is too high and will be visually offensive.	**B.8.3 / 2**
8	8	There will be a potential change of vehicle mix to more freight. This will result in more diesel fumes and therefore more particulates.	**B.8.4 / 4**
9	8	There will be an increase in heat from the enlarged road surface of Milton Road and Sylvan Road too close to residences and schools.	**B.4.2 / 7**
10	9	There are no requirements outlined in the EIS to reduce noise levels along Milton Road and Croydon Street. Traffic on Milton Road, between Penrose Street and Morley Street, will increase enormously and no sound barriers have been proposed. Also, sound barriers have only been proposed for one side of Croydon Street. Sound will bounce off the barrier and further impact on the side without barriers.	**B.9.5 / 1** **B.9.5 / 3**
11	13	Sound barriers provide acoustic benefits; however, "they do cut the community, socially and visually, in half."	**B.13.3 / 2**
12	13	The Project will divide one of the oldest suburbs in Brisbane. It will divide the Toowong cemetery from the community. The Project will result in: 1. Loss of one third of Quinn Park. 2. Inhibited access to Toowong State School and preschool. 3. Loss of local amenities, including the service station.	**B.11.4 / 1** **B.13.3 / 15**
13	14	Widening of Milton Road and Croydon Street is excessive and "visually confronting and unnecessary". "It looks like a freeway and not the sort of place where people would live".	**B.14.5 / 2**
14	14	No mitigation measures have been proposed for the demolition of character housing. Character homes in a demolition control precinct should be protected.	**B.12.2 / 1**
15	14	Our suburb will be divided. Currently, can walk to essential services, catch public transport, use cycle paths and access the river. If the roads are widened and the access tunnel is built, Toowong will become "less visually appealing, will be noisier, dirtier, have more traffic and be less liveable".	**B.13.3 / 3** **B.13.3 / 8**
16	14	Restored character homes will lose value and people will leave the area. The suburb will gradually become run-down and the character housing will deteriorate. The Project will result in the end of Toowong.	**B.12.2 / 1** **B.13.3 / 6** **B.15.5 / 1**
17	14	Graphic representations are misleading. Planning shown is inappropriate and does not screen any of the visually polluting features (i.e. sound barriers and ramps).	**B.14.8 / 3**
18	14	No commercial premises should be developed on land vacated at the end of the construction period.	**B.20.4 / 2**
19		Earlier submissions have been responded to with "pasted together, standard responses that have failed to address my concerns". Community feedback has not been properly taken into account. Having submission deadlines around the December-January period of 2007/2008 and 2008/2009 is not fair, nor is it indicative of a genuine process. The community information sessions have not taken the community's concerns into account.	**B.1.7 / 1** **B.1.7 / 2** **B.1.7 / 5**

Submission No.		26	
Issue No.	EIS Reference	Issue Summary	Response
1	5	Toowong is already plagued by rat running. The local access connection is designed so that users will have no other route onto it except local streets (e.g. Bardon residents are obliged to use local streets to get onto it.) I suggest traffic management plans for the local streets, including the strategic closure of some local roads should be implemented to limit rat-running.	**B.5.6 / 18**
2	5	The EIS has not included data on locations of potential users of the Northern Link tunnel. Doing this minimises the apparent effect, particularly in the area north of Milton Road. I suggest mandatory upgrade or reconfiguration of the Toowong roundabout into an acceptable termination to a major highway. At present trying to negotiate this roundabout from side streets is dangerous and causes much rat-running.	**B.5.6 / 2**
3	13	The catchment area of Toowong State School will not be viable as residents north of Milton Road will not be able to access it by foot or car. The Toowong connection location should be reconsidered or removed altogether. Adequate pedestrian and vehicle access from Toowong/Auchenflower north of Milton Road should be provided as a minimum.	**B.13.3 / 16**

Submission No.		27	
Issue No.	EIS Reference	Issue Summary	Response
1	8	Dust will be a nuisance during three years of construction. I suggest a constant watering procedure to manage this problem.	**B.8.2 / 1**
2	8	No filtration of emissions and the effect this has on our health (our daughter has asthma). I suggest emissions filtration infrastructure should be installed.	**B.8.5 / 1**
3	8	The ventilation outlet is to be located within 400 m of my home. It should be moved away from residential properties - towards the quarry.	**B.8.3 / 2**
4	8	There is a potential change of vehicle mix to more freight. This will result in more diesel fumes and therefore more particulates. Limit the size of the trucks using the tunnel.	**B.8.4 / 4**
5	9	Construction noise for three years. I suggest effective sound barriers during the construction period.	**B.9.3 / 1**
6	14	The Project will result in a decline in liveability due to more noise and pollution.	**B.8.5 / 1**
7		No community consultation was undertaken with residents in West Toowong before the tunnel design. Concerns regarding emissions from the ventilation outlet continue to be ignored.	**B.1.7 / 3**

Submission No.		28	
Issue No.	EIS Reference	Issue Summary	Response
1	5	Project will result in limited cycle access over Croydon Street and mean people are unable to cross Milton Road from Morley Street to Croydon Street. Instead of encouraging more cars to travel more easily by tunnels, encourage sustainable travel on bicycles and by foot.	**B.5.6 / 38**

Submission No.		29	
Issue No.	EIS Reference	Issue Summary	Response
1	2	Inappropriate planning to provide access between the University of Queensland and Northern Link. I suggest removing the local Toowong access through 10 lane Milton Road, as it will divide the community. Use tunnel access from Moggill Road or further along Centenary Highway towards Moggill Road on-ramp.	**B.2.1 / 6**
2	5	The increasing attractiveness of private vehicle travel produces heavy congestion and will result in rat-running on Croydon Street and diminished cycle access. Provide better public transport systems.	**B.2.5 / 2** **B.5.6 / 18**
3	8	Air quality around schools and dense residential areas will be impacted by inadequate filtration and distancing.	**B.8.5 / 1**
4	9	Noise and vibration for the three years of construction will be diabolical for residents.	**B.9.3 / 1**
5	13	The community will experience a high degree of social dislocation as a result of the Project.	**B.13.3 / 14**
6	13	Impact on social environment through loss of part of Quinn Park and inhibited access to the Cemetery, Quinn Park, Anzac Park, Toowong State School, etc. Loss of local amenities such as the Caltex service station and Cat & Fiddle complex.	**B.13.3 / 3** **B.13.3 / 15**
7	14	The current design is a "gross, obnoxious, interruptive visual eyesore with a totally negative impact on the local community."	**B.14.8 / 1**
8	14	The project sends the wrong message regarding environmental impacts as it encourages the use of private vehicles and destroys the historical aesthetics and community value of the region.	**B.2.1 / 7**

Submission No.		30	
Issue No.	EIS Reference	Issue Summary	Response
1		The tunnel will bring more traffic onto the local streets and local residents will be forced to rat-run.	**B.5.6 / 18**
2		Concern over the proximity of road works to the local school.	**B.13.3 / 16**
3		Dust during construction. Houses should be washed every month during construction to remove the dust.	**B.8.2 / 1**
4		Future works on Jephson Street and Sylvan Road should be included in the Project.	**B.5.6 / 16**
5		Additional traffic on Jephson Street will make dangerous to turn into Ventnor Street.	**B.4.2 / 9** **B.5.6 / 16**
6		Croydon Street is currently only busy for 5-10 minutes each morning and evening. This will significantly increased as a result of the Project and will significantly impact on access to the school.	**B.5.6 / 16**

Submission No.		31	
Issue No.	EIS Reference	Issue Summary	Response
1	8	Widening of Milton Road and Croydon Street will result in heat radiation from the road surfaces.	**B.4.2 / 7**
2	2	Northern Link is designed to ease congestion; however, the local access at Toowong will only induce more local congestion and	**B.5.6 / 11**

		traffic.	
3	13	I suggest a pedestrian overpass over Milton Road to give access for residents on north side of Milton Road to Toowong State School and preschool.	**B.5.6 / 38**
4	13	The local service station will be lost and access to local businesses will be diminished.	**B.11.4 / 1**
5	8	I suggest a proper air quality and pollution study should be undertaken and ventilation outlets should include 'best practice' filtration technology.	**B.8.5 / 1**
6	5	Cycle and pedestrian access to Croydon Street will be diminished for North Toowong and Auchenflower-an overpass should be provided over Milton Road.	**B.5.6 / 39**
7	8	Air quality determinations should be made around Toowong State School to determine the impact of the widening of Milton Road and Croydon street.	**B.8.1 / 1**
8	8	To mitigate construction dust. Wash down local houses. Regular wash down of local streets. Wash down roads during construction. Dust during construction.	**B.8.2 / 1**
9	9	To alleviate noise impacts during construction, insulate adjacent houses and double-glaze windows in surrounding neighbourhood.	**B.9.3 / 1**
10	9	Sound barriers on Croydon Street will effectively create a 'tunnel effect' in the suburb.	**B.9.5 / 1**
11	5	Rat-running has not been addressed by EIS. Traffic calming measures should be implemented.	**B.5.6 / 18**
12	8	The tunnel will encourage more diesel vehicles travelling from the Western Corridor to the Airport, leading to an increase in air pollution - appropriate filtration should be installed.	**B.8.5 / 1**

Submission No.		**32**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	It is stated that Northern Link is designed to facilitate access for residents living in the Western suburbs to the city, eliminating the need for using inner suburban streets. The Toowong connection is contrary to the concept. Suggests that the Toowong access should be removed and the freeway access at Moggill Road, Indooroopilly be upgraded.	**B.2.1 / 6**
2	5	Upgrading Croydon Street and Milton Road is not needed, as Croydon Street can often have no cars travelling on it at times between 9am and 3pm. This upgrade has been designed to tunnel traffic from Moggill Road at Indooroopilly which will rat run through suburban streets. The design also means local residents cannot access the tunnel without rat running.	**B.5.6 / 16**
3	5	Suggests that visual amenity should be improved and that pedestrian access on both Milton Road and Croydon Street needs to be considered to facilitate safe transit both along and across these roads.	**B.5.6 / 38**
4	8	Northern Link is fundamentally designed as a freight route. The increase in diesel traffic appears to have been overlooked in the planning of the ventilation outlets. Suggests that ventilation outlets should be filtered to minimise health impacts.	**B.8.5 / 1**
5	9	During construction, there will be noise, dust and vibration generated. Suggests that worksites should be insulated and instead of having a Toowong access, roads should be upgraded.	**B.8.2 / 1**
6	13	Sound barriers will divide the community, inhibit access to schools and local amenities and create security issues due to removed	**B.13.3 / 2**

		visibility.	
7	14	Many historic and heritage homes will be demolished or impacted. Toowong is a close knit, vibrant community that enjoys the history of its past. The tunnel is contrary to the urban community. The M1 freeway is not 10 lanes, so how can 10 lanes be considered in a suburban community.	**B.13.3 / 6**
8	8	Current traffic using Milton Road emits pollutants along the whole length of the journey. Only two unfiltered outlets will result in a concentration of pollutants, negatively impacting schools and local communities near the outlet points.	**B.8.3 / 3**

Submission No.		**33**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	5	In 2026 without Northern Link, 28,700 cars may use Croydon Street daily, however, with Northern Link, this figure is 45,900, a 60% increase- I suggest that there should not be an access at Toowong.	**B.5.6 / 16**
2	5	The potentially devastating rat running exposed by the community has been ignored by the EIS even though many submissions were made to the design team about this issue. Should a Local Area Traffic Management scheme be implemented?	**B.5.6 / 18**
3	5	Bike access will be diminished if Croydon Street becomes heavily arterialised. No access to the Sylvan Road bikeway has been provided for North Toowong and Auchenflower.	**B.5.6 / 39**

Submission No.		**34**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	The project is based on rationale that it will reduce traffic on Milton Road, however, the Toowong access will encourage more traffic through a primarily residential area and there is no evidence that suggests that increasing capacity results in less traffic. While there may be some improvement for a short period, this will soon be lost as more people are encouraged to drive. The end result is the same or increased levels of congestion through more cars on the road, less viable public transport, less amenity for local residents and more dangerous conditions for pedestrians and cyclists. Suggests converting one traffic lane in each direction on Milton Road to public transport/cycle lane when straight through Northern Link tunnels are open for operation.	**B.2.2 / 2**

Submission No.		**35**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The Project will destroy Toowong as it will change the whole appearance of Toowong including: 1. Noise. 2. Traffic. 3. Removing houses.	**B.9.5 / 3** **B.5.6 / 11**
2		Residents will have to rat-run to access their properties.	**B.5.6 / 18**

3		Properties on the eastern side of Croydon Street will experience elevated noise levels from rebounded sound off the noise barrier on the western side of Croydon Street.	**B.9.5 / 1**
4		Our property, on Croydon Street, will be significantly impacted by the road expansion. However, we have not had any visits from BCC to discuss our impacts.	**B.1.7 / 2** **B.1.7 / 3**

Submission No.		**36**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Noise impacts on property from increased traffic on Croydon Street and no noise barriers are proposed.	**B.9.5 / 1**
2		Air quality impacts on our property from increased traffic on Croydon Street have not been considered.	**B.8.1 / 1**
3		Heat radiating off the widened Croydon Street will be significant and make living near it unpleasant.	**B.4.2 / 7**
4		Will have trouble accessing property. Will only be able to turn left out of property and enter from the right. Will have to rat-run to get home.	**B.4.2 / 9** **B.5.6 / 33**
5		Lowest property in the street and the EIS has not considered flooding in the vicinity.	**B.7.3 / 1**

Submission No.		**37**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	Increased congestion and traffic along Croydon Street and Milton Road leading into tunnel.	**B.5.6 / 20**
2	5	Rat-running will be essential for Croydon Street residents to access their properties, as there will be a median strip in the midline.	**B.4.2 / 9** **B.5.6 / 33** **B.5.6 / 18**
3	8	Combining no filtration from the ventilation outlets and heat from the widened road surface, air quality at our property will be poor and the conditions will be intolerable.	**B.8.5 / 1**
4	9	Increased noise from traffic, especially from trucks and motorbikes at night.	**B.9.5 / 1**
5	13	The service station is the only one in the area and there are no plans for its re-establishment.	**B.11.4 / 1**
6	14	Potential flooding in Croydon Street and Bayliss Street has not been addressed.	**B.7.3 / 1**

Submission No.		**38**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	Milton Road has previously spilt Toowong and Northern Link Project provides an opportunity to address this problem. Instead, the proposed design splits it further. The Project should aim to ease congestion and 'reunite' Toowong.	**B.13.3 / 4**
2	2	A major issue that has been not been addressed appropriately is the resumption of properties. This completely undervalues people's homes and lives.	**B.11.4 / 2** **B.13.3 / 10**

3	2	The Northern Link proposal is great for Toowong (and Auchenflower); however the Toowong local connection is a disgrace.	**B.3.4 / 2**
4	5	The proposed changes to Milton Road between Miskin Street, Sylvan Road and Croydon Street are a disgrace. This is widening of roads that travel through exclusively residential areas.	**B.13.3 / 8** **B.4.2 / 7**
5	8	The potential for significant reduction in air quality as a result of the increased traffic volumes and the ventilation outlet emissions is not acceptable. The design team is "toying with residents' lives."	**B.8.5 / 1**
6	13	The proposed design does not provide overpass or underpass or pedestrian crossing access across either Milton Road or Croydon Street for pedestrians. Access to schools and parks will be inhibited as well.	**B.13.3 / 4** **B.5.6 / 38**

Submission No.		**39**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2-14	Division and segregation of Toowong/Auchenflower communities could be solved by not providing local access to Northern Link.	**B.13.3 / 4**
2	2-14	Local traffic congestion will be severely worsened if the local Toowong access happens.	**B.5.6 / 11**
3	2-14	Project will result in increased rat-running through Toowong.	**B.5.6 / 18**
4	2-14	Increased congestion and traffic along Jephson Street and Sherwood Road due to the Toowong local access.	**B.5.6 / 11** **B.5.6 / 16**
5	2-14	Very poor respect and attention paid to the community submission prior to the EIS release.	**B.1.7 / 6**
6	2-14	The expected number of vehicles on Croydon Street and Jephson Street will require further assessment on how pedestrian and cyclists will access Toowong Village, schools and parks.	**B.5.6 / 39**
7	2-14	The objectives and findings of the EIS are valid for the main tunnel; however, it is incredulous that these findings apply to the local access point in Toowong.	**B.2.3 / 4**
8	2-14	The EIS is deficient in addressing the impacts of the local access at Toowong. It addresses the local access impacts as if they are of no importance.	**B.1.6 / 4**
9	2-14	The graphic representation of Milton Road only shows 7 lanes, not 10 as proposed. This is a false portrayal and is very misleading.	**B.14.8 / 3**

Submission No.		**40**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	Inadequate to put the Toowong community through this, to access the University with no clear path defined.	**B.2 / 1**
2	2	Northern Link is supposed to ease congestion on Milton Road and Coronation Drive; however the Toowong local access will only induce more congestion and traffic.	**B.5.6 / 20**
3	3	The rat running exposed by the community has been ignored by the EIS. Submissions were lodged to the design team outlining the potential effects of rat-running and they have been ignored. A Local Area Traffic Management Plan should be implemented.	**B.5.6 / 18**
4	9	Concern over the dust from three years of construction and the heat from the widened road surface.	**B.8.2 / 1** **B.4.2 / 7**

5	9	Concern over construction noise for three years and the implementation of noise barriers only on one side of Croydon Street.	**B.9.3 / 1** **B.9.5 / 1**
6	13	North Toowong, including the cemetery, will be further isolated from its original town core.	**B.13.3 / 4**
7	14	Croydon Street and Milton Road will be a "big scar through the suburbs."	**B.14.5 / 2**

Submission No.		**41**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	Toowong local access will only escalate congestion in Toowong as more cars access the area as a result of widening Croydon Street and more cars using this as an alternative to Coronation Drive.	**B.5.6 / 11**
2	2	How will congestion on Milton Road be alleviated when the tunnel delivers drivers north of the CBD. Do they really wish to pay for something that makes them travel further back into the city or would they prefer to continue to use Milton Road or Coronation Drive?	**B.5.6 / 20**
3	5	No scheme has been implemented for the local area to address the issue of rat-running. Would it not be more sensible for a road allowing direct access from the tunnels to Milton Road east of Croydon Street instead of re-directing traffic along Cadell and Bayliss Streets?	**B.5.6 / 18**
4	13	Access for students walking to Toowong State School will be restricted by the widening of Croydon Street. This issue requires attention with adequate, safe access provided.	**B.13.3 / 16** **B.5.6 / 39**
5	5	Project effectively divides the local community and restricts access to Sylvan Road cycleway. Will increase the amount of time it takes to travel to Toowong Village.	**B.13.3 / 3** **B.13.3 / 4** **B.5.6 / 39**

Submission No.		**42**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	The current congestion problem originates from the freeway, so there is no point in having the Toowong access.	**B.2.2 / 2**
2	5	If there is a Toowong access constructed, rat running will increase in local residential streets. Suggests that a Local Area Traffic Management scheme with serious traffic calming measures should be implemented.	**B.5.6 / 18**
3	5	The Toowong access will cause bike access to be very risky and difficult, particularly from the North side of Milton Road to Sylvan Road and Coronation Drive. This is hardly encouraging the use of bikeways. Suggests that a pedestrian and cycle bridge should be implemented over Milton Road.	**B.5.6 / 38**
4	14.8.4 VP: TC4	Why doesn't Vantage Point Image 'TC4' show the five inbound lanes? This is simply dishonest. Demonstrate integrity by honestly presenting the full picture both visually and verbally.	**B.14.8 / 3**
5		The Toowong access will cause a loss of amenity to the Toowong shopping and business area as it will become a tiny island surrounded by busy crowded roads. No one will want to walk to the shops any more.	**B.13.3 / 3**
6		Negligible attention has been paid to the concerns of local	**B.13.3 / 11**

		residents and business operators in Toowong. Apparently Mayor Newman's opinion is that the price of progress is high economic and social costs. Suggest that financial compensation should be paid to local residents and business owners so that the cost is spread to the people who will benefit from this project.	**B.15.7 / 9**
7		Investing in roads as a long term solution to congestion is futile, as numerous studies have shown that within a few years the traffic becomes just as congested. Increased capacity just leads to increased usage. Suggests that the only solution to traffic congestion is hugely investing in public transport, which has higher environmental benefits as well.	**B.2.1 / 7**

Submission No.		**43**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	8	The position of the Western ventilation outlet is too close to residential housing and the Botanic Gardens. Suggests it should be relocated to the Toowong Quarry and must be filtered no matter what the cost will be.	**B.3.5 / 1** **B.8.5 / 1**
2		The current noise level from the Western Freeway is already excessive and has a negative impact on residential housing and the Botanic Gardens. Suggests that the entire project should be reassessed in favour of an outer ring road, with reductions in speed limits on the Western Freeway. Sound barriers are insufficient to reduce noise levels and are always visually unattractive.	**B.2.5 / 5** **B.9.1 / 1**

Submission No.		**44**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	The tunnel will cause a loss of liveability within Toowong. The suburb will no longer be a pleasant place to live, as it will be too noisy and have too much traffic, acting as a traffic thoroughfare. Reassess priority of traffic. Place rate payers above traffic Use ring roads and bypasses Plan effective public transport.	**B.13.3 / 8**
2	8	The pollution and air quality issues that will be caused by the tunnel will impact upon the health of students and staff at Toowong State School, as well as residents. Suggests that residents, schools and businesses should receive compensation for the cost of sound proofing and air conditioning, enabling them to live a more acceptable life in Toowong. Ventilation outlets should also be filtered.	**B.8.5 / 1**
3	9	The ability of students to learn at Toowong schools will be hindered due to noise and pollution caused by the tunnel.	**B.9.5 / 3**

Submission No.		**45**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		My wife works at Toowong State School and walks to work across Croydon Street. If Croydon Street is widened, it will be very inconvenient to walk to work and will increase the chances of	**B.13.3 / 16** **B.5.6 / 39**

		being involved in a traffic accident. Suggests that the project should be re-planned and don't widen Croydon Street.	
2		The noise and air pollution will increase during both the construction and operational phase. Suggests that the project should not go ahead.	**B.8.2 / 1**
3		There are only two traffic lanes for each direction inside the tunnel. This increases the chances of accidents occurring at the merge junction within the tunnel. What happens if there is an accident inside the tunnel? Suggests there should be 4 lanes in each direction inside the tunnel.	**B.4.2 / 2**
4		The traffic will increase on our street and impact upon liveability.	**B.13.3 / 8**

Submission No.		**46**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	The Toowong connection will ease congestion on Milton Road and Coronation Drive at the expense of increasing traffic through the community of Toowong.	**B.5.6 / 11**
2	2	Having 10 lanes on Milton Road will be detrimental to the character-rich suburb of Toowong where residents have lived for decades. Putting an access tunnel through Toowong is not in keeping with Council's desire to protect character suburbs.	**B.13.3 / 7**
3	2	I understand the need for a link between the outer West and the North, but this can be achieved by the mainline tunnel without the Toowong access in place.	**B.3.4 / 3**

Submission No.		**47**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		I am opposed to the whole concept of tunnels. There should be more investment in public transport, such as light rail to the West.	**B.2.5 / 2**
2	5	The proposed Toowong access will act as a collection tunnel and attract more traffic to travel through Toowong's narrow and dangerous streets. Traffic will be attracted from Bardon, Rainworth, Rosalie and Paddington and use minor roads in order to gain access to the tunnel. This will be extremely dangerous for the elderly, children, pedestrians and cyclists. There will also be an increase of traffic on Milton Road because of residents from Auchenflower and Milton accessing the Toowong access.	**B.5.6 / 2**

Submission No.		**48**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Raises the issue of increasing traffic on Victoria Park Road. Since the formation of the Inner City Bypass, the expansion of QUT and now the Kelvin Grove Urban Village, traffic in our once quiet street, Victoria Park Road, has increased exponentially both in volume and speed. 1. Traffic calming and 40km/hr speed limits have been implemented with little effect on some motorists. 2. Council buses use Victoria Park Road to access QUT	**B.5.6 / 24**

		despite there being a dedicated bus stop on the Northern Busway and access from Kelvin Grove Road. 3. Buses, trucks and semi-trailers often mount the traffic calming obstacles and damage the Keep Left signs due to them being too long and too big for the street to handle. 4. Pollution fallout from greater traffic flow has increased in proportion to the traffic in the street. Some amelioration is requested in Victoria Park Road for existing and future residents to minimise the impact of Northern Link and Inner City Bypass on quality of life as residents.	
2		First Preferred Option for traffic impacts in Victoria Park Road: Make Victoria Park Road a cul-de-sac at the ICB end. Fixing problems immediately, it would mean that local residents would have to access the Inner City Bypass via Kelvin Grove Urban Village.	**B.4.2 / 18** **B.5.6 / 24**
3		Second Preferred Option for traffic impacts in Victoria Park Road: Make Victoria Park Road only exit onto the Inner City Bypass, cutting the volume and speed of traffic exponentially.	**B.4.2 / 18**
4		Least Preferred Option for traffic impacts in Victoria Park Road: Seriously upgrade traffic calming devices and make Victoria Park Road accessible to local residents only, forcing buses and commercial vehicles to use alternative routes.	**B.5.6 / 24**
5		There is also an ongoing issue for local residents with traffic noise from the Inner City Bypass which can only be exacerbated by Northern Link. Suggests that Victoria Park Road should be made a cul-de-sac, allowing more effective sound barriers and tree plantings to be implemented at the end of the street.	**B.9.1 / 3**

Submission No.		**49**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	5	The project will increase traffic and rat running, which is negative for the local area. Suggests that a Local Area Traffic Management scheme be created and implemented.	**B.5.6 / 18**
2	8	The ventilation outlet, 400 m from the Toowong roundabout and homes and schools must be filtered to minimise air pollution affecting local residents. Rethink location.	**B.3.5 / 1** **B.8.5 / 1**
3	9	Sound barriers should be placed on both sides of Croydon Street to mitigate increased noise pollution.	**B.9.5 / 1**
4	13	The tunnel will divide Toowong, one of Brisbane's oldest precincts.	**B.13.3 / 7**
5	14	The tunnel will have severe negative visual impacts as it is over scaled and over engineered. It will cause a reduction in liveability and a loss of green space.	**B.14.5 / 1**

Submission No.		**50**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2.1.1	For Toowong residents, the access tunnel at Toowong will cause streets to become unsafe for pedestrians and cyclists and a haven for rat runners.	**B.5.6 / 39**
2	2.1.2	The argument that the University of Queensland needs a link to a motorway network via the Toowong connection is flawed. The SEQ Regional Plan supports reducing the need to travel. Parking at the University of Queensland and Toowong activity centre is	**B.2.1 / 6**

		already inadequate.	
3	5	The BCC vision of "green and active transport" in Toowong will be compromised for the movement of cyclists, wheel chairs, prams, micro electric vehicles and pedestrians wishing to travel from north Toowong across Milton Road by the building of the Toowong connection.	**B.11.2 / 6**

Submission No.		**51**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Part of the silent majority that support this road tunnel.	**B.1.8 / 1**
2		The worst bottleneck that starts at Toowong Roundabout has been allowed to continue for far too long. The Western Freeway flows directly into a car park called either Milton Road or Frederick Street.	**B.5.3 / 2**
3		The Toowong connection is absolutely vital to ensure that this road tunnel is a success.	**B.2 / 1** **B.3.4 / 1**
4		The Toowong connection will result in benefits for the local community as it will: 1. Reduce current and worsening disruptions to the neighbourhood. 2. Boost access and connectivity to the important community services, such as the Royal Brisbane Hospital.	**B.3.4 / 1** **B.5.6 / 2** **B.5.6 / 11**
5		Traffic congestion will be reduced on Milton Road and Coronation Drive. Traffic increases on Croydon Street and Jephson Street will actually reduce traffic on other roads and will reduce the likelihood of rat-running through local streets. Rat-running already exists due to the grid pattern of the streets and this tunnel will enable direct flow to the arterial network.	**B.3.4 / 1** **B.5.6 / 18**
6		Without the tunnel, increased traffic congestion will result in the decline of air quality and an increase in greenhouse gas emissions. More efficient and quicker private transport, without traffic jams, will result in better than current (and projected) air quality standards and also reduce greenhouse gas emissions.	**N/A**
7		During construction, dust suppression measures will be required and the exhausts will have properly filtered emissions during operation.	**B.8.2 / 1** **B.8.5 / 1**
8		Traffic noise levels will be less as a result of the Project as trucks will not have to start and stop and will be able to travel very efficiently. Vibration would be worse from trucks idling rather than moving.	**N/A**
9		Can not see any loss of the social environment as the Toowong cemetery is not exactly the place to socialise with friends or family. Quite the opposite.	**B.13.3 / 8**
10		Quinn Park is a wasteland and the use of the park for the Project makes sense. As a former Council site, it is most likely contaminated with cattle dip or other such chemicals.	**B.6.2 / 4** **B.13.3 / 13**
11		Affected businesses will be able to relocate, probably to easier, accessible sites or more central village sites, rather than remote, isolated sites.	**B.13.3 / 10**
12		There will be no severe negative visual impacts as the design will be unobtrusive and most of the works will be underground. It is	**N/A**

		likely that remnant land will be better utilised with this tunnel and connection than any existing uses.	
13		Toowong connection will actually provide for increased liveability in the local area. Only a couple of streets will be affected and the overall benefits for the community will outweigh the negatives.	**B.3.4 / 1** **B.13.3 / 8**
14		Ensure that you do not just listen to the vocal minority, but take heed of the silent majority who do want this tunnel to proceed as soon as possible.	**B.1.8 / 1**
15		Keep up the good work. It is a great project and has been needed for the last 20 years.	**B.2 / 1**

Submission No.		**52**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Strongly oppose the Northern Link tunnel. Suggest a light rail for inner Brisbane.	**B.2.5 / 2**

Submission No.		**53**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The proposed Moggill Road/Jephson Street extension of the Northern Link Project will divide the Toowong community with a concrete monstrosity. Access to and from St Lucia can be achieved by current methods, entering the tunnel/freeway system at other sites.	**B.13.3 / 4**
2		Local residents' access to community facilities, such as schools, churches, railway stations and shopping facilities, will be greatly reduced.	**B.13.3 / 3**
3		The current plan will effectively create a bottle-neck at the Sylvan Road/Jephson Street intersection as the number of lanes leaving the intersection will be less than the number entering it.	**B.5.6 / 16**
4		The bottle-neck at Moggill Road/Jephson Street intersection will not be reduced as traffic will now have to turn left and travel west towards the tunnel.	**B.5.6 / 16**

Submission No.		**54**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	This [Toowong] connection is an essential element to enable local access to the tunnel. Constructing the tunnel without this would require Milton, Auchenflower and Toowong residents to access the tunnel via the Moggill Road on ramp to the Western Freeway.	**B.3.4 / 1**

Submission No.		55	
Issue No.	EIS Reference	Issue Summary	Response
1	2	The Toowong connection will cause significant congestion with no benefit, leading to major disruption of the local area. Suggests that the Toowong connection should not be included. Concentrate on creating a reliable bus system.	**B.2.5 / 2** **B.5.6 / 11**
2	5	The construction of the Toowong connection will increase the volume of traffic and rat running in local streets.	**B.5.6 / 18**
3	5	Ventilation stacks should be placed away from the local community.	**B.5.6 / 11**
4	9	Noise and vibrations caused by construction for three years is not desirable.	**B.9.3 / 1**
5	13	The Toowong connection will result in a loss of access to local amenities (i.e. Quinn Park) and Croydon Street.	**B.13.3 / 13**
6	14	The Toowong connection will reduce liveability and property values. Suggest that no one will be able to sell their properties because the Toowong connection is so close to a residential area.	**B.13.3 / 8** **B.13.3 / 11** **B.15.5 / 1**

Submission No.		56	
Issue No.	EIS Reference	Issue Summary	Response
1	2	The Toowong connection will cause major disruption to the neighbourhood, creating problems with access and connectivity to important community services.	**B.13.3 / 3**
2	2	The Toowong connection will bring more traffic and congestion to the Toowong area, both during construction and operation.	**B.5.6 / 11**
3	5	A 60% increase in traffic volume on Croydon Street and a 27% increase on Jephson Street will make crossing these roads and accessing local facilities very difficult.	**B.5.6 / 16**
4	5	Potentially devastating rat running exposed by the community has been ignored in the EIS, even though many submissions about this were made to the design team.	**B.5.6 / 18**
5	5	The use of Croydon Street by cyclists heading towards the CBD is growing rapidly. This will be severely diminished if Croydon Street becomes heavily arterialised.	**B.5.6 / 39**
6	13	The Toowong connection will divide one of the oldest communities in Brisbane and further isolate the Toowong Cemetery from its original town centre.	**B.12.2 / 3** **B.13.3 / 7**
7	13	Regardless of the measures implemented to soften the impact, the new road infrastructure on Milton Road will change the character of this location significantly and permanently.	**B.14.5 / 2**
8	15	The cost of just the Toowong connection was not outlined in the EIS and nor was a project sensitivity analysis conducted without the inclusion of the Toowong connection.	**B.15.7 / 2**

Submission No.		57	
Issue No.	EIS Reference	Issue Summary	Response
1	2	The Toowong connection will cause major disruption to the	**B.13.3 / 3**

		neighbourhood, creating accessibility problems with important community services. Don't include the Toowong connection.	
2	2	Although the Toowong connection is designed to ease congestion on Milton Road and Coronation Drive it will bring more traffic and congestion to these roads, both during construction and operation.	**B.5.6 / 20**
3	5	A 60% increase in traffic volume on Croydon Street and a 27% increase on Jephson Street will make crossing these roads and accessing local facilities very difficult.	**B.5.6 / 16**
4	5	Potentially devastating rat running exposed by the community have been ignored in the EIS, even though many submissions about this were made to the design team.	**B.5.6 / 18**
5	5	Bike access will be diminished due to Croydon Street being heavily arterialised. No access has been provided for North Toowong and Auchenflower to access the Sylvan Road bikeway.	**B.5.6 / 39**
6	8	No air quality determination has been made in the vicinity of Toowong State School, particularly in relation to increased width of Milton Road and Croydon Street.	**B.8.1 / 1**
7	8	Dust created during three years of construction.	**B.8.2 / 1**
8	8	The unfiltered ventilation outlet in the Mt Coot-tha Botanic Gardens is in close proximity to homes and schools.	**B.3.5 / 1** **B.8.5 / 1**
9	8	The potential increase in freight will lead to further pollution and questions of whether the ventilation outlets are adequate.	**B.8.5 / 1**
10	9	Sound barriers provide acoustic benefit, but impose significant social dislocation particularly on Croydon Street.	**B.13.3 / 2**
11		Division of Toowong, one of the oldest communities in Brisbane with the Toowong Cemetery to be further isolated from its original town core.	**B.12.2 / 3** **B.13.3 / 7**
12		One third of Quinn Park will be lost.	**B.13.3 / 13**
13		Necessary amenities such as the service station will be lost, while access to remaining businesses will be diminished (i.e. Cat and Fiddle precinct).	**B.13.3 / 15**
14	14	The Toowong connection is over-scaled and over-engineered. It imposes severe negative visual impacts.	**B.14.5 / 2**
15	14	No mitigation measures have been stated in the EIS for the loss of traditional timber and tin character housing (pre 1900 and pre 1946).	**B.14.5 / 1**
16	14	Residual land should be converted to green space at the end of the project.	**B.14.7 / 7**
17	14	There has been no indication of what is happening with residual land on Croydon Street.	**B.11.4 / 3**

Submission No.		**58**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The Toowong Connection only affords benefits to Toowong residents who will choose to pay a toll and enter Northern Link at Toowong rather than at the entry to the ICB after using Milton Road. Just about all other impacts, including impacts from so called mitigation measures, are negative for Toowong residents and Toowong as a suburb. The purpose of the Toowong Connection is to allow passage through Toowong for residents of other suburbs accessing the new infrastructure.	**B.5.6 / 11**
2		The Toowong Connection is of a scale which is not appropriate for placement within any urban environment.	**B.14.5 / 2**

3		The EIS does not contain evidence of consideration of the feedback given by the community.	**B.1.7 / 6**
4		I question the appropriateness of the same organisation conducting the design and EIS of the project. I request that a probity audit of the process and its application be conducted, with input gained from relevant community groups.	**B.1.6 / 3**
5	ToR 2.2 ToR 4.3 ToR 4.5	The EIS does not consider the designs, or the traffic, environmental or socioeconomic impacts of the proposed Toowong-Everton Park and Toowong-Buranda tunnels, particularly on local Toowong streets including Croydon Street and Jephson Street. Details of how these projects would connect to the road network have not been prepared and are thus not available for community comment. This lack of planning fundamentally compromises the EIS.	**B.21.4 / 2**
6		The EIS does not consider the air quality impacts of the planned Toowong-Everton Park and Toowong-Buranda tunnels.	**B.21.4 / 3**
7	ToR 2.2 ToR 4.3 ToR 4.5	If the Project is allowed to proceed without connections to the two other tunnels at Toowong being planned and impacts properly assessed, the resultant impact on Toowong resulting from the flawed planning and approval process will be potentially catastrophic.	**B.21.4 / 2**
8	ToR 2.2 ToR 4.3 ToR 4.5	The local community at Toowong has no 'initial preference' for a Toowong Connection not to exist, that preference is a long term one!	**B.2 / 1**
9		The community would not have adequate input into alternative designs of the project [as developed in the tendering process].	**B.1.6 / 2**
10	ToR 2	The EIS does not consider air quality or visual impact of additional ventilation outlets in Toowong and the effect that will have on filtration.	**B.21.4 / 3**
11	ToR 4.7.2	That part of Toowong north of Milton Road is already cut off by Milton Road and the Frederick Street Roundabout. The Toowong Connection will increase the separation.	**B.13.3 / 4**
12	ToR 2 ToR 4.7.2	There are fewer pedestrian crossings of Milton Road, between Frederick Street and Morley Street. Crossing amenity is reduced to a single crossing on the eastern side of Morley Street which means that school children will need to cross the busier and wider Croydon Street to get to Toowong State School, raising a significant safety issue. The two-lane left turn from Croydon Street into Milton Road will pose a significant safety risk for cyclists seeking to cross to the northern side of Milton Road into Morley Street. Suggest that pedestrian and cycle access could most appropriately be achieved by an overpass at Quinn Park, so that school children and cyclists would have a safe crossing of Milton Road and school children would have a route to school away from Croydon Street, linking with Quinn Street. The community has lost Quinn Park, so part of the inadequate area (for a Park) could be used for steel ramps to descend from above Milton Road down to the Quinn Street cul-de-sac.	**B.5.6 / 38**
13	ToR 2 ToR 4.7.2	The EIS does not address the issue rat-running, which can be expected to worsen as some from the north seek to gain entry to Northern Link via Morley Street and various streets leading to Morley Street. Suggest: 1. Redesign the ramps to incorporate sound barrier structures. Surely a modernistic “tube” look would have a preferable appearance to what has been proposed. 2. Provide access to Northern link from suburbs such as Bardon.	**B.14.7 / 22** **B.14.7 / 3** **B.5.6 / 18**

		3. Enhancement of connectivity including pedestrian and cycle access to the North of Milton Road.	
14	ToR 2 ToR 4.7.2	The safety implications for school children, pedestrians and cyclists attempting to cross either Milton Road or Croydon Street are impacts that have not been addressed in the EIS.	**B.13.3 / 16**
15	ToR 4.7.2	The widened Milton Road and Croydon Street with the ramps and noise barriers will pose distinctly “non urban vistas” inconsistent with the environment of Toowong and which residents will not judge to be an enhancement.	**B.14.5 / 1**
16	ToR 4.7.2	In Chapter 14 of the EIS, the ramps are depicted in one view without the noise barriers being shown (Vantage Point TC6). This is misleading as it will look a lot worse than that if the barriers depicted as being on the ramps in the view down Miskin Street are built (Refer Vantage Point TC1). Suggests redesigning the Toowong access to: 1. Incorporate sound barriers - in a "tube" shape. Or 2. To be north-facing (towards Bardon).	**B.14.8 / 3**
17	ToR 4.7.2	The EIS does not consider feasible alternatives to the Toowong access. Suggest that the Toowong access be moved west of Frederick Street or removed altogether.	**B.2.5 / 9**
18	ToR 4.7.2	The area of Toowong to the north of Milton Road is already cut off, to some extent, by the Milton Road and Frederick Street roundabout. The project would restrict safe access to Toowong State School from north Toowong.	**B.13.3 / 4** **B.13.3 / 16**
19	Refer to submission for supporting figures (Figure 1).	As a result of the right hand turn from Jephson Street onto Sylvan Road being removed, a significant volume of local traffic from West Toowong now accessing Coronation Drive via Jephson Street then Sylvan Road, would rat-run down Quinn Street, adjacent to Toowong State School. This would pose a significant additional hazard for school children as Quinn Street adjacent to Ascog Terrace is a drop-off point.	**B.13.3 / 16** **B.5.6 / 25**
20	ToR 2.2 ToR 4.3 ToR 4.5	I am unable to determine traffic projections at the critical (for Toowong) Jephson Street/ Croydon Street/ Sylvan Road South/ Sylvan Road to Milton Road connection intersection near the existing Baptist Church. This data is required to understand the impact on Jephson Street in Toowong both with and without the Toowong-Buranda and Toowong-Everton Park tunnels. Jephson Street traffic volumes are not included in Table 37 [of Chapter 5: Traffic and Transport].	**B.5.6 / 16**
21	ToR 2.2 ToR 4.3 ToR 4.5	I note (Table 5-37, page 5-108) that Sylvan Road, east of Milton Road, is forecast to have decreasing average weekday volumes. I doubt that a majority of objective people would believe the long-term lower forecasts. Suggest that the scenario assumptions be independently considered and reported upon by an independent traffic engineering group not involved in either of the design or EIS of Northern Link.	**B.5.6 / 22**
22	ToR 2.2 ToR 4.3 ToR 4.5	The EIS states that “the project, by reducing traffic on Milton Road and Coronation Drive and other local roads and streets, would alleviate through traffic in local streets”. This is not the case in Toowong and such a statement must be balanced by a statement recognizing the significant impact of the Toowong access and increased volumes in Jephson Street, Toowong, which will have the effect of further “dividing Toowong."	**B.4.2 / 7**
23		Homes are being resumed and people’s lives are being fundamentally disturbed, particularly those who have to relocate.	**B.13.3 / 10**
24		What of the impact on those who live or work near the proposed Toowong Connection? Their property values and quality of life are adversely impacted. Impacts on the values of properties that will	**B.13.3 / 11** **B.15.5 / 1**

		not be resumed include: 1. Unsightly noise barriers adjacent to or seen from residential homes with no compensation paid. 2. Breezes halted by noise barriers with no compensation paid. 3. Existing commercial properties opposite unsightly ramps with no compensation paid. 4. Unsightly non-urban vista for pedestrians. Suggest compensation for loss of value.	
25		The Project would require resumption of half of Quinn Park to accommodate widening of Milton Road.	**B.14.5 / 1**
26		A widened, heavily trafficked Jephson Street carrying traffic between the three different tunnels would be highly disadvantageous for the Toowong commercial and retail centre. West Toowong residents would be faced with a Jephson Street barrier and will be more likely to make increased use of Taringa and Indooroopilly centres.	**B.14.4 / 4** **B.14.6 / 4**
27	ToR 1.4	What is supposed to happen when a suburb such as Toowong is significantly adversely impacted by a scheme such as the Toowong Access? We rely on the EIS process to fairly assess impacts and recommend issues requiring further attention. In this case, the EIS process has failed us.	**B.1.6 / 3**
28	ToR 1.4	The EIS claims that "officers were available to explain the reasoning", but appropriate 'reasoning' was not given to me during meetings with the design team. The EIS has not demonstrated how the issues raised are addressed and the issues listed in Appendix B represent high-level summaries. Suggest that the consultation process and its application undergo a probity audit, with input gained from relevant community groups.	**B.1.7 / 2** **B.1.7 / 6**
29	12.2.3	The EIS incorrectly assesses the vibration likely to be experienced by headstones and monuments at Toowong Cemetery. It considers only vibration from the “average predicted rate of advance”, when the TBM is operating in its steady state. Excavation under the cemetery is most likely to be done by road headers and possibly drill and blast measures to construct the 'launch chamber' for the TBM. At some point in the vicinity of the eastern boundary of the Cemetery, the TBM will be commissioned, which will involve numerous starts and stops likely to result in greater vibration than steady state operation.	**B.12.2 / 2**
30	12.2.3	The EIS states that: “the duration of maximum vibration levels [that would occur in Toowong Cemetery] would be less than one day”. This is a gross misrepresentation as the duration to construct the launch chamber under the cemetery is likely to be some weeks, certainly not one day.	**B.9.3 / 4** **B.12.2 / 2**
31		Grout may emerge on the surface of Toowong cemetery in areas where the cover is minimal during the very early stages of excavation. Such grout fills voids. In the case of the cemetery, this may include cavities in some graves and some grout may find its way to the surface.	**B.4.3 / 7** **B.12.2 / 8**
32	12.2.3	The EIS states that “There is potential for increased dust fall on the memorials at Toowong Cemetery from the proposed deposition and treatment of excavated spoil material at the Mt Coot-tha Quarry." No mitigation measures are detailed for memorials in Toowong Cemetery affected by increased dust fall.	**B.12.2 / 6** **B.8.2 / 1**
33	12.2.3	The EIS states that “On completion of the project, the expected traffic volumes along Frederick Street…. would provide visitors with a more tranquil environment." This is a misrepresentation. Traffic volumes and exhaust emissions will be greatly increased at	**B.12.2 / 9**

		the southern end of Frederick Street due to traffic on the adjacent ramps providing access to the tunnel. Only some parts of the Cemetery adjacent to Frederick Street may benefit from reduced traffic volumes (if in fact the traffic modelling is accurate).	
34	12.2.3	The EIS states that "no written submissions or correspondence has been received from the Friends of Toowong Cemetery, in relation to vibration or any other issue of relevance." However, a member of the CRG has advised me that a representative of Friends of Toowong Cemetery has attended a number of CRG meetings and has expressed concerns. It is not apparent that these concerns have been acknowledged or addressed in the EIS. Such attendance at CRG meetings does not indicate indifference.	**B.12.2 / 7**
35	12.2.2	It is not proper to claim that the Croydon Street works will lead "to an improved although quite different urban landscape" (EIS In Brief page 60), that it represents an improvement or that it is urban.	**B.14.5 / 1**
36	12.2.2	The EIS states that road works are exempt from the Demolition Code. While this may be true, it is inappropriate to imply that this is a justification for road works which should not be carried out at all.	**B.11.2 / 6**
37	12.2.3	The EIS does not detail dust control methods, which would be necessary at the point of entry on to the conveyor system outside the tunnel portal, rather than just at the Quarry.	**B.12.2 / 6**
38	12.2.3	The EIS does not detail dust control methods, which would be necessary at the point of entry on to the conveyor system outside the tunnel portal, rather than just at the Quarry.	**B.8.2 / 1**
39	16 18	There is no evidence of risks identified in risk assessment processes (if indeed such risk assessments have been conducted) being listed and systematically addressed for their impact. The EIS does not consider the safety impacts on motorists, pedestrians and cyclists during construction of the Toowong Connection. Risks will be incurred by through traffic on Milton Road during construction of the Toowong access.	**B.16.3 / 1**

Submission No.		**59**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The 10 lane section of road in the vicinity of the existing Miskin Street, Milton Road roundabout would have a big impact on the Toowong area and it is doubtful that this design is the best solution for achieving the Project's objectives.	**B.4.2 / 7**

Submission No.		**60**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Instead of building this tunnel, stronger attention should be paid to investing in cheap, efficient and subsidised public transport. Traffic congestion is unlikely to disappear even after the TransApex initiative is complete if Brisbane continues to rely on the car in a time of increasing population growth.	**B.2.5 / 2**
2	2	Intrusive road infrastructure has become an eyesore in Brisbane. Too much of Brisbane's iconic suburban charm has already been lost in the name of fixing traffic problems.	**B.14.5 / 1**

Submission No.		61	
Issue No.	EIS Reference	Issue Summary	Response
1	2	The tunnel is proposed to improve access to the airport and the Australian TradeCoast precinct and relieve Milton Road and Coronation Drive; however, this can be achieved with the main Western Freeway entrance. The ICB has an entrance on Coronation Drive, Milton Road and Given Terrace for local traffic. Suggests that the mainline tunnel should be constructed without the Toowong connection and that a road crossing the Brisbane River at Moggill, joining to the Bruce Highway, should be built.	**B.3.4 / 3**
2	2	The Toowong connection will cause rat-running in back streets, which is dangerous and noisy for residents.	**B.5.6 / 18**
3	5	The widening of Milton Road and Croydon Street will limit access from the north side of Toowong to the Toowong Village. This will also decrease accessibility to Toowong and Auchenflower train stations and the ferry at the Regatta. Suggests a pedestrian bridge over the widened Milton Road in the vicinity of the 'Cat and Fiddle' shopping centre.	**B.13.3 / 3** **B.5.6 / 38**
4	5	The road alterations in Toowong will discourage pedestrian activity and possibly cause people to use their cars to drive into Toowong.	**B.5.6 / 39**
5	5	Not enough consideration is being given to the green use of foot power (i.e. pedestrians and cyclists).	**B.5.6 / 46**

Submission No.		62	
Issue No.	EIS Reference	Issue Summary	Response
1		The EIS did not adequately address major community concerns, especially the traffic and road connections in the immediate Toowong area.	**B.5.6 / 11**
2	2	The Toowong connection will produce unreasonable disruption to our community, increasing the difficulty for people to access services and shops in the Toowong Village area.	**B.13.3 / 3**
3	2	The Toowong connection will only cause increased traffic, more congestion and noise.	**B.9.5 / 3** **B.5.6 / 11**
4	5	The expected 60% increase in traffic volume on Croydon Street will make the use of this and other roads by local residents much more difficult and dangerous. Rat-running is already common in Toowong, where many cars attempt to avoid the congestion on main roads.	**B.5.6 / 18**
5	5	The EIS failed to make any concrete proposals for any Local Area Management Plans.	**B.5.6 / 18**
6	8	The unfiltered ventilation stack in the Mt Coot-tha Botanic Gardens is a major personal and community health concern, especially for residents living down-wind of its location.	**B.8.5 / 1**
7	8	Exhaust from cars and trucks using the 10 lane Milton Road section is a worry.	**B.8.3 / 3**
8	8	Concerned about the impact of dust generated during the three years of construction for the Toowong connection.	**B.8.2 / 1**
9	14	The Toowong connection will seriously reduce the liveability in our suburb with the removal of traditional timber and tin character housing.	**B.13.3 / 8**
10	14	Trees will be lost due to the widening of connection roads [Milton Road, Croydon Street etc.]. The installation of ugly sound barriers will impact negatively on Toowong.	**B.14.5 / 1** **B.14.8 / 5**

Submission No.		63	
Issue No.	EIS Reference	Issue Summary	Response
1		The Northern Link tunnel is a waste of money. More money should be invested in public transport.	**B.2.5 / 2**
2		The ventilation outlets will cause air pollution to be concentrated in one area, impacting on residents living nearby. No technology can make the ventilation outlets safe.	**B.8.5 / 1**

Submission No.		64	
Issue No.	EIS Reference	Issue Summary	Response
1		The Northern Link tunnel is a waste of money. More money should be invested in public transport.	**B.2.5 / 2**
2		The pollution out of the ventilation outlets will have significant long-term impacts for people living near them.	**B.8.5 / 1**

Submission No.		65	
Issue No.	EIS Reference	Issue Summary	Response
1		The Northern Link tunnel is essential, but not as proposed. On and off ramps are more expensive when constructed underground rather than above. Two sets of tunnels should be constructed with an above ground link in Norman Buchan Park, Bardon (or cut and cover). Simple cross section tunnels and mainly above ground access ramps would greatly reduce construction costs. There is ample space between Anzac Park and the Botanic Gardens for on and off ramps.	**B.3.2 / 2**

Submission No.		66	
Issue No.	EIS Reference	Issue Summary	Response
1		Devastated at the possibility of losing my home of 86 years as a result of the tunnel.	**B.13.3 / 10**
2		Suggest that a ring road be constructed and the toll taken off the road [to encourage heavy vehicles to use it, instead of local roads].	**B.2.5 / 5**
3		Suggests improving public transport.	**B.2.5 / 2**

Submission No.		67	
Issue No.	EIS Reference	Issue Summary	Response
1		Local connection will destroy Toowong due to more congestion, loss of parkland, house resumptions and poor visual amenity.	**B.13.3 / 8** **B.13.3 / 13** **B.11.4 / 2** **B.14.5 / 1**

2		Concerned about increased health problems for residents located within a 3 km radius of the tunnel and users of the tunnel.	**B.13.3 / 20** **B.18.4 / 1**
3		Concerned about the safety of the tunnel in the event of an accident.	**B.16.2 / 1**

Submission No.		**68**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Concerned about the close proximity of an unfiltered ventilation outlet to the Bible College of Queensland and the effect it may have on air quality at the college and the health and safety of the staff and students, including those who reside at the College. Seeking assurance that there will be no negative impact by way of unpleasant aroma or contaminated air as a result of the stacks output of fumes. Particularly concerned if there is a westerly breeze blowing from the stack towards the College.	**B.8.3 / 3** **B.18.5 / 1**

Submission No.		**70**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	The local access at Toowong will be counterproductive to improving local congestion. The Toowong Connection is not required and Project aims will be better met without it.	**B.5.6 / 11**
2	5	Local walking and cycling along Milton and Croydon Streets will become much less attractive as a result of the changes from the tunnel. Suggestion that more park-and-rides be developed along with better cycling options and reliable public transport.	**B.13.4 / 2** **B.5.6 / 46**
3	8	Local traffic [congestion] could be eased more sustainably through the encouragement of walking, cycling and public transport that meets the needs of the community.	**B.2.1 / 7** **B.5.6 / 46**
4	9	Projected noise levels should be compared to 'acceptable levels' not 'current levels'. Milton Road has increased to an 'unacceptable' level over the years.	**B.9.2 / 1**
5	13	Concern that the tunnel and associated Toowong local access will impact on the Toowong suburb aesthetics. This will result in a 'loss of liveability' in Toowong.	**B.13.3 / 8** **B.14.5 / 1**

Submission No.		**71**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The local connection at Toowong will destroy Toowong and local areas, including parkland and the environment.	**B.11.4 / 3** **B.13.3 / 15**
2		Entire project inappropriate for residents of Toowong and beyond.	**B.2 / 1**
3		Concerns regarding increased health problems for residents and tunnel users.	**B.13.3 / 20** **B.18.4 / 1**

Submission No.		72	
Issue No.	EIS Reference	Issue Summary	Response
1	2.6	EIS does not adequately address the impacts of peak oil or recognise that [Australia] is an oil-based society, in which the whole economy, not just transport, is based on oil. As oil prices increase, it will become more difficult to implement alternative technologies as described in the EIS because manufacturing these technologies is based on oil. It is unrealistic to be planning for the "business as usual" scenario when there is no doubt that consumer behaviour will change out of necessity.	**B.2.6 / 1**
2	2.6	The section on trends in car ownership and distances travelled are flawed because they only take into account oil prices of up to $55 per barrel. Even with the moderate increase in fuel prices of up to $155 per barrel there is a downward trend in Distance Travelled versus World Oil Price.	**B.2.6 / 1**
3	2.6	Vehicle sales declined as oil prices increased so it is inappropriate to assume that car ownership will continue to grow at current rates.	**B.2.6 / 1**
4	2.6	Even though it is proposed that the tunnel will be privately owned and operated, in the end it will be the residents of Brisbane and Queensland who will pay for the 'white elephant' if travel demand is not as predicted.	**B.1.3 / 2**
5		The EIS assumes a 'business as usual' scenario, claiming that greenhouse gases will reduce because of reduced travel times. What the EIS fails to include is that by providing additional road infrastructure instead of public transport infrastructure, the project is increasing the likelihood of vehicles being used because of inadequate public transport infrastructure.	**B.2.1 / 7**
6	8.6	Trains and buses are already running over capacity during peak times inducing people to drive. The money for this project should be put into rail tunnels instead of road tunnels, so that there are suitable public transport alternatives available.	**B.2.5 / 2**
7	8.6	Vehicle emissions are a major source of greenhouse gases. Discussions on more fuel efficient vehicles etc. are superfluous to the real need to reduce our dependence on cars.	**B.2.1 / 7**
8	8.6	This Project and others like it do not encourage any fundamental change in our thought processes and behaviours. If we are to move into a sustainable future without massive economic hardship, it is essential that these changes happen sooner rather than later.	**B.2.4 / 1**

Submission No.		73	
Issue No.	EIS Reference	Issue Summary	Response
1	2	The Northern Link tunnel will increase congestion on Milton Road and Coronation Drive. Suggests that there should be more public transport and light rail.	**B.2.5 / 2** **B.5.6 / 20**
2	5	The increase of traffic volume on Croydon Street and Jephson Street will make access difficult for Toowong residents on the cemetery side. Pedestrian paths and bikeways will be diminished. Suggests a ring road should be built that does not involve any part of Toowong.	**B.5.6 / 39**
3	8	We are experiencing dreadful heat conditions at the moment, which will be exacerbated by the ventilation stacks and heavy traffic.	**B.13.3 / 20**
4	9	We do not need the noise and disruption to a dear old suburb like	**B.2.5 / 2**

		Toowong. Suggests light rail should be built or a ring road.	**B.9.5 / 3**
5	13	Access to parks and shopping precincts [in Toowong] will be blocked.	**B.13.3 / 3**
6	14	The project will result in a loss of environment and decrease the quality of life in Toowong.	**B.13.3 / 8**

Submission No.		**74**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	13	Concerned about the loss of traditional timber and tin character homes in Toowong.	**B.12.2 / 1**
2	14	The Toowong Connection will reduce accessibility to local services as well as spoil the visual aspects of my area.	**B.13.3 / 3** **B.13.3 / 8** **B.14.5 / 1**

Submission No.		**75**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	8	I am concerned about the dust, noise, pollution and disruption that will occur during construction. I feel that the proximity of construction to a heavily populated residential area is not considering the health and wellbeing of the residents.	**B.8.2 / 1**
2	8	Additional traffic through Toowong should be prevented.	**B.5.6 / 11**

Submission No.		**76**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	13	Motorway-type roads and ramps through Toowong would reduce accessibility to Toowong State School and Toowong Village - the "Hub of Toowong". The roads associated with the tunnel will divide us from our local amenities and we would also lose our local garage [Caltex service station].	**B.13.3 / 3** **B.13.3 / 15**
2	13	Roads associated with the tunnel would make it difficult for pedestrians to walk to and from bus stops.	**B.13.3 / 3** **B.5.6 / 39**
3	13	New roads associated with the tunnel would result in a loss of character houses and part of Quinn Park.	**B.13.3 / 6** **B.13.3 / 13** **B.11.4 / 1** **B.12.2 / 1**
4	14	The Toowong connection is overwhelming in size for the little benefit it would provide.	**B.14.5 / 2** **B.4.2 / 6**

Submission No.		77	
Issue No.	EIS Reference	Issue Summary	Response
1		I was appalled to learn that there is no plan for a filter on the Toowong ventilation outlet for the proposed Northern Link. Surely it is apparent that releasing the full exhaust fumes for a 4.3 km tunnel directly into the air surrounding suburban homes and schools would have an adverse effect on all who reside in the area. By all means build the tunnel but please, please do so responsibly with due consideration to the health of the citizens of Toowong.	**B.4.2 / 22** **B.8.5 / 1**

Submission No.		78	
Issue No.	EIS Reference	Issue Summary	Response
1		My children cross Milton Road at Morley/Croydon Street to get to school and my husband crosses at the same intersection on his bicycle to get to work. Toowong could be a model "green" suburb. Putting a tunnel access and surface road works in place would put a divisive blight on this once independent city.	**B.13.3 / 4** **B.5.6 / 39**
2		It is clear that current standards of measuring air quality grossly underestimate the health impacts of car and truck emissions, particularly diesel emissions. Diesel exhaust is 100 times more toxic than gasoline exhaust, even when carbon monoxide is considered.	**B.18.2 / 2**
3		The introduction of a tunnel for personal vehicles will make it more attractive to use a car for commuting, reducing the number of people using active transport. Westside News highlighted the crowded conditions on the Ipswich rail line and now people will have even more reason to drive a car.	**B.2.1 / 7**
4		The fact that poor air quality endangers the health of children should be obvious. In the case of asthma, which is well studied, the connection of asthma rates and emergency room visits with community design and transportation plans is being recognised in urban planning internationally. Changing methods of transportation (to use more public transport) has resulted in a decline in asthma cases in Atlanta, USA. Proximity to diesel exhaust is linked to high acute and chronic respiratory disease morbidity rates.	**B.18.2 / 1** **B.18.3 / 1** **B.18.4 / 1** **B.13.3 / 20**

Submission No.		79	
Issue No.	EIS Reference	Issue Summary	Response
1		I am concerned about the acoustic, vibration and air pollution as a result of the proposed worksite located at the Mitsubishi dealership on Valentine Street.	**B.8.2 / 1**
2		Suggest that if the Frederick Street connection is not approved, the Valentine Street should become a cul-de-sac at the Frederick Street end to reduce rat-running.	**B.5.6 / 18**

Submission No.		80	
Issue No.	EIS Reference	Issue Summary	Response
1		Toowong and Auchenflower have retained significant character	**B.13.3 / 7**

		housing and a distinctly suburban environment close to the city. These suburbs make Brisbane unique and delight visitors to the city. These suburbs would be adversely affected if the Toowong connection proceeds. The area should be a tourist destination, not a concrete jungle.	**B.14.4 / 4** **B.12.2 / 1**
2		The Project would provide a huge volume of traffic in the Jephson Street and Croydon Street corridor and ultimately lead to a third highway being created.	**B.5.6 / 16**
3		Without the Toowong connection, the project would result in a reduction in general traffic movements emanating from Toowong and Auchenflower into the city as residents would be able to access Coronation Drive and/or Milton Road without the heavy pressure of competing with traffic coming from the Centenary Highway which will be diverted into the mainline tunnel.	**B.5.6 / 11** **B.5.6 / 17**
4		A better solution to reduce the use of cars emanating from Toowong and Auchenflower would be a greater emphasis on public transport. There are already good links by rail, ferry and bus that could be enhanced at a relatively low cost. A ferry terminal at Park Road, better utilisation and design of the bikeway along Coronation Drive or a frequent bus loop incorporating Coronation Drive and Milton Road could be implemented.	**B.2.5 / 2**
5		Accepting that there is a traffic basis for the proposed tunnel, there can be no economic, traffic or environmental reason why there should be entry tunnels in or out of the mainline tunnel into Toowong and Auchenflower.	**B.2.1 / 6** **B.3.4 / 2**
6		The proposal for the Toowong connection will mean that the social fabric of Toowong will be decimated by having the suburb dissected by major road infrastructure.	**B.13.3 / 7**
7		To have designed an exhaust system, without appropriate filtration and apparently relying on wind for dispersion. There must be proper scientific planning and implementation of a safe filtration system so that pollutants are not allowed to congregate and settle within Toowong and Auchenflower.	**B.8.5 / 1** **B.18.3 / 1**

Submission No.		**81**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Would like to see Quinn Park remain in tact as it is part of our history.	**B.11.4 / 1** **B.13.3 / 13** **B.12.2 / 1**
2		Concerned about changes to public transport as I need to be close to public transport to attend medical appointments	**B.5.6 / 37**

Submission No.		**82**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	13	I will have my home resumed if the Toowong Connection goes ahead and as a result do not want an access tunnel through Toowong.	**B.3.4 / 2**

Submission No.		83	
Issue No.	EIS Reference	Issue Summary	Response
1	13	I am concerned about the social division of one of Brisbane's oldest and most character-rich suburbs. We should be embracing Toowong and protecting its heritage. I don't think that character homes should be resumed.	**B.12.2 / 1** **B.13.3 / 8**
2	13	Ramps, roads and tunnels should not be placed in the middle of this suburb. The connection would impose too much visual, noise and dust pollution for the remaining residents.	**B.8.3 / 3**

Submission No.		84	
Issue No.	EIS Reference	Issue Summary	Response
1	5	The Project will increase traffic through Toowong and in Brisbane by simply encouraging people to drive instead of finding more environmentally friendly ways of travelling. Suggest a train tunnel to the west instead of a car tunnel.	**B.5.6 / 3**
2	5	The Toowong Connection will increase rat-running, make it more difficult to get to local amenities and make it more difficult for walkers and cyclists.	**B.5.6 / 18**

Submission No.		85	
Issue No.	EIS Reference	Issue Summary	Response
1	13	Concerned about the loss of one-third of Quinn Park.	**B.13.3 / 13** **B.14.5 / 1**
2	13	I work at Toowong State School and am concerned that the project would make it more difficult for our children to get to school. Toowong State School has been chosen for the Active Schools program next year and it seems hypocritical of Council to be putting a huge motorway-type construction in the way.	**B.13.3 / 16** **B.5.6 / 39**

Submission No.		86	
Issue No.	EIS Reference	Issue Summary	Response
1	13	Sound barriers provide acoustic benefit but cause social dislocation. Barriers are unattractive no matter how nice you try to make them. It is a sad state of affairs when people need to be separated from their world because of cars and their pollution and noise.	**B.13.3 / 2** **B.14.8 / 5**
2	13	I work at Toowong State School and I am concerned about the close proximity of this huge construction. We encourage our children to walk to school but it will be harder for them and their parents if the access tunnel goes ahead. Suggest that we need to encourage public transport, not cars.	**B.13.3 / 16** **B.5.6 / 39**

Submission No.		87	
Issue No.	EIS Reference	Issue Summary	Response
1	8 18	Place the ventilation outlet at Toowong further back, even in the old quarry.	**B.3.5 / 1**
2	8 18	Protect the health and well being of residents by ventilating and filtering the exhaust emissions.	**B.8.5 / 1** **B.18.3 / 1**
3	8 18	To protect against the noise coming from the freeway, build a decent noise reduction barrier.	**B.9.5 / 2**

Submission No.		88	
Issue No.	EIS Reference	Issue Summary	Response
1		The proposed connection in the Reference Design has very substantial visual and traffic implications for residents on Croydon Street and Milton Road. Suggest amending design of connection, as per Figure 1.	**B.14.5 / 1**
2	Refer to submission for supporting figures (Figure 2).	The Reference Design includes entrances to the westbound tunnel for traffic from Musgrave Road outbound and Kelvin Grove Road outbound. No access is provided for traffic from Hale Street northbound. This means that all traffic entering the tunnel from the city direction westbound has to travel through the College Fiveways, a notoriously congested intersection. Moreover, the entrance from Kelvin Grove Road outbound is entirely unnecessary since any traffic travelling northbound on Petrie Terrace could turn left into Musgrave Road and use the Musgrave Road entrance instead. Suggests amending design of connection, as per Figure 2.	**B.4.2 / 17** **B.5.6 / 21**

Submission No.		89	
Issue No.	EIS Reference	Issue Summary	Response
1	22	Conclusions made within the Northern Link EIS do not provide a balanced overview and do not contribute to ecologically sustainable development, as required in Section 7 of the ToR.	**B.22.1 / 1**
2	2.3 22.3	In relation to environmental and social objectives, it is questionable that these objectives are met comprehensively, in a socially equitable and sustainable manner. The Project doesn't provide overall enhancement, nor is it clear how Northern Link specifically will "assist development of a sustainable urban environment for inner-western suburbs" especially as the area is one of significant growth. Overall, Northern Link does not comprehensively meet the Project Objectives and has significant adverse local outcomes.	**B.2.3 / 3** **B.8.3 / 3**
3	11.8 (p. 50)	The proposed development of unrequired space [acquired for the project] into townhouses or three-storey multi-unit developments, as cited in 11.8, conflicts with sections of the EIS that proposed such land be used as public space.	**B.11.4 / 3**
4	5.6.9 (p. 125)	The suggested traffic re-routing [in Toowong] is ill-informed (e.g. recommending use of Ascog Terrace, which has traffic calming and a dangerous entry point).	**B.5.6 / 33**
5		The rationale given for providing local connections is "patronising in the extreme, ignoring both Council and community sentiment". It also highlights the overall weakness of the community consultation	**B.1.6 / 2**

		that was undertaken for the EIS.	
6	2.4 22.4	It is questionable whether the EIS sustainability meets criteria other than in terms of resource efficiency, such as "sustainable places and urban form, biodiversity conservation or health and well being". There are no specific measures for these criteria and it would seem that the Sustainability Framework and Northern Link table has left blank relevant items relating to the operation of the Project.	**B.2.4 / 1**
7	3.2.1	Option 2 (straight through) has community support, clearly appears as providing transport efficiency, but has the distinct advantage of a better balance environmentally. "A straight through tunnel, in contrast to the tunnel with local connections, would meet the project objectives at a less cost to the local areas, be more consistent with local and state plans and be more consistent with community wishes."	**B.3.4 / 3**
8		The EIS ignores local concerns in favour of 'unrecognised benefits' of local connections, which have adverse impacts for all of the Toowong area, not just those in close proximity to the local connections. The EIS glosses over significant local adverse impacts with a superficial consideration of whether key planning criteria are met, is not socially equitable and does not contribute to liveability and sustainability in Toowong. Regional traffic and specifically freight considerations are given inappropriately greater weight than local human and social factors. Local connections are not necessary for Northern Link to achieve its objectives.	**B.2.3 / 4** **B.22.1 / 1**

Submission No.		**90**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	IB 2.4.1 (p. 10)	A design without connections has been developed and is the preferred design of Council and the local community, so do not spend more money on this inferior route.	**B.1.6 / 2**
2	IB 5.9 (p. 66)	Some social and community conditions for Toowong residents have not been addressed. The service station at the centre of Milton Road and Frederick Street will be removed and no alternate site for a service station in Toowong has been included. Access to the Cat and Fiddle Shopping Centre at the corner of Milton Road and Morley Street will be difficult and will cause the demise of this important local community asset.	**B.11.4 / 1** **B.13.3 / 3** **B.13.3 / 15** **B.5.6 / 32** **B.5.6 / 33**
3	IB 1.2.1 (p. 2)	The Western Brisbane Transport Network Investigation (WBTNI) by the Queensland Government notes that the Northern Link connects the Western Freeway with the Inner City Bypass. To impose a local access at Toowong will cause unnecessary congestion [in the tunnel] by mixing through traffic with local traffic and may impact on Northern Link's function as a freight corridor.	**B.2.2 / 5**
4	IB 7.4 (p. 19)	Croydon Street has not been included in the urban mitigation initiatives. A noise wall will be constructed on the western side of Croydon Street causing noise and heat to bounce back onto residents on the eastern side of Croydon Street. A noise wall cannot be constructed on the eastern side of Croydon Street as this will obstruct access to residents' properties. The mitigation measures for upgrading building facades are not reasonable for old Queensland houses.	**B.9.5 / 1**
5	IB 7.4 (p.	The problem of residents being able to sharply turn into their	**B.4.2 / 9**

	19)	driveways on Croydon Street has not been addressed, nor has the collection of rubbish bins.	
6	IB 8.5.2 (p. 90)	Jephson Street will experience an increase in traffic but nothing is contained in the EIS on the costing to alleviate this major problem which will cause congestion in Croydon Street.	**B.5.6 / 16**
7	IB 9 (p. 93)	The recommendation in the 'In Brief' to seek further design of the local connections at Toowong will only attract a design to maximise toll and not optimise traffic flow or community amenity. Refer to some of the major disasters with private enterprise dictating designs on the Sydney tunnels.	**B.1.6 / 2**
8	IB 5.10.3 (p11)	The Benefit Cost Ratio (BCR) of the project with local access at Toowong and Kelvin Grove is 1.2. Reports held by the Brisbane City Council, but not included in the EIS, show the BCR of the straight through option 1.3.	**B.15.7 / 1**

Submission No.		**91**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	5	[Concerned about] dust during three years of construction. Suggests using regular watering to mitigate dust.	**B.8.2 / 1**
2	5	No filtration on ventilation stacks. It is not possible to know what the long term effects of unfiltered air will be. Immediate impact of increased pollution on asthma sufferers.	**B.8.5 / 1** **B.18.3 / 1**
3	5	Vehicle mix will increase in number of diesel vehicles.	**B.8.4 / 4**
4	9	[Concerned about] the impact of construction noise. Suggests using noise barriers.	**B.9.3 / 1**
5	14	Concerned that the project would cause reduced liveability [of Toowong], particularly in relation to: 1. Air quality. 2. Noise levels. 3. Increased traffic in area.	**B.13.3 / 8**

Submission No.		**92**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	22.8	My residence is in close proximity to the Kelvin Grove connection and I will be adversely impacted by the construction and operation of the Northern Link Tunnel. Since I do not own or drive a motor vehicle, I will not benefit from any increase in amenity. My amenity would be compromised by the residents living in outer suburbs, who are not given adequate alternative transport choices.	**B.13.3 / 9**
2	22.8	I am philosophically opposed to the TransApex concept. I believe the funds would be better spent on public mass-transportation systems.	**B.2.5 / 2**
3	22.8	"The traffic modelling in the EIS forms the justification for the project and subsequent projects under the TransApex scheme. The model does not take into account the capacity of the people of Brisbane to adapt and change behaviour." The traffic modelling has not taken into account the impact of "peak oil" and the global economic meltdown on the behaviour of drivers of motor vehicles.	**B.5.4 / 12**

Submission No.		93	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The main purpose of the Northern Link tunnel will be to take commuter traffic from beyond the inner western suburbs to the city centre and beyond, without using Moggill Road, Milton Road and Coronation Drive. This will be achieved through the Western Freeway connection but does not require a secondary access point at Toowong. Therefore there is little need for an entrance (and toll) for people from Toowong - who can enter further west anyway.	**B.3.4 / 3**
2		An access point at Toowong would lead to division of the suburb through radical widening of Milton Road to ten lanes and Croydon Street to seven lanes. This will have a devastating impact on the social milieu of Toowong, and create a very ugly division.	**B.13.3 / 14** **B.14.5 / 1**
3		An access point at Toowong would lead to resumption of more than one hundred homes, many of them pre-war homes which provide Brisbane with its distinctive character, and serious and permanent disruption to the lives of potentially hundreds of people (in many cases elderly people with longstanding and significant local community connections, whose lives could not be easily re-established elsewhere).	**B.13.3 / 7** **B.13.3 / 10** **B.12.2 / 1**
4	12.2.3 (p. 19)	An access point at Toowong would lead to the demolition of properties in Croydon Street, Milton Road, Morley Street, St Osyth Street, Sylvan Road and Valentine Street identified in the Brisbane City Plan as Character Places.	**B.12.2 / 1**
5	4.2.5 (pp. 14-15)	An access point at Toowong would lead to multiple permanent disruptions to the flow of local vehicular and or pedestrian traffic, affecting Milton Road, Morley Street, Croydon Street, St Osyth Street, Bayliss Street, Sylvan Road, Valentine Street, Quinn Street, Frederick Street and Gregory Street.	**B.5.6 / 11**
6		The access point at Toowong would lead to reduced ease of local traffic across Toowong, including Toowong State School, through local road closures, road widening and tunnel infrastructure.	**B.5.6 / 39**
7		The access point at Toowong would lead to the loss of Quinn Park. There is no conceivable landscaping or design action that could be taken that would mitigate the loss of half of Quinn Park.	**B.11.4 / 1**
8		The access point at Toowong would lead to the extreme loss of visual amenity in a character suburb through the loss of trees, parkland, character housing and the construction of some of the widest roads the city has ever known as well as elevated roads and ramp structures.	**B.14.5 / 2**
9		The inner city needs more trees and more green space, and it needs to preserve its unique architectural character and its communities. The EIS acknowledges that a Toowong tunnel connection would bring about irremediable losses in all these areas.	**B.13.3 / 7** **B.10.2 / 5** **B.14.5 / 1**

Submission No.		94	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		As a major issue being addressed by the Northern Link Road Tunnel project is the morning peak traffic congestion on the Western Freeway, a much less expensive alternative would be to provide a ramp over the existing round-about for Mount Coot-tha Road traffic and, following construction of the ramp, remove this roundabout.	**B.2.5 / 7**

2	4.2.5 Figs 4-6, 4-7	If the proposed tunnel is considered unavoidable, the entrance to the tunnel from, and exit to, Toowong, as shown on Figures 4-6 and 4-7, should be reconsidered so that a lower impact alternative can be considered.	**B.4.2 / 6**
3		It is unbelievable that there is no access to Milton Road from the tunnel exit road, even though Milton Road has been increased from four to six lanes.	**B.4.2 / 6** **B.5.6 / 2**

Submission No.		**95**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	5.3.6 (p. 53) 11.2.3 (p. 27)	Strongly agree that active transport options must be enhanced in any future changes to the local transport network, but I strongly dispute the claim that the Northern Link tunnel will deliver such benefits.	**B.11.2 / 6** **B.5.6 / 46**
2	5.3.6 (p. 53) 11.2.3 (p. 27)	The already poor standard of cycling and pedestrian facilities in Toowong will be worsened considerably by the proposed changes [to Milton Road]. There is no capacity under the current proposals for pedestrians and cyclists (especially children attending Toowong State School) to cross Milton Road from the Morley Street precinct. If local access ramps go ahead, there must be provision for cyclists and pedestrians to cross beneath, across or over these major arterial roads.	**B.5.6 / 38**
3	5.3.6 (p. 53) 11.2.3 (p. 27)	There must be a safe and timely passage for pedestrians on Jephson Street and Benson Street, both of which will experience increases in traffic as a result of the Project.	**B.5.6 / 39**
4	5.3.6 (p. 53) 11.2.3 (p. 27)	Cyclists travelling through Toowong to the City and University should not be disadvantaged. Safe cycle paths or on-road bicycle lanes Jephson Street and Croydon Street are necessary.	**B.5.6 / 46**
5	5.3.6 (p. 53) 11.2.3 (p. 27)	The reduced traffic flows on Sylvan Road potentially offers a safe cycling corridor linking the western suburbs and the Toowong Botanic Gardens with the Bicentennial Bikeway. This facility must be enhanced and exploited by providing safe passage across the Croydon Street/Jephson Street/Sylvan Road intersection. A tunnel or cycling overpass may be required.	**B.5.6 / 38**
6	5.6.9 (p. 114)	If the right hand turn from Jephson Street to Sylvan Road is removed, motorists will be forced to make an equivalent right turn two blocks earlier at Lissner Street, and then be forced to make a second right hand turn from Bennett Street into Sylvan Road, which is often blocked with traffic and would thus encourage rat running.	**B.4.2 / 11** **B.5.6 / 25**
7	5.6.2 (p. 89)	The EIS has failed to demonstrate a need for the Toowong local access portion of the Northern Link tunnel. The data provides a very weak justification for local access to the tunnel with such small numbers of local users anticipated.	**B.5.6 / 2**
8	5.6.9 (p. 125)	Support the plan to remove the right turn from Milton Road into Sylvan Road and agree that this will remove eastbound traffic from Sylvan Road.	**B.4.2. / 7** **B.5.6 / 22**
9	5.6.9 (p. 125)	Under the proposed changes introduced by the Northern Link Tunnel, access to the Toowong South precinct, bounded by Miskin Street, Croydon Street/Jephson Street and Ascog Terrace would be adversely affected. Will there be a dedicated right turn lane from Croydon Street into Sylvan Road (westbound) and how would this intersection operate?	**B.5.6 / 28**
10	11.4.2 (pp. 38-39)	The loss of local services [service station, liquor store and part of the Baptist Church as identified in 11.4.2 of the EIS] represents a major loss of amenity for local residents.	**B.11.4 / 1**

11	11.4.2 (pp. 38-39)	Access to the Cat and Fiddle shopping centre and Toowong Village will be greatly impeded by the proposed traffic changes, especially for pedestrians and cyclists who currently enjoy these local services.	**B.13.3 / 3** **B.5.6 / 32**
12	11.4.2 (pp. 38-39)	Local residents incur more costs and no benefits from having the local access situated in their neighbourhood.	**B.3.4 / 2** **B.11.4 / 1**
13	11.2.3 (p. 26)	Pedestrian access to Toowong State School will be very difficult for pupils who walk from the Morley Street precinct. Those who access from the Western Freeway (a sizeable proportion of pupils are driven to school from this direction) will have great difficulty in accessing the school. Suggest that if the local access tunnel proceeds then ensure that there is pedestrian access from Morley Street precinct to Quinn Street via an underpass or bridge.	**B.4.2 / 13** **B.13.3 / 16** **B.13.4 / 2**

Submission No.		**96**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	Little, if any, benefit will be gained by the local community with the inclusion of the Toowong access connection. It will fragment the community and will [lead to] severe difficulties in accessing Toowong's local services and facilities.	**B.13.3 / 3** **B.5.6 / 11**
2	2	Part of the rationale for Northern Link is easing congestion on Milton Road and Coronation Drive. The inclusion of the local access at Toowong, inherently by its own design, can only cause further congestion. Whilst this is especially the case during the construction period, it will be of a permanent nature [i.e. during operation as well].	**B.5.6 / 20**
3	5	The anticipated increase in traffic on Milton Road, Croydon Street and Jephson Street, together with the widening of these roads, will make crossing these roads a pedestrian's nightmare. The proposed plans have not addressed these issues and are inadequate for people wishing to access public transport or local facilities by foot. Suggest that if the Toowong access goes ahead, a comprehensive array of walkovers, underpasses, and safety islands with traffic lights that have sufficient walk time should be included for the local community.	**B.4.2 / 13** **B.5.6 / 38**
4	5	The usage of local side roads to both access and exit from the Toowong access tunnel has been dealt with superficially. Gregory Street already has an issue with rat running, which Council has recently taken some measures to alleviate. The proposed right turn from Morley Street into the tunnel will enable the local community to enter the tunnel; however, they will need to rat-run in order to return home as there is no immediate access back to the same location. Suggests that should the local access at Toowong proceed, a Local Area Traffic Management Scheme should be designed to prevent the usage of local streets as *defacto* access routes to and from the tunnel.	**B.5.6 / 18**
5	5	The local community is unlikely to need the Toowong access as their ability to get to the Inner City Bypass is both easy and free of cost.	**B.5.6 / 2**
6	8	The number, location and filtration of the ventilation stacks is of extreme importance to the health of the residents. Suggests that an independent body should collect data, model the proposed impact to the whole area and make recommendations, regardless of cost, that meet the Project's guidelines.	**B.8.5 / 1**
7	8	During the construction period there will be considerable air pollution created both from the construction processes and the	**B.8.2 / 1**

		change to traffic patterns. Suggests that an independent body should model the impact of this and recommend mitigation measures.	
8	9	The issue of noise levels, in what is essentially a suburban area, during the construction period have not been sufficiently addressed. Suggest that an independent study should be commissioned to review the process to ensure impacts of the Project on the local community are minimised.	**B.9.5 / 3**
9	9	It appears that little regard has been paid to the long term noise levels created by the Toowong access tunnel.	**B.9.5 / 3**
10	13	The Toowong local access, by the very nature of its design, will fragment and divide the community. It will involve the loss of public spaces, the loss of access to facilities and services and the proposed introduction of commercial areas in a predominately suburban environment.	**B.13.3 / 3** **B.13.3 / 8** **B.13.3 / 15** **B.4.2 / 15**
11	14	The Toowong local access is out of proportion with its surrounds and could be described as a "poor man's remake of a Los Angeles freeway." It makes no attempt to blend with into the environment, but rather appears to make its own visual statement.	**B.14.5 / 1**
12	14	The character of the area [Toowong] has been designated by Council as worth retaining as it has character residential zoning and pre-war houses that can not be removed or demolished. Council is disregarding its own regulations as the Toowong access will involve removing these character houses, which the existing owners are not permitted to do.	**B.12.2 / 1** **B.14.4 / 4** **B.12.2 / 1**
13		It is obvious that detailed designs of the Project were developed a long time prior to them being publicly available. Other options were discarded even before the community could comment on them. Can only assume that this was a deliberate strategy on the part of the Council and was possibly used as a method of minimising objections.	**B.1.7 / 1**
14		The community consultation process is a 'misdescription'. I witnessed input and comment by the community; however, I did not perceive that this input resulted in any alterations to the Project. The information provided [during the consultation sessions] was not always consistent and some of the officers presenting did not seem to have a sufficient knowledge for them to adequately respond to questions.	**B.1.7 / 1** **B.1.7 / 2**

Submission No.		**97**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Have two young children and are concerned about air quality. Suggest that ventilation outlet is filtered.	**B.8.5 / 1**

Submission No.		**98**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Is it wise/necessary to increase the number of lanes on Milton Road? Surely this will only encourage the increased use of Milton Road, rather than the tunnel.	**B.5.6 / 20**
2		If an additional lane is added [on Milton Road], it will quite possibly make it impossible to access the property [524 Milton Road], given	**B.4.2 / 8**

		the grade/slope of the site and the steepness of the existing driveway. If this happens, it may be necessary to resume the whole property. This will be an expensive exercise and something that we wish to avoid. Suggest that if you plan to resume the property next door, that a slip/access lane is created so that the property can be accessed.	**B.5.6 / 34**
3		Depending on the amount of land to be resumed, we are anticipating increased noise, signage and visibility issues [for property on Milton Road].	**B.4.2 / 8** **B.9.5 / 3**

Submission No.		**99**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		It is now clear that the proposed temporary access for three residents in Upper Clifton Terrace into Westbury Street appears to be very close to our house. Our property adjoins the boundary and Council access. The back fence of properties along Kelvin Grove Road provides a safety barrier. Request that this fence remains while the temporary road is in place to provide safety and privacy for our house.	**B.4.2 / 21**
2		When the temporary access is no longer required for Upper Clifton Terrace and a new footpath and buffer zone is completed, it is requested that a similar fence be provided to protect our house from pedestrian and bicycle traffic. The proposed plan for temporary access and future footpath needs to be amended to provide for a reasonable buffer between new works and our house to give us security and privacy.	**B.4.2 / 21**

Submission No.		**100**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	IB9 Recommendation 1 point ii (p. 93) IB Fig 16 (p. 61)	The impact on Toowong is highly evident in Figure 16 on Page 61 of the In Brief. There is no comparative photograph of the current situation but what is proposed here will destroy a residential area with many traditional homes, it will destroy the use of amenities such as Quinn Park, the historic cemetery, the Botanical Garden, the Observatory. It will bring ugliness to this beautiful area and dislocate the community of Toowong driving a vehicular wedge through a people's residential community. There needs to be total reconsideration of the feeder round system at Toowong Consider the following two options: 1. Abandon the Toowong feeder road system completely and opt for a straight through tunnel system from the Western Freeway. 2. Initiate replanning of the feeder road system so that there is a much reduced impact, lower key road system with more sensitivity to local community needs.	**B.1.3 / 8** **B.11.4 / 1** **B.14.5 / 1** **B.3.4 / 4** **B.14.3 / 1** **B.14.6 / 4** **B.14.8 / 1** **B.14.6 / 4**
2	IB 5.7 (p. 60)	The report states that the project will result in 'clutter' from overpasses, massive road expansions in Milton Road, Croydon Street, Sylvan Road, Jephson Street. The report states that there is only a 'perception' of a 10-lane wide Milton Road as a barrier. The report indicates that such impacts can be mitigated visually.	**B.1.3 / 8** **B.14.5 / 1** **B.14.5 / 2**
3	IB 4.3 (p. 35) IB Fig 13	The justification in the document is the predicted increase in traffic accessing the Croydon/Milton Road intersection and the	**B.14.5 / 2** **B.13.3 / 8**

		predicted destinations of this traffic. I note that on Figure 13 there is a prediction that traffic at this intersection will more than double in the next five years even without the proposed Northern Link feeder system. I appreciate that Brisbane is growing, but it is not doubling every five years. These increases at this junction are also more than two times greater than that of any other system. I therefore seriously question the data and assumptions that support such predictions. I assume these models took into account the current economic slowdown and recession scenarios. It is hard to see how growth that will feed into these systems can be achieved in a perspective of economic hardship. Suggests that traffic models should be opened up for "peer review and scientific forensic analysis" and should be reassessed in the light of the economic crisis. Having done this, reassess the cost benefit analysis for the necessity of the feeder roads through Toowong.	
4	IB 5.7 (p.60)	The report states that the project will result in 'clutter' from overpasses, massive road expansions in Milton Road, Croydon Street, Sylvan Road, Jephston Street. The report states that there is only a 'perception' of a 10 lane wide Milton Road as a barrier. The report indicates that such impacts can be mitigated visually.	**B.14.5 / 2** **B.5.5 / 1**

Submission No.		**101**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Objects to the Toowong connection as it is not needed, wanted or justified and would have significant impacts on the local community and divide the community.	**B.3.4 / 2**
2	2	Questions rationale for the Toowong connection given that the suburbs of Toowong, Taringa, St Lucia and part of Indooroopilly would have better and faster access to the city via Coronation Drive and Milton Road [which would be freed up by the mainline tunnel 'filtering' away much of the through traffic].	**B.2.2 / 2**
3	2	The Toowong connection should be abandoned. What is really required is an outer (10-12 km) ring road system allowing traffic and travel around the city.	**B.2.5 / 5**
4	2	If there is some TransApex proposal for a future link from Toowong to the south side of Brisbane it should be explained in the EIS.	**B.21.4 / 2**
5	2	Dividing suburbs into segments dissected by major arterial roads for traffic is the antithesis of sound long-term transport and infrastructure planning.	**B.1.6 / 4**
6	8	The Toowong connection and widening of Milton Road will cause air quality and greenhouse gas issues for the local community. The proposal does not provide adequate filtration on the ventilation stacks. Because the tunnel would likely service freight traffic this would result in heavy particulates from diesel vehicles being released through the ventilation stacks. Additionally traffic jams within the tunnel would also release further emissions.	**B.8.5 / 1** **B.8.4 / 4**
7	13	From a social environment point of view it is hard to see any positives with regards to the Toowong connection. The dislocation of the directly impacted residents, lowered house values, and diminished ease of access through the suburb and to amenities is a real concern.	**B.13.3 / 4** **B.13.3 / 7** **B.13.3 / 11**
8	13	Sound barriers are a poor outcome for the suburb, particularly for the local primary school and pre-schools. Why are barriers suggested for one side of Croydon Street only?	**B.14.8 / 5**

		Sound barriers are ugly, encourage graffiti, block air flow and serve to further isolate and segment parts of the suburb. For highset Queenslanders they may be relatively ineffective and for those residents that have to look out of their windows/decks straight onto a wall, have a very negative psychological impact.	
9		The Toowong connection would greatly impede ease of access to the schools (among other areas) and does not appear to have sufficient crossings proposed to ensure convenience and safety.	**B.5.6 / 38**

Submission No.		**102**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	8	I object to the provision of unfiltered exhausts from the Western Connection ventilation stack and dust from the tunnel during construction for a period of three years. I object to Chapter 8, Air Quality and Greenhouse Gases of the EIS for the following reasons: • The EIS is dismissive of air filtration. • The modelling is flawed. • Diesel trucks liberate diesel particulates in large volumes to the atmosphere. • No consideration of future tunnels such as the East-West tunnel or the Toowong to Everton Park tunnel has been included. • Modelling of the vehicle mix is wrong. • The EIS does not take into the Kenmore Bypass and Airport Link drawing heavy vehicles into the area.	**B.8.5 / 1** **B.21.4 / 3**

Submission No.		**103**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The EIS does not address Section 5.13 of the Terms of Reference (Health and Safety), most particularly the health of pregnant women and infants under three years. Cumulative exposure to particulate matter must be considered for this special group. Suggest that a child care centre within the study area needs to be monitored for effects of air quality.	**B.18.1 / 1**

Submission No.		**104**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Concerned that Northern Link has not been compared objectively and expertly with alternatives such as surface road upgrades, a no-toll options and a North West Motorway with Stafford Road upgraded, to ensure that maximum value is obtained from this large public and private investment in our road network. Suggests a north-south bypass, with an east-west orbital using Stafford Road and Airport Link, would provide significant congestion relief to the north and west of Brisbane and should be assessed directly against the proposed Northern Link tunnel.	**B.2.5 / 5**
2		Greater community benefit would be obtained by providing Northern Link without a toll, as increased traffic through Northern Link would reduce congestion on much of the surrounding road	**B.15.7 / 4**

		network. Suggests that without the toll, economic returns to the Northern Link project would be higher. The toll diverts 25,000 vehicles per day, many of which would use other routes including Milton Road and Coronation Drive.	
3		Due to the current economic crisis, have applied the higher discount rate of 8%. Analysis using the 8% discount rate results in a BCR below 1, at 0.9 and a net present value of -$106million, indicating that Northern Link is not economically viable under these circumstances. Suggests alternative options should be considered.	**B.15.7 / 1**
4		Calls for proper consideration, including traffic modelling and economic analysis, of a range of realistic alternatives to Northern Link, including surface road upgrades in association with optimised public transport options, provision of Northern Link as a free road (no toll) and provision of the North West Motorway.	**B.2.5 / 11**
5	2	Suggests that further consideration be given to the alternative of optimising surface road transport, including increasing lane capacity on a number of roads, doubling Milton Road from 4 to 8 lanes or Coronation Drive from 6 to 8 lanes. Considers that this option was not fully considered in the EIS and seems to have been rejected on political grounds, rather than any analysis of traffic and economic impacts. Suggests that further consideration, including analysis or traffic and economic impacts, be given to the option of optimising surface roads.	**B.2.5 / 8**
6	TP1	Greater social benefit and equity outcomes would be achieved by not tolling Northern Link. Reducing or removing the toll would reduce travel times and vehicle options and result in a higher BCR. Because the toll reduces economic benefits, other funding options should be more meaningfully considered. Removing the toll would reduce travel times and vehicle operating costs and result in a higher BCR.	**B.15.7 / 4**
7		Recommends that Northern Link be assessed directly against a North West Motorway. Concerned that the focus on the Inner City Bypass could create a situation where one breakdown or other incident could spread gridlock across much of Brisbane's road network within a very short time. Suggests that Northern Link be assessed directly against a North West Motorway. In order to form a comparable project scope to a North west Motorway, Northern Link should be combined with a major capacity upgrade of Gympie Road from Kedron to Carseldine. This should assess the merits of having three major north south corridors through the north of Brisbane, compared with the existing two (Gympie road and Gateway Motorway). It should also assess the merits of distributing the east-west travel demand on the north of Brisbane across a middle ring (Stafford Road and Airport Link) and an inner ring (Inner City Bypass) rather than concentrating demand on the ICB.	**B.2.5 / 5**
8		Does not support imposing an additional cost [toll] on motorists when the existing regime of motoring and fuel taxes already cover the social costs of road uses. The percentage of potential users not prepared to pay the toll could be much higher than 32%. If the purpose of Northern Link is to alleviate congestion, any toll should be priced to ensure the tunnel is not under-utilised. This conflicts with the financial imperative to set the toll at a rate that maximises profits. Suggests Council consider alternative funding mechanisms, such as inner-city congestion pricing with toll-free bypass roads.	**B.15.7 / 4** **B.5.6 / 1**
9		More attention needs to be given to addressing the adverse effects of Northern Link on the existing surface road network, remote from the project area, that would have significantly	**B.5.6 / 10** **B.5.6 / 9**

		increased traffic demands placed on them as a direct result of the project, including Lutwyche Road, Kelvin Grove Road and Enoggera Road and Centenary Motorway / Western Motorway corridor, should be upgraded as part of the project scope.	
10		Concerned that Northern Link will place further demand on the Inner City Bypass to function as the critical / pivotal transport corridor for Brisbane, serving Airport Link, Hale Street / Hale Street Link Bridge, Clem7 Tunnel, Kingsford Smith Drive and Northern Link. Suggests that if Northern Link is to proceed, the Inner City Bypass must be upgraded from six to eight lanes. Suggests that a detailed incident management plan should be developed to ensure that breakdowns and incidents on the Inner City Bypass and in the tunnels are responded to quickly and managed efficiently.	**B.5.6 / 14**
11		Recommends that the Centenary Motorway/Western Motorway must be upgraded if Northern Link is to operate as a successful and viable transport corridor. Questions the assumption that a four-lane cross river facility could carry an AWDT of up to 140,000 vehicles per day (Centenary Bridge) and believes that no amount of peak spreading will mitigate regular and extreme delays and congestion on this route. Suggests that the Centenary Motorway/Western Motorway must be upgraded to at least a six lane configuration. Optimally an eight lane configuration from the Moggill Road entry/exit ramps North to the Northern Link Connection is recommended.	**B.5.6 / 13**
12		All lanes on the Centenary Motorway/Western Motorway should be general purpose lanes. Any decision to restrict lanes to high occupancy vehicles or public transport should be evidence based to demonstrate the implications on the level of congestion. A comparison of the project with all general purpose lanes versus a GP + (HOV/HOT) lane option should be undertaken and made available for public discussion, Any type of HOV facility (including High Occupancy Tolls) on the Centenary Motorway/Western Motorway is unjustifiable, based on the multi-purpose use of this corridor as a major freight, tourism and non-CBD commuter route and the lower traffic carrying capacity of HOV lanes.	**B.5.4 / 10**
13		Reintroduction of transit priority initiatives, e.g. an inbound High Occupancy Vehicle Lane, on Coronation Drive is unjustifiable based on the relatively small reduction over current traffic volumes when Northern Link opens, the several purposes of this corridor, the traditionally low vehicle utilisation of HOV lanes and the re-routing of bus trips from Coronation Drive to Northern Link or other busways. Suggests that a comparison of a project with all general purpose lanes versus a GP and HOV lane option be undertaken and available for public discussion.	**B.5.6 / 3**
14		Concerned that the Northern Link EIS concedes a 31% increase in crashes on the Western Freeway west of the Northern Link ramp connection. Any road upgrade should bring wide scale road safety and social benefits to the community and a 31% increase in crashes in completely unacceptable. Suggests that a high standard eight lane Western Motorway from Moggill Road to the Northern Link connection and a six lane Centenary Motorway to the Ipswich Motorway would deliver significant crash savings [through reducing congestion] as well as substantial benefits to travel time and travel reliability along the corridor.	**B.5.6 / 52**
15		A high proportion of programmed local area traffic management projects in the precinct extending from Milton Road to Birdwood Terrace and from Frederick Street t to Weinholt Street will be	**B.5.6 / 18**

		unnecessary and lead to increased travel times, vehicle emissions and a loss of amenity for the local community after Northern Link opens. Suggests that the community must be consulted and advised of the advantages and disadvantages of any local area traffic management treatment before and after Northern Link opens.	
16		All entry and exit ramps must be built to current motorway design specifications, including adequate entry ramp length to allow vehicles to match the speed of motorway traffic and select an appropriate gap to merge, and adequate exit ramp length to decelerate and prevent the chances of vehicles queuing back onto the motorway.	**B.4.2 / 1**
17		There should be very limited spoil haulage trips undertaken during AM peak and PM peak at all worksites. Delivery to all worksites should be similarly managed.	**B.3.6 / 2**
18		Road works, diversions and speed restrictions should be clearly signed in accordance with the Manual of Uniform Traffic Control Devices, Part 3 - Works on Roads. Lane closures should be kept to a minimum and preferably only in off-peak or night operations. The Traffic Management plan should attempt to minimise the need to reduce speed limits through Northern Link roadwork sites.	**B.3.6 / 3** **B.5.7 / 2**

Submission No.		**105**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Concerned that no consideration has been given to filter, or clean the exhaust from the tunnel. Considering the volume of traffic, the pollutants that will be ejected into the air at the tunnel ends, concentrated at two sites, will be considerable. This emission is supposed to disperse into the atmosphere, but on days of temperature inversion, becoming more frequent in Brisbane, the emission will become trapped in the city and inner Western suburbs. Suggests using a water spray scrubber to remove particulate matter and (some) of the undesirable gases (Carbon Dioxide, Carbon Monoxide, Sulphur Dioxide and others) from the exhaust. Other filtration/scrubbing methods could also, no doubt, be used, but this could be considered by the scientific and engineering staff working on the EIS project itself.	**B.8.5 / 1**
2		To allow a concentration of pollutants to be simply pumped into the air in this time of global warming and attempts to reduce carbon emissions would seem to us to be not only irresponsible, but missing an opportunity to partake in a significant reduction of greenhouse gas emissions.	**B.8.6 / 1**

Submission No.		**106**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Supports the strategic need to create an efficient link between the Western Freeway at Toowong and the Inner City Bypass at Kelvin Grove that takes traffic (including trucks) off surface streets. However, is concerned about the proposed connection at Toowong and the associated property resumptions in the Valentine Street precinct, along Milton Road and along Croydon Street, which would lead to significant disruption of the local	**B.11.4 / 2** **B.13.3 / 10**

		community. Suggests the development of an alternative design or the straight through option is adopted.	
2		Concerned about the visual impacts of the ramp structures on adjacent businesses and residents. This will be a visual blight that does not fit in with the topography of the landscape.	**B.14.8 / 1**
3		Concerned about the need for significant road widening on Milton Road between Sylvan Road and Croydon Street and in Croydon Street. This will divide the local community as these roads will act as a barrier to connectivity.	**B.13.3 / 4**
4		Concerned about the impact on Quinn Park. A widened Milton Road will cause the loss of a significant local park that currently creates a green space barrier between local residents and Milton Road. While it is noted in the EIS that the park will be extended to Croydon Street with improvement to park amenities, it will not compensate for the impacts from the additional traffic noise from Milton Road.	**B.11.4 / 1** **B.14.5 / 1**
5		Concerned about the lack of pedestrian and cycle crossing points in Milton Road and Croydon Street. Given local pedestrian and cycle traffic generators such as Toowong Primary School, it is important that safe crossing opportunities on these roads are maintained or enhanced.	**B.13.3 / 4** **B.5.6 / 38**
6		Concerned about the lack of pedestrian and cycle crossing points to Toowong Cemetery.	**B.20.5 / 1** **B.5.6 / 40**
7		It is essential to adopt measures outlined in the EIS to address potential construction impacts on places of historical importance, such as Toowong Cemetery, to ensure that no further damage to heritage structures is caused.	**B.12.2 / 2**
8		Supports need to provide space in the ventilation system to allow for future retrofitting (should technology improve).	**B.4.2 / 22** **B.8.5 / 1**

Submission No.		**107**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The Toowong connection is an over-engineered and excessively expensive proposal. We fail to see how the projected traffic demand supports the estimated cost. There is no real economic benefit to this family from the local connection. In our opinion, the economic modelling in the EIS is constructed simply to provide a positive answer to the cost benefit analysis. In any event, that is a meagre ratio of 1.2 which is a very small margin. In our opinion the costs of the project will never be realised in real terms and we do not see how this can be a sensible use of public funds.	**B.4.2 / 6**
2		Converting the relevant sections of Milton Road into 10 lanes and Croydon Street into 7 lanes will be the cause of major disruption to Toowong residents. The changes will effectively divide Toowong, making local pedestrian access to venues such as the riverside walkway, the City Cat, Toowong Village, Quinn Park, more dangerous and less conducive to our current frequent use.	**B.13.3 / 3** **B.14.5 / 1** **B.14.7 / 2**
3		Toowong is a very important part of the cultural history of Brisbane and the plans represent further destruction of the cultural history of Brisbane.	**B.12.2 / 1**
4		Concerned the local connection would increase "rat running" in Morley Street and surrounding area, during both the construction phase and the operational phase. During operation, the only option for traffic coming from Bardon to enter the main tunnel will be to use the right hand turn into Milton Road from Morley Street,	**B.5.6 / 18**

		which will lead to increased use of Morley Street, further degrading the amenity of the area.	
5		The local connections do not provide us, residents of [north] Toowong, with 'local connectivity'. Despite exiting the proposed portal of the tunnel less than 100 m from our home, we would not be able to exit the off-ramps into Morley Street, but would have to 'rat run' to our home. Suggests that the lack of proper local connections for people who actually live locally is in equitable and that social equity needs to be applied in terms of access to the proposed tunnel.	**B.4.2 / 10** **B.5.6 / 18**
6		Concerned about dust during the construction phase. The EIS is noticeably absent of any quantitative data on health impacts. Given the associations between particulates and adverse health outcomes, the projected dust impacts and their probable health impacts are of great concern. Suggests that the project not proceed with the project in the absence of clear quantitative data on the projected dust impacts during the construction phase and their probable health impacts.	**B.18.2 / 1**

Submission No.		**108**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The noise level measurement locations did not include Kent Street, which is a natural valley and is open to the full noise of traffic, as the houses are at the same level as the roadway. Wool Street and Crag Road where the noise level measurements were made have some protection from noise as the motorway goes through deep cuttings at these locations.	**B.9.1 / 1**
2		Concerned that Northern Link would increase noise levels at Kent Street as: 1. Heavy vehicles will still be required to start reducing speed using exhaust brakes directly opposite Kent Street before entering the tunnel. 2. Northern Link will increase the amount of traffic considerably, especially that of heavy vehicles and the associated noise. 3. The expansion of the motorway will move it physically closer again to the residential area of Kent Street. Suggests that provision be made to protect residents of Kent Street and Sussex Street against increased noise.	**B.9.1 / 1**

Submission No.		**109**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	Toowong entrance will split Toowong and create problems and disruption within the area.	**B.3.4 / 2**
2	8	No filtration on main tunnel stacks - future increases in truck traffic will cause particles to fall-out on surrounding schools.	**B.8.5 / 1**
3	5	Toowong connection will cause 60% increase in traffic volume on Croydon Street and 27% on Jephson Street and result in "rat-running" in surrounding streets as well as making local access very difficult for the people of Toowong.	**B.5.6 / 18**

Submission No.		110	
Issue No.	EIS Reference	Issue Summary	Response
1	9	The community needs to be able to assess the proposal both with and without Toowong access to determine if the benefits are greater than the costs. The project without local access would minimise noise and vibration exposure to residential homes.	**B.3.4 / 4**
2	9.1	Deficiencies are noted with regard to noise monitoring locations, specifically along Milton Road, Croydon Street and Jephson Street. The modelling based on limited sample points may be inaccurate. Referred to noise problems in relation to North South Bypass Tunnel identifying that previous mitigation measures have been inadequate. There is no discussion regarding these problems and how to prevent them occurring elsewhere. Suggest that noise, vibration, air monitoring and dust concentration measurements occur in selected residential properties close to worksites and along the tunnel corridor and for them to be displayed via live feed or updated weekly on the Northern Link website.	**B.9.1 / 1**
3	9.1.1 Tab 9.4, 9.5	Baseline noise monitoring may have been abnormally elevated due to the increased truck traffic associated with Gateway Upgrade Project, with 600-740 truck movements per night between 6pm and 5am Sunday to Thursday. If the baseline has been inaccurately recorded, this may mean that the predicted reduction in 2014 noise levels is not valid.	**B.9.1 / 1**
4	9.5.1	Feels that there has been inadequate recognition of the rat running through Auchenflower, particularly along Victoria Crescent, Morley Street and Gregory Street. This may cause elevated noise levels at project completion.	**B.5.6 / 18**
5	9.2.2	The construction period is too long for residents to put up with construction noise. Under no circumstances should haulage operation be allowed to operate 24 hours a day from the Milton [Road] worksite.	**B.9.2 / 2**
6	9.2.2	The Australian Standards referred to in the EIS are based on the typical Australian house, which is generally made of brick and provides considerable insulation from noise and vibration. The predominant house in the area is question is the Queenslander which is highset, wooden, with thin single sheeted walls that offer minimal noise protection. Suggestion that low range of noise exposure in the standards needs to be adopted. The project is unlikely to meet this standard.	**B.9.2 / 3**
7	9.2.2	Queenslander houses are at elevated risk of vibration damage because of tiles and plasterboard. Suggest reducing the 'trigger level' for building condition surveys to 5mm/sec.	**B.9.3 / 6**
8	9.2.2	The EIS should provide a clear commitment to "trigger levels" for interventions and timeframes for modification.	**B.9.3 / 6**
9	9.3.1	The [construction] work will be so extensive and disruptive in the residential areas around secondary entry/exit in Toowong that the no connection option is the best.	**B.13.3 / 8**

Submission No.		111	
Issue No.	EIS Reference	Issue Summary	Response
1	5	At massive additional cost, the Toowong connection has no community support and traffic numbers have not demonstrated	**B.5.6 / 2**

		usefulness.	
2	5	The proposed changes to increase traffic on Croydon Street and Jephson Street will cause major difficulties for cyclists and pedestrians to access to the Cat and Fiddle Shopping Centre and the Sylvan Road Bikeway.	**B.5.6 / 39**
3	5	Concerns regarding rat running have not been adequately studied or addressed in the EIS.	**B.5.6 / 18**
4	5	Access into the area bounded by Sylvan Road, Ascog Terrace, Jephson Street and Miskin Street will be difficult unless a dedicated right turn access lane and traffic light is formulated. Suggests that the project does not include Toowong connection.	**B.4.2 / 7** **B.5.6 / 28**
5	8	Concerns regarding air quality and filtration have not adequately been addressed.	**B.8.5 / 1**
6		Concerns regarding construction noise disruption.	**B.9.3 / 1**
7	13	Grave concerns have been raised regarding social dislocation the Toowong access connection will cause to this historic precinct.	**B.13.3 / 7**

Submission No.		**112**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	9	There will be excessive noise during construction and inadequate noise mitigation.	**B.9.3 / 1**
2	5	The project would result in increased traffic congestion in Toowong which will cause rat running that is dangerous for pedestrians, particularly school children.	**B.5.6 / 11** **B.5.6 / 18**
3	5	Building tunnels for cars does not ease traffic congestion. Traffic including freight would increase in suburbs such as Indooroopilly, Kenmore, Fig Tree Pocket, Taringa and St Lucia.	**B.2.1 / 7**
4	8	Dust during construction and exhaust fumes will be damaging to the health of residents.	**B.8.2 / 1**
5	2	Selling the project as “reducing congestion” when it will not. Building tunnels for cars and trucks does not ease congestion - Use tunnels as subways for buses and trains only.	**B.2 5 / 2**
6	13	Concerned that residents who are "evicted from their homes" may experience "mental health issues", including increased stress and other health problems. Suggest that residents be allowed to relocate within the same suburb if they desire, increase the amount of compensation for those affected and pay for counselling and other treatments for health and psychological problems.	**B.13.3 / 10**
7	13	Loss of parkland will result in people and children becoming less active and therefore there will be an increase in weight-related health problems	**B.13.3 / 15**
8	13	The project would result in the vision of Toowong and loss of social contacts, causing social dislocation.	**B.13.3 / 14**
9	13	The Toowong memorial tree would be lost. Suggests that it not be cut down and that placing a plaque on a cement barrier would be disrespectful.	**B.12.2 / 4**
10	13	Toowong is a historical suburb and the character of the area must be retained and not destroyed by those projects that don't assist congestion problems.	**B.13.3 / 7** **B.12.2 / 1**

Submission No.		113	
Issue No.	EIS Reference	Issue Summary	Response
1	2	I am concerned about local community losing access to services. I live near Milton Road and regularly run, ride and my children walk and scooter along Croydon Road to parks and bikeways. Suggests that there needs to be tunnel or overpass to allow access to local parks and Coronation Drive bikeway for running and riding. Objects to pedestrian crossings being removed from Milton Road.	**B.4.2 / 13** **B.5.6 / 38**
2	5	Concerned about potential rat runs. I live in a street one block from the Milton Road/Croydon Street intersection and our street will see increased traffic from people wanting to go down Milton Road without using the big 'new' intersection. We have not even been included in the community study area. Suggests that local streets need to be considered in a traffic management or traffic calming measures, designed to stop a very quiet street (Eldridge Street) becoming a rat run.	**B.1.3 / 1** **B.5.6 / 20**
3	8	Concerned about air quality. I have children and it is not acceptable to increase air pollution without filtering the outlets. Concerned that increases surface traffic will at intersection of Croydon Street and Milton Road will greatly increase pollution in addition to the ventilation outlets.	**B.8.5 / 1**
4	13	Concerned about the loss of the social environment. We bought in the area because it was character residential and zoned accordingly, as well as having local services and amenities such as Quinn Park, Wests Park, access to local schools and bikeways. We walk / cycle to shops and work and my children will be walking to school. This will be greatly diminished by the widening of the road, loss of pedestrian access, increased pollution and road traffic and loss of one third of Quinn Park. This makes a mockery of the council's zoning plan.	**B.4.2 / 13** **B.13.3 / 3** **B.13.3 / 13**

Submission No.		114	
Issue No.	EIS Reference	Issue Summary	Response
1		The Toowong connection would provide no benefit to the Toowong community. Will fracture access and amenity for residents.	**B.13.3 / 1** **B.13.3 / 4** **B.5.6 / 11**
2		The Project would cause rat running to escalate. Suggests local area traffic management must take place, if the 10 lanes and subsequent chaos proceeds.	**B.5.6 / 18**
3		[Concerned about] noise and pollution, especially around [Toowong State] School.	**B.8.1 / 1**
4		Leave Croydon Street and Quinn Park alone.	**B.14.5 / 1**

Submission No.		115	
Issue No.	EIS Reference	Issue Summary	Response
1	9	Concerned about vibration and settlement in houses near to roadwork. Wooden houses are designed for open living. Suggested mitigation of changing window and door seals is tantamount to a complete change of lifestyle.	**B.9.3 / 2**

Submission No.		116	
Issue No.	EIS Reference	Issue Summary	Response
1	2.1.3	Concerned about the removal of the right turn from Jephson Street to Sylvan Road as north bound cars on Jephson Street will have to turn right across the traffic to enter Lissner Street, effectively removing the capacity of one lane of traffic. Traffic wishing to access Coronation Drive from Ascog Terrace will have to turn right into Jephson Street. The EIS does not consider the 416 bus route, which uses this right turn, and the needs of the number of local residents who catch the bus at the Bulldogs bus stop. Preventing the turn will also encourage 'rat running' through local streets.	**B.4.2 / 11** **B.5.6 / 25**
2	2.1.3	Small changes in traffic patterns (such as the removal of the Caltex service station, the route of the 470 bus, less children walking to school as the result of traffic safety concerns and reduced safety and amenity for pedestrians along Croydon Street and Jephson Street), have broader implications, increasing traffic on the very residential streets that the project cites as benefiting from reduced traffic. Suggests undertaking an assessment of the likely increase in traffic generated as a result of the "loss of convenience" from the project. Incorporate this additional traffic into the traffic model and present the findings in the supplementary EIS. Suggests removing or significantly redesigning the Toowong connection and associated works to reduce the "loss of convenience" impacts forcing local residents to increase vehicle use.	**B.5.6 / 33** **B.5.6 / 16**
3		Small changes in traffic patterns (such as the removal of the Caltex service station, the route of the 470 bus, less children walking to school as the result of traffic safety concerns and reduced safety and amenity for pedestrians along Croydon Street and Jephson Street), have broader implications, increasing traffic on the very residential streets that the project cites as benefiting from reduced traffic. Suggests undertaking an assessment of the likely increase in traffic generated as a result of the "loss of convenience" from the project. Incorporate this additional traffic into the traffic model and present the findings in the supplementary EIS. Suggests removing or significantly redesigning the Toowong connection and associated works to reduce the 'loss of convenience' impacts forcing local residents to increase vehicle use.	**B.5.6 / 33** **B.5.6 / 16**

Submission No.		117	
Issue No.	EIS Reference	Issue Summary	Response
1	1 13	The location of the ventilation outlet adjacent to the residential community at Toowong is unacceptable, creating a significant risk of health problems, particularly children. Current modelling is inadequate in predicting the extent of the impact and there is a need for further evaluations against acceptable standards.	**B.18.3 / 1**
2		Suggests that the EIS study corridor be extended to include West Toowong and sensitive sites.	**B.1.3 / 1**
3	18	Suggests that the dispersion model be revised with further emission studies undertaken to assess the likely concentrations of pollutants and the overall impact on the areas surrounding the ventilation outlets. It should take into account the higher population densities expected in the inner city area and the Western Corridor area, the increase in traffic flow (including during peak periods), congestion and associated lower average vehicle	

		speeds in the tunnel and the higher proportion of heavy vehicles in the vehicle mix.	
4		Suggests that further modelling be carried out on weather and wind patterns in Toowong and surrounding suburbs and the predicted path and concentration of pollutants. The assessment will also need to consider the local terrain as Toowong and surrounding suburbs are very hilly.	**B.8.1 / 3**
5		Suggests that air quality monitoring be undertaken at local residential areas and sensitive sites on a permanent basis. If an increase in air pollution is noted or exposure limits are exceeded, action must be taken immediately.	**B.8.3 / 5**
6		West Toowong was not considered in the EIS study corridor and is a significant omission from the EIS. Given that the proposed location of the ventilation outlet at Toowong is in very close proximity to West Toowong (the area likely to be most affected) the potential impact should be quantified and understood and necessary controls put in place.	**B.1.3 / 1** **B 8.3 / 2**
7		Suggests that the West Toowong area will require further study and impact assessment and community consultation should take place once these results from the study and impact assessment are received.	**B.1.3 / 1** **B 8.3 / 2**
8		The inclusion of the Inner West Transport Study Area in Chapter 5 of the EIS is solely for traffic and transport movement purposes and does not assess the impact on the community.	**B.5.1 / 2**
9		There are a number of sensitive sites that have been omitted from the EIS in which need to be included. These are "Hillsdon Kindergarten" [Child Care - Taringa], "Taringa Montessori" [Child Care - Taringa], "Toowong Child Care Centre", "Brisbane Boys College" [Secondary School - Toowong], "Queensland Academy for Science, Maths and Technology College [School - Toowong], "Stuartholme College" [Secondary School - Toowong], "St John's Residential Care" [Aged Care - Toowong], "Westbrook Park" [Park - Toowong] and "Anzac Park" [Park - Toowong].	**B.8.1 / 4**
10		Toowong Creek should also be taken into account as rain will capture the pollution in the air and it will run into the creek.	**B.8.3 / 2**
11		The community of West Toowong consists mostly of houses and families. There are currently 2,126 children aged 0-14 years residing in Toowong, Taringa and Bardon, with 777 under 4 years old [Source: ABS]. There are 328 children in Toowong and this does not include the children attending local schools who reside outside the area. These children will be affected by the worsening air quality from the ventilation outlets.	**B.8.3 / 2** **B.13.3 / 20**
12		Chapter 13 of the EIS suggests that there are low numbers of families and children in the study area. The exclusion of West Toowong from the study corridor and the fact that the EIS states that there is a lower proportion of family households and high population mobility demonstrates a significant lack of understanding (within the EIS) of the true community nature in the West Toowong area.	**B.13.2 / 3**
13		West Toowong is a residential area and thus the location of the Toowong ventilation stack is inappropriate [Source: Australian Government National Health and Medical Research Council Air Quality in and Around Traffic Tunnels Final Report 2008].	**B.3.5 / 1**
14		A significant omission and group requiring specific impact assessment [in relation to Table 10-7] is the significant and large (above 50 birds) flock of cockatoos that reside and feed in the area, particularly Anzac Park, West Toowong streets and parks and along Toowong Creek. The increased particulate matter in the air, in such close proximity may decrease or even wipe out the significant population of cockatoos. The impact of the emissions on this flock requires assessment.	**B.10.2 / 1**

15		The main concern is with the proposed ventilation outlet at Toowong. The EIS states that "the ventilation station would be situated on Council owned land on the Mt Coot-tha side of the Western Freeway approximately 400 m west of Mt Coot-tha Road" and that "the Project design does not propose the installation of filtration equipment". This location is directly beside the West Toowong area and given the significant height of the land behind the proposed site, West Toowong will be the area primarily affected by the output of the ventilation outlet.	**B.8.3 / 2**
16		My main concern is with the short-term and long-term exposure to pollutants from motor vehicles, in particular nitrogen dioxide, ozone, carbon monoxide and particulate matter. The air quality in proximity to the ventilation stack will be adversely affected especially during periods of peak traffic flow and congestion, causing negative health effects for nearby residential areas.	**B.18.3 / 1**
17		Particulate matter generated from diesel engine exhaust fumes pose particular health risks.	**B.18.4 / 1**
18		Particulate matter finer than 10 microns (PM_{10}) and particulate matter finer than 2.5 microns (PM2.5) are of major concern because of their small size and toxicity.	**B.18.4 / 1**
19		Ultrafine particles (less than 2.5 microns) are likely to result in adverse health consequences. While the EIS acknowledges that ultrafine particles are a dominant factor in health effects, no exposure standards have been developed.	**B.18.4 / 1**
20		The Australian Government National Health and Medical Research Council Air Quality in and Around Traffic Tunnels Final Report 2008 concludes that current approaches to monitor air quality under represent the health impacts of ultrafine particles and that people who live near tunnels or ventilation outlets may be at risk. It is therefore essential that effective and suitable filtration equipment be installed as part of initial construction to reduce the concentration of the pollutants emitted from the ventilation outlet.	**B.8.5 / 1** **B.18.4 / 1**
21		The persistent community concern the M5 tunnel has attracted in Sydney has lead to design and operational changes to subsequent tunnels. A redesign to the M5 involved a 1 km ventilation tunnel transporting polluted air to a ventilation stack in an industrial area away from the tunnel. It is vital the Northern Link tunnel also learns from the M5 experience.	**B.4.4 / 4**
22		Suggests that ventilation stacks should be placed in industrial areas away from residential areas, even if this is some distance away from the tunnel.	**B.3.5 / 1**
23		The Australian Government National Health and Medical Research Council Air Quality in and Around Traffic Tunnels Final Report 2008 states that the advantages of tall stacks are diminished if sited on valley floors. For achieving the full benefits of stack venting in populated areas, stacks need to be taller than valley sides to take advantage on natural atmospheric dispersion. Given the topography of the land at Toowong with the steep rises on both sides of the site, the proposed height of the stack is definitely not taller than the valley sides and therefore clearly inappropriate for a ventilation outlet.	**B.4.2 / 22** **B 8.3 / 2**
24		Suggests that the ventilation outlet at Toowong be moved to a nearby industrial area not in a valley. Sumner Park and Darra may be options.	**B.3.5 / 1**
25		The ventilation outlet at Woolloongabba is very noticeable, even with its industrial location. If the ventilation outlet proposed at Toowong is similar, it will be an eyesore for local residents and for visitors to the Mt Coot-tha Botanic Gardens.	**B.14.8 / 4**
26		The proposed mitigation outcome, for the concern raised by the community relating to the need for filtration, is inadequate (being the potential to retrofit filtration). If the monitoring identifies	**B.8.5 / 1**

		elevated or unacceptable levels of pollutants, it would take significant time to test and install filtration equipment, assess options and implement remedial action to alleviate the problem.	
27		During the time period it takes to retrofit filtration, the community would be exposed to high levels of harmful pollutants, causing irreversible health damage, or the tunnel would need to be closed during this period. The mitigation outcome also states that the technology would need to be proven.	**B.8.5 / 1**
28		The EIS Technical Report 7: Air Quality Impact Assessment states that "the difference in ambient air quality arising from treatment of tunnel emissions by some form of filtration would be difficult to detect. Benefits arising from emissions treatment would most likely be realized in-tunnel and at elevated locations very near the tunnel ventilation outlets." Therefore, in a worst case, yet reasonably likely scenario, unacceptable levels of pollutants would be detected and potentially no effective filtration would be available, with the only option being to close the tunnel indefinitely until the problem was rectified. This suggests that suitable filtration for multiple pollutants or other options must be identified, tested and proven prior to commencing construction of the tunnel.	**B.8.5 / 1**
29		In the EIS, no acceptable and proven mitigation strategies have been developed in response to real concerns over unacceptable elevated levels of pollutants. Potential solutions need to be identified and elevated prior to progressing with Northern Link.	**B.8.5 / 1**
30		Suggests that filtration solutions may include a combination of technologies to address the multiple compounds in the tunnel emissions. Examples include electrostatic precipitators and scrubbers.	**B.8.5 / 1**
31		Exposure to even a small increase in air pollutant concentrations in the local area will have a detrimental effect on a long term basis on children, particularly young children in the 0 to 4 year age group. The cumulative effect means that simply monitoring the concentration levels is not a sufficient solution as the damage will have commenced.	**B.18.4 / 1**
32		In the Health Impact of the Proposed Northern Link of the EIS, it is acknowledged that numerous studies have demonstrated that living near a busy road is detrimental to the health of adults and children. The EIS does not factor in the 4.3 km of pollutants concentrated in one location and the multi fold increase in concentration. Living near the ventilation outlet [at Toowong] would be like living beside multiple busy roads and thus significantly increasing the acute and long term health effects, including mortality, hospital admission, lung function, cancer incidence and lung function growth in children.	**B.18.4 / 1**
33		While the EIS concludes that ground level concentrations of pollutants with or without the Northern Link tunnel are similar, it should be noted that this conclusion is based on a number of assumptions that are considered to be unrealistic in light of the recent experience with the M5 tunnel in Sydney.	**B.8.1 / 3**
34		The introduction of a tunnel will change traffic volumes in the area surrounding the tunnel and the expected further growth of Brisbane's population will increase traffic flow significantly. Brisbane's roads are already congested and higher expected traffic flows and the associated reduction in vehicle speed will further increase the pollution caused from vehicles.	**B.8.1 / 3**
35		The high population densities plan for the inner suburbs will increase congestion and pollution levels. The Northern Link Planning Needs Assessment Report estimates that 3.8 million people will be living in the South-East Queensland region by 2026. The population of the Western Corridor is expected to increase by 137%, while the Draft Regional Plan for South East Queensland	**B.8.1 / 3** **B.5.4 / 7**

		predicts 116,000 new dwellings will be constructed in the Ipswich Local Government area by 2031. This will result in a significant increase in traffic using Northern Link, which has not been factored into the traffic volume modelling and thus air quality predictions.	
36		Another factor is the assumption made in the EIS regarding the vehicle mix, age, speed, the gradient of road and emission control technology for the Australian vehicle fleet. These variables have been adopted in the EIS to estimate total vehicle emission rates. This may not be a realistic scenario as it would be expected that a higher percentage of heavy, diesel engine vehicles are more likely to use the tunnel than passenger vehicles due to the associated cost in using the tunnel. A higher mix of heavy vehicles using the tunnel will not only increase pollutants inside the tunnel, but also increase emissions from the ventilation outlet.	**B.8.4 / 4**
37		It is highly unlikely that people travelling locally between inner city suburbs will use the tunnel. Therefore the ventilation outlet will not relieve existing traffic flows and pollution and will just add significantly to the pollution in the area.	**B.8.5 / 1**
38		The Northern Link tunnel will effectively become a major highway for heavy vehicles feeding traffic from the Warrego and Cunningham Highways to the Port of Brisbane and areas north of Brisbane instead of the Gateway Motorway.	**B.5.6 / 2**
39		The tunnel will do nothing to neither alleviate localised traffic nor add to the amenity of the Western Suburbs.	**B.5.6 / 19**
40		Most areas along the Northern Link tunnel corridor are currently not affected by pollution from heavy vehicles. This increased freight distribution will increase the proportion of heavy vehicles using the tunnel and this has not been factored into the current model for predicting air quality impacts.	**B.8.4 / 4**
41		The Australian Government National Health and Medical Research Council Air Quality in and Around Traffic Tunnels Final Report 2008 notes that the fleet split may not necessarily relate to the general fleet split in the district in which the tunnel is situated, especially if the tunnel is part of a strategic route and carries long distance traffic links to port or airports (as Northern Link seems proposed to do). This fleet split will have a significant influence on the CO and PM_{10} emissions.	**B.8.4 / 4**
42		No account is taken of worst case scenarios and the effect of the expected increase in heavy vehicular traffic directed from the Ipswich Motorway into the Northern Link tunnel.	**B.5.6 / 10**
43		The EIS does not make allowance for the anticipated slower traffic speed in the tunnel as a result of a higher proportion of heavy vehicles.	**B.5.4 / 6**
44		Congestion is another issue not considered in the EIS.	**B.5.6 / 20**
45		The possibility of an accident or even a fire inside the tunnel has not been factored into the EIS. Such occurrences will have adverse consequences on community health.	**B.16.2 / 1**
46		In the event of an accident inside the tunnel causing a fire, fumes of toxic chemicals generated due to ignition of flammable and combustible liquids carried by heavy vehicles would result in a major pollution incident and spread pollutants from the ventilation outlets throughout the adjoining areas. Suggests that to mitigate this significant risk, heavy vehicles should be banned from using the tunnel or restrict their use to night time only.	**B.16.2 / 1**
47		By ventilating all tunnel exhaust fumes to only two locations instead of dispersing the pollutants across the length of the road, will effectively concentrate pollutants in proximity to the area surrounding the ventilation outlet. This will cause a significant	**B.8.5 / 1**

		increase in ground level concentrations of pollutants in proximity to the ventilation outlet, potentially above the levels predicted by the dispersion model used for the study and potentially above acceptable standards, thus causing significant health impacts to the local community.	
48		The air quality assessment for the tunnel operation is based on the use of a computer-based dispersion model to predict air pollutant concentrations in the study area. Current dispersion models have some acknowledged weaknesses in their ability to accurately assess dispersion from stacks and portals, especially in urban areas and areas with differences in elevation [Source: Australian Government National Health and Medical Research Council Air Quality in and Around Traffic Tunnels Final Report 2008]. The site around the proposed ventilation outlet has significant differences in elevation.	**B.8.1 / 3**
49		For PM_{10} particulates, the dispersion model calculates a 24 hour average concentration. However, this gives a distorted picture as periods of low traffic flow, especially after midnight, result in very few pollutants being emitted. This means that the emissions from the ventilation stack during peak periods will significantly exceed the average concentrations.	**B.8.5 / 1**
50		The dispersion model does not take into account or make predictions for high traffic flow during peak times. In the worst case scenario, a lengthy traffic congestion could lead to the air quality goals for PM_{10} and PM2.5 of 50ug/m^3 and 25ug/m^3, respectively, to be exceeded. These goals are the National Environment Protection Measures (NEPM) for 24-hour maximum concentrations.	**B.8.5 / 1**
51		The tunnel section of Northern Link [mainline tunnel] is 4.3 km long, which is longer than the M5 East tunnel. It is therefore important that the design for Northern Link incorporates at the outset suitable measures that will overcome and avoid the pollution episodes experienced with the M5 East tunnel.	**B.4.4 / 4**
52		Suggests that a video detection system in the tunnel should be installed which identifies "smoky" heavy vehicles that emit visible smoke. These vehicles should then be reported to the EPA for corrective action.	**B.8.4 / 2**
53		The meteorological information contained in the EIS is using wind data based on the four monitoring stations (Rocklea, Brisbane CBD, South Brisbane and Woolloongabba), which are not in proximity to Toowong.	**B.8.1 / 3**
54		The influence of nearby buildings and the local terrain will affect local wind patterns and hence impact on the dispersion of air pollutants.	**B.8.1 / 3**
55		Effluent gases from the ventilation outlet are at ambient temperature and have therefore no buoyancy.	**B.8.5 / 1**
56		In view of these variables [point 53-terrain; 54-nearby buildings; and 55-temperaturevs buoyancy], it would be difficult for the dispersion model to accurately predict the ground level concentrations of pollutants in proximity of the ventilation outlet [at Toowong]. It is possible that there are pockets of higher than predicted ground level concentrations of pollutants in that area.	**B.8.1 / 3**
57		Depending on prevailing weather conditions, there is the potential for temperature inversion, where pollutants cannot disperse with a consequent build up of ground level concentrations.	**B.8.1 / 3**
58		The wind studies in the EIS do not mention or assess the impact on the West Toowong or Taringa areas.	**B.8.1 / 3**
59		More information and data is required from the Northern Link Project Team on the local wind patterns and the predicted distribution path of the concentrated pollutants expelled from the	**B.8.1 / 3**

		proposed ventilation outlet at Toowong. The assessment will also need to consider the local terrain.	

Submission No.		118	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The Brisbane CBD bicycle users group has serious concerns about the project. Our concerns are the negative impacts of promoting greater car dependence and reduced adoption of more efficient and sustainable transport modes. Increased traffic on the roads increases the danger to cyclists and reduces the space on roads for dedicated cycling facilities.	**B.2.1 / 7**
2	2.1.3 11.2.2 13.3.2 13.4.2	The EIS claims that the project will "free up" road space in some parts of the study corridor, to provide cycling facilities. However, as the EIS shows that traffic will increase regardless of the project proceeding, it is unlikely that these facilities should be provided in the future. Suggest the restoration of bus lanes on Coronation Drive and the introduction of cycling lanes on Milton Road.	**B.11.2 / 2** **B.5.6 / 46**
3	11.1.4	The lack of cycling facilities on the affected sections of Milton Road and Kelvin Grove Road is an issue of particular concern as these roads are future principal cycle routes according to the SEQ Principal Cycle Network Plan. Meandering footpaths are not a substitute for principal cycling routes. Suggest the project clearly demonstrate how it intends to deliver on these parts of the principal cycle network.	**B.11.2 / 2**
4		The Brisbane City Council's own Brisbane Active Transport Strategy: Walking and Cycling Plan 2005-2010 requires it to provide priority to pedestrian and cyclist access and safety in all new infrastructure projects, however this project provides no such priority and removes existing provisions for access and safety. The plan requires Council to provide green bike lanes with traffic light activation loops at signalised intersections, none of which is proposed in the EIS. Suggests that the EIS needs to address these requirements and include quality cycling facilities on the roads affected by the project tin accordance with Council's policies.	**B.5.6 / 42**
5		Cyclists will be most affected by the changes on Kelvin Grove Road, Milton Road and Croydon Street, which have significant cycle traffic now. The biggest danger comes from additional turning lanes, merges and diverges on the left side of the carriageway, for example, for northbound cycle traffic on Kelvin Grove Road. Suggests the project should replace high speed merge and diverge slip lanes with lanes that connection to the intersection proper (and are therefore governed by normal traffic signal and give way rules), put merge and diverge lanes on the right side of the carriageway where possible, retain existing and provide additional explicit cycle crossing points on any remaining left side merge and diverge lanes, use green cycle lanes in the vicinity of any turning lanes, use bicycle storage boxes or advanced stop lines at signalised intersections and generally provide safe and convenient on road cycle routes along affected roads.	**B.5.6 / 43**
6		Section 5.6.12 is supposed to identify the impacts of the project on active transport, but with the exception of the bike lanes on Sylvan Road, does not even reflect the reality that cyclists ride on-road, rather than using inappropriate footpaths. North bound cycle traffic on Croydon Street attempting to reach Morley Street will need to wait for as many as five or six cycles of the traffic signals, unlike motorists on the road.	**B.5.6 / 39**

		Suggests that for cyclists who do use footpaths, the project should retain direct signalised crossings, avoid staged crossings, use pedestrian priority zebra crossings across turning lanes, use bicycle lanterns at signalised crossings, not resort to tortuous zigzagging and unnecessary hill climbing and generally provide safe and convenient off road cycle routes across intersections on the affected roads.	
7		Cycle traffic across Kelvin Grove Road, Milton Road and Croydon Street will be seriously impacted by the project. The addition of central medians, walls and numerous traffic lanes will make crossing these roads very difficult and dangerous. Suggests the project should include additional crossings at grade between Cadell Street and St Osyth Street and between Bayliss Street and the lane opposite Suggests new grade separated crossings between Gregory Street and Quinn Street and between Musk Ave and Upper / Lower Clifton Terrace and extend the existing overpass of Kelvin Grove Road from Normanby Road directly to Lower Clifton Terrace.	**B.5.6 / 38**
8	5.7.7	The EIS glosses over the severe impact construction will have on cyclists and how they will be mitigated. Closures or realignment, such as the heavily used Western Freeway bikeway, should be quantified in terms of frequency and duration. For example, the EIS states that realignment of the bikeway on the southern side of the ICB will be required, but does not explain why.	**B.5.7 / 6** **B.5.7 / 4**
9		Where bikeways are realigned, there is an opportunity to enhance the cycle network by building wider paths than those they were replacing, for example the Western Freeway bicycle path. This would be cheaper to do early on.	**B.5.7 / 6**
10		The cycle-related mitigation measures proposed are underwhelming in relation to the scale of the project and its impacts. The bicycle path to the Botanic Gardens from the bridge is already committed to by Main Roads. The proposed off-road bicycle facilities along Sylvan Road make little sense. Council is already working to find a solution for the crossings of Dean and Miskin Streets, if there are alternatives, the EIS should detail them. A better connection along Milton Road between Croydon and Dean streets would be desirable, but the proposed path through Quinn Park suffers from safety issues. The proposed re-establishment of signalised pedestrian crossings of Milton Road and Croydon Street is not a mitigation, but reinstatement of existing conditions, which will be worsened by the project. It is unclear what is meant by "support pedestrian crossing with urban design and landscape treatments." Given the barrier effect of the project around Kelvin Grove, a link between Victoria Park and Spring Hill would be highly desirable, but this needs to be clarified. The proposed reinstatement of the path in Victoria Park must happen. The proposed pedestrian link to Lower Clifton Terrace seems to be a minimal effort that will not provide a good level of service to either pedestrians or cyclists.	**B.20.5 / 4**
11		Suggests the project should widen the existing bicycle lanes on Sylvan Road and / or remove or relocate the existing car parking and introduce storage boxes at the Croydon Street intersection to cope with large volumes of cyclists. Suggests improvements to the crossings of Dean and Miskin Streets. Suggests a suitable path at road level along Milton Road and / or an on-road bicycle lane. Suggests bicycle lanterns on the signalised crossings be included in the project. Suggests clarification of the proposed "link" between Victoria Park and Spring Hill, to provide good connectivity to Kelvin Grove Road, the urban village and the Normanby pedestrian cycle link. Suggests reinstatement of the path in Victoria Park be mandatory	**B.20.5 / 4**

		for the project. Suggests a grade separated crossing is provided connecting Musk Ave to Lower Clifton Terrace for cyclists and pedestrians. Suggests bicycle lanes be included in the works on lower Clifton Terrace.	

Submission No.		**119**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The serious and permanent effects of the proposal are the construction of tunnel exhaust stacks and the proven health impacts of these. Tunnel emissions can potentially cause chronic illness and our air quality and rain patterns will be affected by these permanent structures.	**B.8.5 / 1**
2		The tunnel will encourage private vehicle use, as it has been planned with no supported public transport. This is short sighted for a city with our projected growth. Building more roads will only encourage more traffic which will create further congestion, not solve it. This is the choice of providing increased private vehicle infrastructure versus support the liveability of this city with public transport vision. Suggests that the tunnel be built with train and bikeway provision.	**B.2.5 / 2**

Submission No.		**121**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	8.5.2 Tab 8-11	The background PM_{10} is already above goal so any produced by ventilation stacks especially with higher traffic loads at Toowong Western Freeway Tunnel entry/exit already adding to particulates at the kerb. Implement electrostatic precipitation or other filtration methods to filter out particulates before air is discharged from ventilation stacks.	**B.8.5 / 1**
2	18.2.1 (pp. 8-9)	Levels of Nitrogen Oxides and particulates will increase, as will detrimental health effects.	**B.18.4 / 1**
3	8 18	There will be increases in particulates, oxides of Nitrogen and other products of internal combustion engines such as Benzene, Carbon Monoxide, Formaldehyde, Xylene, Toluene and Butadiene (among others) near the busier roadways such as the Western Freeway and the ventilation stacks. Go beyond the minimum recommended guidelines and filter all air leaving the ventilation stacks. Provide residents with reduced price of free house plants such as Aloe barbabensis, Spathiphyllum sp., Philodendronsp., or Epiprenum sp. which can remove all formaldehyde from the air, Gerbera sp. or Chrysanthemum sp. which remove Benzene and Chlorophytum comosum which removes Formaldehyde, Toluene, Xylene and Carbon Monoxide.	**B.8.5 / 1** **B.8.3 / 2** **B.8.3 / 4** **B.18.3 / 1**

Submission No.		**122**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	8.5.2 Tab 8-11	The background PM_{10} is already above goal so any produced by ventilation stacks especially with higher traffic loads at Toowong Western Freeway Tunnel entry/exit already adding to particulates at the kerb.	**B.8.5 / 1**

		Implement electrostatic precipitation or other filtration methods to filter out particulates before air is discharged from ventilation stacks.	
2	18.2.1 (pp. 8-9)	Levels of Nitrogen Oxides and particulates will increase, as will detrimental health effects.	**B.18.4 / 1**
3	8 18	There will be increases in particulates, oxides of Nitrogen and other products of internal combustion engines such as Benzene, Carbon Monoxide, Formaldehyde, Xylene, Toluene and Butadiene (among others) near the busier roadways such as the Western Freeway and the ventilation stacks. Suggestion to go beyond the minimum recommended guidelines and filter all air leaving the ventilation stacks. Provide residents with reduced price of free house plants such as Aloe barbabensis, Spathiphyllum sp., Philodendronsp., or Epiprenum sp. which can remove all formaldehyde from the air, Gerbera sp., or Chrysanthemum sp. which removes Benzene and Chlorophytum comosum which removes Formaldehyde, Toluene, Xylene and Carbon Monoxide.	**B.8.5 / 1** **B.8.3 / 2** **B.8.3 / 4** **B.18.3 / 1**

Submission No.		**123**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		There is little evidence of refinement of the Toowong design from community comment in Appendix B of the EIS. The submission process was rushed and there was insufficient time to obtain the advice of independent technical experts on the material presented in the EIS. Suggests Community Consultation should have been undertaken during the development of the options of the project (straight-through or with the Toowong Connection) in order for the impacts to be fully realised and the design developed with these in mind Suggests display ads in the Westside News and other Quest Newspapers would have been the surest way of providing information to the community at large and those who are likely to visit the Cemetery.	**B.1.7 / 1** **B.1.7 / 5**
2	8	Dust from the conveyor that has the potential to fall on memorials of the Toowong Cemetery in levels with the potential to impact on these memorials is a cause of concern. Deeply carved marble monuments are prone to pitting if dust build up then becomes wet. Dust build up becomes a binding agent for traffic pollution, which is acidic in nature. Suggests a control plan be prepared specifying measures to be undertaken if dust from the conveyor adversely impacts the Cemetery.	**B.8.2 / 1**
3	9	Toowong Cemetery also serves as a place of worship and educational facility, and as such, applicable noise goals for these uses need to be applied. The Cemetery is fully operational with funerals conducted weekly. In addition, the Cemetery hosts a Remembrance Day Service, numerous school and heritage groups during the year. Toowong Cemetery should be elevated to the status of a place of worship / education and have the applicable noise goals applied.	**B.9.4 / 1**
4	9.3.4	The proposed vibration monitoring points as listed in the EIS are not sufficient and need to be increased to take into account the variety of geology and topography within the Cemetery. Only one monitoring point for the TBM and two for blasting is proposed. To obtain reliable data, at least three monitoring points are required in each direction. Suggests that vibration and noise monitoring needs to be substantially upgraded from the current proposal. At least nine	**B.9.3 / 3**

		monitoring points are required for each tunnelling activity. Monuments deemed to be at risk need additional monitoring at their bases. The FOTC suggests that data from the monitoring points be made available on the internet so they can compare the actual levels with projected levels.	
5	12.2.3	Neither the Friends of Toowong Cemetery nor the Toowong Cemetery ground staff has the technical expertise to predict the potential damage to monuments and to suggest mitigation strategies. Specialist structural engineers would need to be engaged by the project prior to the commencement of construction to audit every monument above the path of the tunnel and to monitor vibration levels daily. The EIS improperly considers only vibration from the "average predicted rates of advance" when the TBM is operating in its steady state. However, the TBM will be stopping and starting, which will result in greater vibration than steady state operation.	**B.12.2 / 2**
6	12.2.3	Suggests the following: • Assess vibration effects of road header excavation, allowing for shallow cover to the monuments. • Assess vibration effects of drill and blast or rock hammer under the Toowong Cemetery. • Assess start and stop vibration from the TBM during commissioning. • Revise vibration/effect on monuments section of the EIS. • Assess possible effect of high pressure grouting operations. • Assess construction method and likely time exposure under the cemetery and report this to the FOTC. • Propose mitigation measures such as cleaning the memorials after completion of works. • Brief staff and FOTC on findings of revised vibration analysis. • Resubmit the EIS for community feedback.	**B.9.3 / 4**
7	TP 12 (p. 8)	Settlement is a major cause of monument damage in cemeteries. It is not necessarily connected to construction. Settlement from the tunnels will exacerbate a known issue and mitigation measures must be incorporated into the construction plan. Short and long term settlement monitoring needs to occur at numerous points and rehabilitation measures need to be implemented should any damage occur. Suggests that before any construction occurs, at-risk monuments are underpinned to protect them from both vibration and settlement.	**B.6.2 / 3** **B.12.2 / 2**
8	19	The social chapter states the Project will improve pedestrian friendliness of the area, but the Toowong Connectors actually reduce access points to the Cemetery. Vehicle access will be disrupted during construction due to the multiple changes to the Mount Coot-tha roundabout. Suggests that formal pedestrian crossings are added across Milton Road and Frederick Street near the Milton Road roundabout Suggests that the project ensure adequate signage directing traffic to the Cemetery's main entrance or alternate entrance on Richer Street, for the convenience of funeral corteges and visitors.	**B.12.2 / 3** **B.13.4 / 3**
9		As a heritage group, we would not like to see the demolition of any 'character housing' along Frederick Street	**B.12.2 / 1**
10		The demolition of the service station will be an inconvenience to cemetery staff, FOTC and visitors, as it is the only convenience	**B.11.4 / 1**

		store within walking distance of the cemetery.	
11		The straight through tunnel option, which has not been adequately evaluated in the EIS, would create the maximum benefit to the Toowong Cemetery, with a reduction of traffic in front of the main gate. This would provide safer entrance for slow moving vehicles, reduction of noise and improvement of pedestrian accessibility. Before the project commences, monumental masons should survey the corridor, and estimate the cost of reconstruction in the case of a worse case scenario of a terrace collapsing. Adequate financial provision for reparation needs to be made from the outset.	**B.3.4 / 4** **B.12.2 / 2** **B.12.2 / 3**

Submission No.		**124**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Our residence and the surrounding neighbourhood will suffer severe adverse effects if the secondary entrance to the tunnel at Frederick Street proceeds. We believe that the negative impact of this secondary entrance far outweighs any potential positives and request that this proposed secondary entrance not proceed. We have no objection to the operation of the mainline tunnel, where the entrance is off the eastern end of the Western Freeway.	**B.3.4 / 2** **B.3.4 / 3**
2		We regularly use the Caltex/Woolworths Service Station at Milton Road and if the secondary tunnel entrance proceeds the service station will disappear, resulting in increased travel time to a service station and increased inconvenience. We regularly use the turn off into Sylvan Road from Milton Road. Under the proposed widening of Milton Road this turn will be removed causing further inconvenience.	**B.11.4 / 1** **B.13.3 / 15**
3		The scale of the proposed road works for the secondary tunnel entrance, including the dual overpasses is "ludicrous" and will turn the area of Toowong into a concrete jungle and split our suburb down the middle. Children in our street attend Toowong Primary School and play for various Toowong sporting teams. As a result of the proposed changes to Milton Road, attending these local schools and clubs will require us to cross a major highway.	**B.13.3 / 16** **B.14.5 / 1**
4		We have major concerns that Victoria Crescent will become a rat run with residents travelling from northern suburbs, down Frederick Street, turning into Victoria Crescent to try to enter the secondary tunnel entrance approaching from the east along Milton Road.	**B.5.6 / 18**
5		Due to the hilly nature of our suburb and in particular the steep decline of our property, we have been advised that the tunnel will only be 10 m below our house. The 1.5 m buffer zone decreases this to 8.5 m. This concerns us in relation to safety (in relation to the potential destabilisation of our house and proposed swimming pool); noise and vibrations (during construction and ongoing with tunnel use) and loss in property value.	**B.9.5 / 5** **B.4.2 / 3**
6		The thought of feeling the vibrations of heavy vehicles as they travel below us is most disturbing; and anything that would potentially disturb sleep is depressing in the extreme.	**B.9.5 / 5**
7		Concern that a tunnel located 10 m below the surface will negatively affect the property price of the land. Additionally, given that the property in question is located on an 800 m^2 block within 5 km of Brisbane City, it may constrain the future development capability of this land.	**B.15.5 / 3**

Submission No.		126	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The proposed tunnel will impact us in the following ways: • Stress. • Loss of sleep. • Compensation not adequate for long term impacts and safety. • Loss of money and time. • Sorrow. • Worthlessness. • Hopelessness. • Despair. The community has never been consulted as to whether or not they want a tunnel.	**B.13.3 / 20**
2		Tunnels can fill with water and land above tunnels can cave in.	**B.16.3 / 3**

Submission No.		127	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The School is supportive of strategies to improve the efficiency and capacity of transport routes in and around Brisbane. However, require some confirmation regarding issues associated with the proximity of the Tunnel to the school.	**Comment**
2		Concern regarding a 10% increase in traffic along Gregory Terrace as a result of the Tunnel. Increased traffic could pose as a safety risk for our students specifically during pick up and drop of times.	**B.13.3 / 15** **B.5.6 / 15**
3		The School seeks confirmation that the air quality after the completion of the project would meet set standards and not adversely affect the health of the school community	**B.8.3 /3**
4		Any potential increases in noise levels from the increased traffic on Gregory Terrace could adversely affect the class room experience at BGS and BGGS.	**B.9.5 / 3**
5		The project team has indicated that the current noise levels on the Inner City Bypass are exceeding acceptable noise levels for a local road. Are there any further noise level reduction strategies to ensure that both inside and outside class activities are not negatively affected? Will noise barriers be constructed along the Inner City Bypass?	**B.9.5 / 3**
6		Will air, dust and noise monitoring data be available on a regular basis to the public?	**B.8.2/ 1** **B.8.2 / 3** **B.8.3 / 5** **B.9.3 / 1** **B.9.3 / 9**
7		Will dust and noise reduction strategies be adequate during the construction period and specifically during the school term?	**B.8.2/ 1** **B 8.2./ 3** **B.9.3 / 1** **B.9.3 / 9**

Submission No.		128	
Issue No.	EIS Reference	Issue Summary	Response
1	3.2 (pp. 20-21)	There needs to be more information on the methodology used to come up with the figures provided on future transport, and there needs to be a change of focus from cars to the promotion of other forms of transport.	**B.2.2 / 1**
2	3.2 (pp. 20-21)	The network of concrete flyovers and tunnels proposed by Northern Link will discourage environmentally friendly forms of transport such as walking and cycling. The assumptions stated in the EIS are old fashioned and go against modern climate change inspired thinking.	**B.2.1 / 7**
3	3.4 (p. 26)	The three 'Project Alternatives' have been dealt with very briefly in a way which suggests they have not been fully examined as worthwhile. The 'Optimise Public Transport' alternative lumps pedestrian and cyclists in with this option and there is little consideration of expanding the rail network. There needs to be more medium to long term thinking and planning to discourage people from making car trips by providing good alternatives (rail, bus, bike etc). This needs to be properly explored rather than dismissed in a few brief paragraphs.	**B.2.5 / 11**
4	4.3 (pp. 33-40)	The network of flyovers and widening of several roads in Toowong will make it virtually impossible for local traffic to move anywhere. The only solution is to have no feeder routes into the local communities so that traffic flows into the tunnel from the Western Freeway and ends (probably in a giant traffic jam) at the Inner City Bypass.	**B.3.4 / 3**
5	5.7 (pp. 58-64)	If Brisbane values unique 'timber and tin' areas like the inner western suburbs, the "Los Angeles style labyrinth of feeder roads" associated with Northern Link must be scrapped. Such a proposal clearly compromises the character of these areas.	**B.14.8 / 1**
6	5.9 (pp. 66-68)	The damage to the communities affected by the study corridor outweighs the fact that Northern Link provides a 'missing link' in Brisbane's motorway network. Northern Link will divide Toowong and ruin one of Brisbane's character housing areas. The community has raised issues such as preservation of community values, protection of heritage sites and the environment, safety issues and consideration of climate change. These have been of more concern than property values.	**B.13.3 / 6** **B.13.3 / 8**

Submission No.		129	
Issue No.	EIS Reference	Issue Summary	Response
1		Extremely concerned about the devastating impact the proposed Toowong Connection may have on our beautiful and historic 'tin and timber' suburb.	**B.12.2 / 1**
2		Strongly believe the impact of the proposed Toowong Connection on the community will be disproportionate and of such magnitude that attempts to mitigate will be futile and predominantly symbolic.	**B.14.5 / 2**
3		There is a strong and widespread discontent within the Toowong Community regarding the Toowong Connection portion of the proposed Project. The mitigation measures currently proposed by the proponent are insufficient for the level of impact that will result from the construction and operation of the Project. These mitigation measures will in themselves create considerable additional adverse impacts, some of which can not be mitigated.	**B.22.7 / 1**
4		Rather than instil confidence in the planning process and in the proposed infrastructure, the EIS has strengthened our conviction	**B.3.4 / 2**

		that the proposed Toowong Connection is ill-conceived.	
5		Factors that made swift analysis more difficult and cumbersome were several errors, frequent omissions and even conflicting information.	**B.1.6 / 4**
6		It is considered that the Project did not meet the objectives of the ToR adequately in terms of community consultation.	**B.1.7 / 1**
7		Only those who houses were 'of interest' were shown plans in the first week of May 2008. Close neighbours, also significantly impacted by the Project but were not having their homes resumed, were not permitted by Council to see the plans for an additional three weeks.	**B.1.7 / 3**
8		Delivery of a project brochure in May 2008 was done in a plain, unsealed envelope addressed to "the resident." Such items were mistaken for junk mail and were discarded or not delivered. Given the scale of the Project, personally addressed letters should have been a priority at this early stage of the Project.	**B.1.7 / 2**
9		Residents from Valentine Street, Croydon Street, Milton Road and Morley Street, to name a few, should have received some personal correspondence from the proponents of the Project.	**B.1.7 / 2**
10		Many residents of Toowong have only been included as Level 2 stakeholders as the will not be directly impacted by construction or operation of the Project. However, the EIS shows that these same residents will be affected by noise and dust during construction and ongoing air quality impacts during operation.	**B.1.7 / 3**
11		Throughout the process, the majority of Northern Link Tunnel displays were presented in libraries during work hours. There were far fewer displays available outside work hours.	**B.1.7 / 2**
12		The Northern Link team relied heavily on the internet to present information about the Project. Many people do not have access to the internet and those who do were reluctant to download documents 10MB in size. Information in print was limited in availability and light on content.	**B.1.7 / 2**
13		From the beginning, community consultation became, not a request for input from the community, but a marketing exercise whereby the Northern Link Team could present their Project as a *fait accompli*.	**B.1.7 / 1**
14		Community consultation should have been undertaken during the development of the options for the Project, including the Toowong Connection in order for the impacts to be fully evaluated and the design developed with these in mind.	**B.1.7 / 1**
15		Members observed that the Community Consultation Team Leader did not appear conducive to receiving community feedback on the Project. When concerns were raised verbally with the Team Leader, they tended to reply by defending the project against the comments made, or discounting the comments by reference to things previously said or done rather than taking the comments on board in the spirit of consultation with the view to providing an informed response for the technical team.	**B.1.7 / 2**
16		Consultation was not objective and did not present an open forum to discuss our concerns. For example, no summary was produced following the lengthy consultation with Morley Street residents.	**B.1.7 / 2**
17		Community consultation, rather than providing a legitimate voice for the community, provided the Northern Link Team with a source of information whereby flaws in the Project, as identified by the community, could be examined and given a marketing spin that deflected attention away from difficulties of the Project. This is evident by the fact that the vast majority of comments provided by the Toowong community have not been incorporated into the EIS, and have therefore had to be repeated.	**B.1.7 / 1** **B.1.7 / 6**

18		Inconsistent and incorrect information was frequently presented by the consultation team and design team.	**B.1.7 / 2**
19		The need for resumption of 512 Milton Road is inconsistent. Owner's received a 'letter of interest', however, were advised that no properties on Milton Road east of Croydon Street would be required.	**B.4.2 / 8**
20		The need for resumption of 35 Valentine Street. Community believed that the property was required, however, it wasn't until the consultation team was shown a worksheet that they advised that it was actually required.	**B.1.7 / 2**
21		Inconsistent information was provided at the information sessions from different member of the consultation and design team.	**B.1.7 / 2**
22		Timeline displayed information on filtration that misled the community to believe that filtration would be included with the Project.	**B.1.7 / 2**
23		Whereas members of the CRG were shown results of measurements of current noise levels in the Toowong area, additional noise levels generated by a sudden increase in trucks associated with the Gateway Upgrade Project were not assessed. In other words, it was unclear whether the base line figure can be regarded as 'normal' or whether this represents an extraordinary and temporary peak.	**B.9.1 / 1**
24		Believe that consultation was only undertaken in order to 'tick a box' in the ToR requirements, and was used to provide the team with ammunition against community objections.	**B.1.7 / 1**
25		The consultation process has not only failed to communicate effectively with the community, it has failed to inform the design of the Project. We call on the CG to rule the consultation on the Project to date insufficient and for proper objective consultation to be commenced for the Project.	**B.1.7 / 2**
26		Request a probity audit of the processes and its application be conducted, with input gained from relevant community groups, so that other communities can be spared the unreasonable amount of time and effort members of the Toowong community are necessarily applying to opposing the inappropriate Toowong access.	**B.1.7 / 1**
27		Some members of the TTS group were also members of the Toowong CRG for the project. Their perception was that all major decisions were made prior to the CRG meetings and that the CRGs were used to gather information about concerns so counter arguments could be developed for use at community information sessions for the EIS.	**B.1.7 / 4**
28		The proponent did not make community access to the CRG easy. CRG representative contact details were not provided on the project website until July 2008, after the release of the plans to directly impacted landholders (May, 2008). It was frustrating that there was not a community representative from Valentine Street, one of the most affected streets, on the CRG. Notes of the CRG meeting were not published on the project website in a timely fashion and it was often 2-3 months after a meeting. A number of issues and questions raised were also omitted from the notes.	**B.1.7 / 4**
29		We agree with the issues as contained within Table 1-6 of the EIS. However the 'issues' presented in the EIS are high level summaries that gloss over and obscure the actual content and concerns identified in community feedback.	**B.1.7 / 6**
30		The EIS reports on the frequency and format of engagement with the local community, rather that than the way in which community concerns identified through consultation have been addressed. The EIS focuses on quantity, rather than quality of consultation	**B.1.7 / 6**

		activity and as a result offers no meaningful evaluation of the success of the Northern Link consultation process. Moreover, it appears that the consultation process has not been evaluated, nor has satisfaction with the project been measured longitudinally.	
31		The EIS has not demonstrated how issues raised during consultation have been addressed. The EIS should detail how issues raised by the community were addressed (e.g. Underpinning reasoning) rather than merely repeating the rationale for choosing a particular design. Where outcomes are provided as being covered within the EIS, no cross reference to sections of the EIS is provided. This makes tracing specific responses to specific issues extremely difficult. Specific issues raised by the community should have been considered and responded to individually so as to achieve greater transparency and accountability in the consultation and decision-making process. Mitigation measures should be developed and detailed where the issue is deemed valid. Where the issue is not deemed valid an explanation of why it is not valid should be provided.	**B.1.7 / 6**
32		TTS Group Inc can identify no changes between the concept design and EIS reference design as a result of feedback from the community consultation process. There is no evidence of refinement of the Toowong design from community comment. Specific aspects were verbally discussed between the design team ad TTS group which have not resulted in any changes (e.g. crossing of Milton Road, removal of the tunnel portal entry from Morley Street, provision of cyclist access along Croydon Street).	**B.1.7 / 1**
33		The EIS advertising period officially commenced on Saturday 25 October, yet printed hard copies were not generally available until over a week after this date. Local libraries and ward offices did not have copies available until about 3 November. Technical Reports were still not available at the Toowong Library or Toowong Ward Office on 6 November.	**B.1.7 / 5**
34		The EIS has neither accurately represented the community's concerns, nor objectively and impartially assessed the impact of the Northern Link Project on Toowong. Several examples of bias are provided within the 'In Brief', Technical Reports and the EIS. These relate to statements about the visual amenity, local amenity and residential character and urban form.	**B.1.6 / 3**
35		The options assessment undertaken for the Toowong local connection in Section 3 of the EIS is flawed in that the design used in the options assessment has been significantly changed to have much larger impacts, but the revised design was not reassessed against the options development criteria. Toowong Tunnel Solutions requests assessment of the current project design against the strategic review framework and the results of this assessment presented to the community.	**B.3.3 / 4**
36	3	The EIS does not clearly articulate the need for the Toowong connection. An assessment of traffic demand for the Toowong connection needs to be undertaken, taking into account the strategic plans and needs of major traffic generators such as the University of Queensland. An assessment should include consideration of alternatives using the same road network and assessment of alternative road infrastructure networks that are expected to achieve the same outcomes (at a fraction of the cost of a driven tunnel).	**B.2.1 / 6** **B.2.2 / 2** **B.2.5 / 9**
37	3	The EIS has not addressed the need and justification for the optional connections separate to the main tunnel proposal. As such the ToR has not been fulfilled and supplementary EIS is requested to rectify this omission.	**B.2.1 / 6** **B.3.4 / 4**

38	2.5.3 Tab 2-6	The EIS provides analysis of alternative projects against the objectives of Northern link, however Northern Link itself is not included in the analysis and therefore assessment of Northern Link against the project alternatives cannot be undertaken. The Proponent should reassess the benefits and disadvantages of the various alternatives in a supplementary EIS so that each of them can be considered individually and compared with the alternatives.	**B.2.5 / 10**
39	TP 1	The traffic modelling used for Northern Link has inherent problems in that it does not suitably consider induced traffic demand. The traffic volumes need to be reassessed using an approach that captures long-term induced traffic effects brought about by changes in land use and urban sprawl.	**B.5.4 / 13**
40	5.3.5	The schema used to describe level of service in Table 5-16 performance does not allow for differing levels of service for different directions of use at a given intersection. This gives a false impression of the level of service of the intersection at that point.	**B.5.3 / 3**
41	5.6.12	The EIS fails to consider walking and cycling as a part of the transport network and fails to include any forecast pedestrian or cyclist volumes with or without the project.	**B.5.6 / 46**
42	5	All data included in this section assumes the Project is constructed with the options of connections at Toowong and Kelvin Grove included. Failure to include the data for the "straight through" proposal makes detailed analysis of the impact of the local connections impossible.	**B.5.6 / 17**
43	5.6.2 5.6.7	Streets such as Jephson Street and Milton Road, which are directly affected by the proposed infrastructure, should have been included fully in the study corridor so that a full range of the impacts in this area could have been researched and reported. This would have revealed incompatibilities between the project and Brisbane City Council urban renewal projects. In relation to Jephson Street, two additional lanes of motor vehicles on Jephson Street will not only deteriorate pedestrian and cycle safety and air quality, it will also marginalise the road users. This may translate into cycling and walking becoming less popular in and near Toowong Central.	**B.5.6 / 16**
44	13.3.4 21.4.2	The EIS has not considered traffic impacts of the planned Toowong to Everton Park tunnel, including potential local connections and feeder roads. Such consideration is required under the Terms of Reference as the project falls within the required window for forecasting traffic volumes, that is, 2026. The cumulative impact of a third stack, near the proposed Northern Link stack and an increase in local discharge at the western entry to Northern Link must be considered.	**B.21.4 / 1** **B.21.4 / 3**
45	13.3.4 21.4.2	The EIS has not considered the traffic impacts of the proposed East-West Link tunnel on local roads in Toowong which are likely to become feeder and exit roads of the proposed Toowong to Buranda tunnel. Such consideration is required under the Terms of Reference as the project is within the required window for forecasting traffic volumes, that is, up to 2026.	**B.21.4 / 1**
46	5.2.8	The EIS does not describe the volume and composition of freight traffic on the existing road network. Analysis is limited to identifying two sources of freight that exist in the study area but does not extend to identifying the composition or volume of freight from these sources. Understanding of the freight usage of these routes is critical to understanding the impact of the project in terms of not only traffic and transport but analysis of noise. Suggest that the Proponent produce a study of the freight traffic volumes and composition for the study area, identifying a steady	**B.5.2 / 2**

		state level unaffected by short term construction projects.	
47	5.3.4	Table 5-26 gives the level of service experienced on the Western Freeway during both the AM and PM peak to be Level of Service A - Generally Free Flowing. This is at odds with ABC traffic reporting that indicate the Western Freeway to be "slow from Moggill Road to the Toowong Roundabout" on a daily basis.	**B.5.3 / 1**
48	5.3.4	Data in the forecast traffic growth tables are not supported by explanations for predictions that run counter to expectations or reverse current traffic trends.	**B.5.5 / 1**
49	5.5.2 Tab 5-26	Table 5-26 does not include Croydon Street, a key road, despite the changes proposed for this road in the project. The street is the site of a large number of proposed resumptions of homes and character houses, in order for the street to become a major access and exit route for tunnel traffic using the Toowong local connection. Suggest that recognition of the proposed works for Croydon Street as a major part of the project necessitating inclusion as a 'key road' for the Toowong Connection.	**B.5.3 / 4** **B.5.6 / 16** **B.5.6 / 22**
50	5.3.2	Connector streets between Frederick Street and Gregory Street have not been included in the traffic model (e.g. Part of Morley Street, Musgrave Street and Victoria Terrace). As Morley Street is a connector street to the tunnel portal, the absence of these streets is a significant flaw in the traffic modelling.	**B.5.4 / 2**
51	5.2.1 (p. 15)	The EIS acknowledges that the Project will not only require road widening of Milton Road and Croydon Street, but also of Jephson Street, which is largely outside the Study Corridor. However, the EIS fails to provide a comprehensive assessment of the impacts of the project in this area outside the Study Corridor. This is problematic because such an assessment would have revealed that the Project is incompatible with BCC's own Urban Renewal strategy.	**B.11.1 / 7**
52	5.2.1 (p. 15)	The EIS has not taken into account the requirements of Local, State or Federal active transport policy. There is no evidence that the Proponent has considered the South East Queensland Principle Cycle Network Plan in the development of the project. The proposed project will make it extremely difficult for the planned routes to be delivered in the future. The EIS shows no evidence of the provision for pedestrians or cyclists as being anything more than an afterthought. Cyclists have not been provided for on the major affected carriageways, nor has any reason been given as to why it is impossible to do so.	**B.5.6 / 42**
53	7.6.1	Referring to flood potential associated with the Toowong Connection. Section 5.2.1 and 5.2.2 of the ToR stipulated that "existing and 'project in place' flood potential needs to be modelled". Croydon Street is located within the Q50 of the Langville creek Catchment. However the EIS has not modelled or assessed this catchment. This assessment will have to take place and will have to consider any increase in road pavement height, and the installation of sound barriers along the western edge of Croydon Street. Mitigation measures will need to be developed that prevent adverse impacts on adjacent properties for flood events up to, and including, the 1 in 100 AEP.	**B.7.3 / 1**
54	TP 7 IB 5.3.3 5 8 9 21	The project provides an inadequate description of the existing local air environment as no meteorological data has been collected from Toowong. The lack of local meteorological and limited local air quality data is problematic given the Toowong topography and inter-site variation. The absence of this data results in inadequate description of the study area and the validity of the modelling undertaken should therefore be questioned.	**B.8.1 / 3**

55	TP 7 IB 5.3.3 5 8 9 21	The air quality modelling has considerable inaccuracies and fails to represent important features of the Toowong environment. The air quality modelling needs to be redone for Toowong using Toowong meteorological data for at least a full year. The modelling must be conducted using a more suitable grid scale and suitable topography contour intervals to capture the topography of Toowong. It must also include works associated with the Toowong Connection. A proper prediction error analysis of the model also needs to be undertaken.	**B.8.1 / 3**
56	TP 7	The EIS has failed to quantify the dust and particulate impacts of the construction phase. This is a considerable concern to residents who live in close proximity to the worksite and in particular, residents of streets such as Morley Street and Valentine Street which are immediately adjacent to the proposed Toowong worksite. It would be a serious error on the part of the CG to approve the project and presented in the absence of any quantitative data or projections on the anticipated dust impacts and consequent public health impacts during the construction phase.	**B.8.2 / 1**
57	9.5.5	Noise modelling uses a false baseline noise level due to additional truck movements as a result of Gateway Upgrade Project. Suggestion that a new noise monitoring program should be conducted now that Gateway Upgrade North has ceased. Additionally, put restrictions on truck movement s on surface roads in residential areas, e.g. Milton Road.	**B.9.1 / 1**
58	9.2.2	Based on the information provided in Section 9.2.2 of the EIS, regenerated noise from heavy vehicles within the tunnel is likely to occur at some houses. Monitoring of 'at risk' houses and trigger levels for voluntary relocation/purchase need to be established in the supplementary EIS. It is also suggested that a high level of internal noise and vibration monitoring ought to be undertaken on houses that are potentially at risk.	**B.9.5 / 5**
59	11.1.5	The Northern Link project as presently conceived with the Toowong Connection is not consistent with the Brisbane Long term infrastructure Plan, 2007 (BLTIP) as the City West suburb of Toowong will be significantly impacted in terms of identity, sense of place and will not enhance the local environment. A suggestion is to provide an objective, independent evaluation of how the project meets each of the criteria of the BLTIP (including the identity and sense of place of the City West suburb of Toowong.	**B.11.1 / 6**
60	11.1.5 11.2.3	The Northern Link Project as presently conceived with local access roads and ramps is not consistent with the Desired Environmental Outcomes of the Brisbane City Plan. To comply with City Plan 2000 the EIS needs to commit to improving public and active transport along Milton Road and Coronation Drive and commit that there will be no net loss of community open space as a result of the project. The supplementary EIS needs to present greater detail in the specific development options for residual land following completion of construction.	**B.11.2 / 5**
61	11.1.4 11.2.2	The Northern Link project is considered inconsistent with the South East Queensland Regional Plan (SEQRP) as the EIS does not recognise the Desired Regional Outcome for 'Community, Place and Identity' (DRO 6). It is established that by only presenting the positive impacts and not the negative impacts, the EIS presents a biased picture. When negative impacts are taken into account the proposed local access design is contrary to maintaining local connectivity and may lead to further deterioration of local connectivity. There are also numerous adverse impacts in relation to the 'sustainability' and 'strong communities' policy items.	**B.11.2 / 3**

62	2.1.1	The EIS is inconsistent with AusLink and has failed to adequately consider transport connections and connectivity with existing and future transport corridors which is of "critical importance to nation and regional economic growth, development and connectivity". The optional connections as proposed by the Northern Link tunnel will not stand up to cost/benefit scrutiny without the benefit of the AusLink funding. Given the optional connections do not meet AusLink requirements, providing funding for the construction of these uses is a questionable use of Federal resources.	**B.2.1 / 5**
63	2.1.1	The EIS fails to establish how the Toowong Connection is consistent with the Carbon Reduction Scheme.	**B.8.6 / 2**
64	1.3	The EIS does not provide the methodology it used to identify and evaluate the benefits and impacts of the social environment. The EIS should rectify this so that proper scrutiny of the procedure can be undertaken.	**B.13.2 / 1**
65	TP 13	The EIS fails to recognise all of the social costs of the Toowong Connection through the Cost Benefit Analysis of the project. The EIS fails to measure the social costs as can be readily done by standards and recommended techniques by the Commonwealth Government and OECD. The EIS presents a biased view of social costs and benefits as it regards all social benefits as identified as being important without qualification. The importance of the social costs is dismissed by assertion when their importance is an empirical matter which can be readily calculated. Suggestion that the social costs of the Toowong Connection be calculated separately to the project as a whole and provided within the Supplementary EIS. The social costs as measured should e the monetary compensation paid to the Toowong residents if the Toowong Connection is approved.	**B.15.7 / 9**
66		The EIS does not provide complete information about the costs and benefits of the Toowong Connection (separate from the Project, as a whole) which can be provided using standard techniques in cost benefit analysis.	**B.15.7 / 2**
67	15.5.3 (pp. 14-16)	The assessment on property value impacts in the EIS only assesses impacts on a suburb scale, which will inevitably hide property value reductions and reductions in scale volumes in close proximity to potential infrastructure. To assess the true potential impacts of Northern Link, an assessment of property values and sale volumes within a few hundred metres of potential connection points for Airport Link needs to be undertaken.	**B.15.5 / 2**
68	16 17	Application of risk management processes to identify impacts and risk arising from the project are not evident. All risks, hazards and safety issues identified must be included in documentation and communicated to all stakeholders involved in the project. The EIS does not consider pedestrian and cyclist impacts, risks to local motorists, risk to through traffic, safety risks to Toowong State School and those living north of Milton Road in Toowong during construction of the Toowong access.	**B.16.3 / 1**
69	19.5	The outline EMP lacks sufficient clarity and rigour in the description of objectives and criteria to be put in place and monitored through the construction and operation of the project. In order to reflect EPA guidelines, it is suggested that the project objectives are redefined to provide certainly and rigour to the objective; and redefine the performance criteria to include measurable outcomes.	**B.19.5 / 1**
70	20	The Urban Regeneration chapter in the EIS explicably and incorrectly denies the existence of any high level impacts of the project. It also makes impossible claims about the benefits of the project.	**B.20.3 / 3**

71	20.4.2 20.4.3 20.5.1	The EIS does not commit to implementing any of the mitigation measures identified. Pre-existing projects should not be counted as mitigation measures as part of the project.	**B.20.5 / 5**
72	21.4.2 13.3.4	The EIS has not considered the cumulative impact of a second stack from the proposed East West Link near the proposed Northern Link stack and an increase in local discharge at the western entry to Northern Link.	**B.21.4 / 3**
73	21.4.2 13.3.4	The EIS has not considered traffic impacts on Toowong feeder and exit roads including, but not limited to, Jephson Street and Croydon Street of the proposed Toowong to Buranda and Toowong to Everton Park tunnels.	**B.21.4 / 1**
74	21.4.2 13.3.4	The EIS does not make proper assessment of the impacts of increased traffic on Jephson Street and two other proposed tunnels on the commercial centre of Toowong (amongst other impacts).	**B.21.4 / 1**
75	21.4.2 13.3.4	The EIS has neglected to take into consideration the cumulative emissions from several proposed tunnels in addition to the Northern Link tunnel. This has potential implications not only for emissions but also for the visual impacts which will be compounded unless plans are put in place to minimise these impacts.	**B.21.4 / 3**
76	5.4.6 5.6.1	The numbers presented in the EIS show that in 2014 the number of trips induced by the project will be just over 35% of the number of total project trips. By 2026 this falls to just over 30%. The EIS mispresents this as "low levels of induced demand." Promoting even greater car dependence for Brisbane is a significant, broad scale impact of the project that is not addressed. Suggests that the project correct the assertions in the EIS that the level of induced demand is low Suggests that the capacity of the project to induce needless additional traffic onto Brisbane's roads is reduced.	**B.5.4 / 13**
77	7 TP 7	Most people will tolerate a short period of construction pollution; however with three tunnel portals built close to each other in Toowong, the construction period could be over a decade. Hence the construction air pollution and traffic congestion will be essentially permanent and result in more serious problems. The cumulative impact of the construction of three tunnels in the vicinity of Toowong needs to be assessed from a social, environmental and construction traffic point of view. Suggests that the project assess the cumulative social, environmental and construction traffic impacts on Toowong from the construction of Northern Link, the Everton Park to Toowong tunnel and the East-West link.	**B.21.3 / 5**
78	2.1.3 5.6.9	The proposed removal of the right turn from Jephson Street northbound into Sylvan Road eastbound will have significant impacts on traffic flow around Toowong Village Shopping Centre and will significantly impact accessibility to a number of Toowong amenities and erode the modelling Northern Link traffic benefits of reduced local congestion. No reference is made to the impact on the 416 bus route which uses this right turn. The EIS suggests local access between Jephson Street and Sylvan Road would be along Lissner Street, which presents additional traffic and safety problems.	**B.5.6 / 25**
79	2.1.3 5.6.9	The implications for local traffic of some traffic changes have been inadequately considered (e.g., turn into Ascog Terrace or St Osyth Street). The proposed traffic routes are problematic, either being unsafe or inappropriately using suburban streets as connection roads, beyond their capacity, Reference to investigations identifying "some adverse effects" in the Technical Report (s12.1 12 - 286) were deleted from the EIS (5 s5.63 p5-94) where the	**B.5.6 / 33**

		expression 'adverse effects' was removed.	
80	5.6.9	When local adverse impacts of changed traffic flows are considered, key objectives of the Draft Transport Plan 2006 - 2026 are not met. The EIS traffic modelling does not consider in any detail adverse impacts at the local level. Issues such as the removal of the Caltex service station are only considered in terms of loss of convenience, not impact on traffic. Similarly, increased safety concerns for children walking to school will result in increased numbers in local vehicle traffic as parents drive their children to and from school. Additionally, there will be reduced safety for pedestrians along Croydon street and Jephson Street and for cyclists.	**B.11.4 / 1** **B.5.6 / 19**
81	2.1.3	The adverse effects of increasing Croydon Street to seven lanes and increasing traffic on Jephson Street are not adequately dealt with in the EIS. Congestion in Jephson street would cause cars to bank up at each set of lights. The EIS refers to the potential widening of Jephson Street, however this would impact on the liveability for local residents, as well as those properties removed. Suggests that diverting traffic out of the Toowong central area makes much more sense and it more consistent with the state and local plans than trying to use roads unsuited to large volumes of traffic as ring roads, distributors, etc. Suggests that expert advice, independent of the proponents, should be obtained to fully examine these issues and consider the local traffic issues in more detail before any traffic plans are developed, and the findings presented in the supplementary EIS.	**B.5.6 / 16**
82	2.1.3 5.6.9	The proposed median barrier on Croydon Street will significantly inhibit local access and mobility in the local area. It will force traffic from all directions to use circuitous routes on inappropriate local streets, instead of direct routes on higher order roads as it currently can. The 'convenient access' referred to in the EIS for access from the south requires an additional 1.5 km of travel through inappropriate local streets. A short bicycle trip from the local activity centre on Sherwood Road will triple in distance. All other alternative routes proposed by the EIS are similarly flawed and will result in exacerbated traffic problems. Suggests removing the central median barrier on Croydon Street from the project. Suggests retaining the right turns in and out of Cadell Street, Bayliss Street and St Osyth Street.	**B.4.2 / 9** **B.5.6 / 30**
83	3.6.3	The Toowong work site is in close proximity to residences and therefore trucking of spoil should not be permitted 24 hours per day. Mitigation measures for noise for spoil removal are not adequately covered in the EIS. Given the greater than three year time frame, it is totally unreasonable to expect local residents to have to endure disruptive noise throughout the night for the duration of the Project. Suggests that the project limit trucking of spoil from the Toowong worksite to between 6.30am to 6.30pm on Monday to Saturday.	**B.3.6 / 2**
84	5.3.7 11.2.2	The projected increased traffic flows resulting from the proposed local access tunnel will have a negative impact on active transport options unless strong mitigation measures are enacted. Pedestrian and cycling access to local services and transport nodes must be enhanced to ensure that local traffic does not contribute to worsening gridlock in the area. Of particular concern are the crossing of Milton road from Morley street, safe cycle transport between Morley and Croydon Streets, an overpass or underpass at the proposed Quinn Street cul-de-sac, safe and timely passage of Jephson Street and Benson Street and the potential for access to the Toowong Botanic Gardens.	**B.20.5 / 1** **B.5.6 / 38**
85	8 TP 7	There is a lack of clarity with regard to application of acceptable goals for air quality and neglect in the non use of contemporary standards which should be applied. There is also inappropriate	**B.8.1 / 2**

		use of some standards to draw invalid conclusions with regard to the acceptability of air pollutant exposure on health. The CG must give very careful consideration to the impacts on air quality, including the face that some are not even quantified in the EIS, given the indisputable associations between air quality and adverse public health outcomes. The CG must also be acutely aware of the need to use contemporary standards, rather than accepting out of date standards that are referenced for application in the EIS. The EPA EPP (Air) standards are currently under review by the Queensland Government, with revised standards expected to be introduced. The objective of the EIS should be to achieve air quality parameters that are well below the various goal levels, to maximise the protection of public health. Also, the NEPM standards are only advisory and the project should not proceed without clear goals, especially when health impacts are not well understood. Suggest that the supplementary EIS should make a commitment to adopt the air quality goals as presented in the Draft Outline Environmental Management Plan. Suggest that trigger levels should be established at 50% of the air quality goals for both construction and operation (including CO, NO_2, PM_{10} and PM2.5), which if exceeded for more than five periods a year, enacts actions to undertake further monitoring and mitigation measures to ensure air quality does not reach air quality goals Baseline health data should be collected to monitor for a range of possible adverse health outcomes, with an action plan in place specifying actions to be undertaken if adverse health outcomes are identified that could be attributed to the Project Real time, publicly accessible data are required to monitor this, with actions to be taken when goals are exceeded Technical report 7 refers to recommendations about furthering understanding about ultrafine particles. Technical Report 7A also reports a range of monitoring activities that should be adopted (page 28). These activities should be implemented.	
86	4.2 TP 7	Although modelling reported in the EIS suggests adequate dispersion, the location of the proposed Toowong emission stack would not appear consistent with the technical advice provided in Technical Report 7, particularly if there is less than optimum dispersion. There is a notable lack of local meteorological data and use of broad scale modelling, which does not enable assessment of risks in less than optimal conditions or reasonable comparison of alternative locations. Suggests that meteorological monitoring is undertaken in Toowong, with modelling at a suitable scale of consider the valleys and drainage characteristics of Toowong. Suggest articulation of the factors that decided the stack locations indicated, to make clear why alternative stack locations more consistent with Technical Report 7 of the EIS were not selected.	**B.8.3 / 2** **B.8.1 / 1**
87	8	We agree with the conclusion that vehicle emission from a ventilation shaft is preferable to ground level emission, but we recommend that filters be installed on the Northern Link ventilation shafts due to the significant risk of increased heavy diesel truck traffic. This appears to be the practice in Japan where there is heavy diesel truck traffic in some tunnels.	**B.8.5 / 1**
88	12.2.3	Page 12-22 of the EIS states that memorials in the cemetery have the potential to be impacted by dust deposition from conveyor operation. Houses are located similar distances downwind of the conveyor, and as such, measures need to be formulated to protect against adverse dust impacts at these properties.	**B.12.2 / 6**
89	TP 7 18	Formal measures need to be formulated and adopted to protect against adverse dust impacts on properties and on people's health in proximity to worksites. Detailed dust mitigation measures are	**B.8.2 / 1**

		recommended in Technical Report 7 Air Quality Impact Assessment. Asthmatics and people with airway diseases can be significantly impacted by dust. Suggests that monthly internal cleaning and 6 monthly external cleaning of houses impacted by dust deposition during construction works be undertaken.	
90	9.2.2	Page 9-9 of the EIS states that construction noise sources would begin to resemble a permanent rather than temporary feature of the noise environment. Given the extended construction time (3.5 years) and the 24 hour per day basis of certain noise sources, construction noise goals should be the same as the noise goals set for the operational phase of the project.	**B.9.3 / 1**
91	TP Noise Construction	Unacceptably high noise levels are predicted in the vicinity of Valentine Street and south of Milton Road during the construction period, including at night time. A commitment is required in the supplementary EIS that construction noise will not exceed noise goal levels. The Construction Noise Report also makes no mention of considering the meteorological inversions that regularly occur in Toowong during winter months. Construction works of the cycle overpass on the Western Freeway could be clearly heard from the "north" Toowong pocket in mid 2008.	**B.9.3 / 1**
92	9.3.5 9.4.1	Numerous houses are located within 300 m of the Toowong worksite and 800 m of the Western Freeway worksite. Given the close proximity of residences to the worksites, any low frequency noise generating work with the potential to impact on residences must be done during the period 6.30am to 6.30pm Monday to Saturday. The health effects of low frequency noise also need to be assessed. Suggests monitoring of how low frequency noise levels at sensitive receptors needs to be undertaken. A commitment should be made in the supplementary EIS to offer relocation when a predefined trigger level is exceeded, such as the Australian standards.	**B.9.3 / 8** **B.9.3 / 6**
93	9.3.1	There is no reference in Technical Report 9 about auxiliary fans that will be required to provide ventilation through tunnel construction. These fans cannot be entirely enclosed as they need to accommodate significant air-flows. For the construction of the secondary entries/exits, these will be located in close proximity to residences. Consideration should be given to all noise sources expected at construction sites, including extraction fans.	**B.9.3 / 2**
94	9	As a heritage site, Toowong Cemetery will come under scrutiny for blast damage. However, Toowong Cemetery also serves as a place of worship and educational facility and as such, applicable noise goals for these uses needs to be applied.	**B.9.4 / 1**
95		Regular noise complaints have been received in relation to the NSBT tunnel. The Northern Link EIS needs to contain an assessment of the lessons learnt from NSBT and how these will be applied to Northern Link.	**B.9.3 / 11**
96	9.1.1 9.3.8	Only one point for construction vibration modelling for the TBM and two for blasting is proposed. Given the variables involved, at least three monitoring points are required in each direction. The proposed vibration points listed in the EIS are not sufficient. Vibration expresses itself in a number of modes and all of these modes need to be monitored. Suggests vibration and noise monitoring needs to be substantially upgraded from the current proposal. At least nine monitoring points are required for each tunnelling activity. The monitoring points need to be advanced as tunnelling progresses. Sites deemed at risk need additional monitoring. Vibration measurements should be done with geophones fixed into bedrock as well as located on the ground.	**B.9.3 / 3**
97	9.2.2	The flexible timber construction of old Queenslander houses	**B.9.2 / 4**

		makes them less susceptible to serious vibration damage than the more common brick houses. The flexible construction also puts tiled and plasterboard areas at elevated risk from vibration damage. Suggest that the trigger level for building condition surveys should be reduced to 5mm/sec. A commitment should be made to repair damage and provide a guarantee for work undertaken.	
98	9.3.3 9.3.5	"Advance notification of the time, type and duration of noise intensive works" is not an acceptable mitigation measure for the long-term nature of the construction works. Noise levels must be maintained within accepted guidelines and where expectations are that it will exceed these guidelines, it needs to offer adequate noise mitigation to local residences. The commitment needs to be clearly defined, not generally made. Suggests that houses need to have vibration monitoring. Where the critical level is exceeded (say 30dBA), relocation or voluntary purchase options are triggered. Suggests that where blasting is to be undertaken, a predetermined blasting schedule should be advertising and should exclude blasting between 7pm and 7am. Suggests that pre and post tunnelling building condition inspections need to be undertaken in areas at risk of superficial and structural damage.	**B.9.2 / 4** **B.9.3 / 2** **B.9.3 / 6**
99	9	The proposed measures of upgrading building facades, including the closing of windows, will result in an unacceptable impact on loss of amenity and lifestyle for the three years of construction. The acceptable noise assessment criteria for construction works must be based on noise levels in outdoor living areas or houses with open windows.	**B.9.3 / 2**
100	9.5	This project should take the opportunity to strive for overall improvements in noise mitigation, rather than adopting a status quo approach. The surface connection work will generate the major increase in noise effects and as such, strong measures are required to satisfactorily mitigate and enhance the liveability of affected areas. Should the Toowong connection proceed, a supplementary EIS is request to explore further opportunities for providing stronger noise mitigation options. Should the Toowong connection proceed, the supplementary EIS needs to provide further noise mitigation options which offer strong measures for mitigation noise impacts and with the objective to reduce noise levels, rather than adopt a status quo standard.	**B.9.2 / 1**
101	TP 9B	The assessment of operational noise does not appear to have taken the meteorological inversions that regularly occur in Toowong during winter months into account. This needs to be qualified and if required, an assessment considering the inversions undertaken.	**B.9.1 / 2**
102	11.1.4	Forecasted levels of induced latent traffic are unreliable because they have been obtained with help of an outdated FSM approach. The specific criticism of this approach is that it does not include a dynamic matrix for land-use and it therefore overlooks urban sprawl and its impact on traffic demand.	**B.5.3 / 13**
103	11.1.4	The EIS discusses the role of major regional activity centres such as Toowong as employment and trip generators, but fails to acknowledge other important activity centre principles outlined in the SEQRP, including walking, cycling and public transport. The Toowong Connection will result in an outcome that is in conflict with the South East Queensland Regional Plan's Regional Activity Centres network.	**B.11.1 / 3**
104	11.1.5 11.3	The proposed Toowong local access leads to the irreversible destruction of a very unique and historic "tin and timber" suburb. This loss of historic / cultural heritage is in direct conflict with BLTIP objectives and cannot be justified on the grounds that it is	**B.11.1 / 6**

		required for the greater public good, since the proclaimed benefits in terms of reduction in travel time are based on outdated methods that do not fully capture induced demand, because it fails to take into account changes in land use.	
105	11.1.5	When using the Brisbane Plan 2000's DEO assessment criteria to evaluate the costs and benefits of the Toowong local entry, it is clear the costs (natural environment, liveability, and health and safety) far outweigh the benefits (access). Such an assessment also reveals that there is a serious equity issue associated with this portion of the project in that the local community will be expected to carry the costs whilst communities further afield can expect some modest benefits.	**B.11.2 / 5**
106	12.2.3	The land acquisition act provides BCC with the legal basis to ignore its own demolition control plan legislation and to proceed with a project that will destroy a significant pocket of tin and timber family homes. However, BCC should have a moral and ethical requirement to respect its own planning policies. We urge the proponent to refrain from adopting double standards, to act in accordance with the spirit of DCP regulation and to remove the Toowong local entry from the project. Failure to do so will lead to irreversible loss of Brisbane's cultural heritage.	**B.12.2 / 1**
107	11.2.3	Removal of 45 privately owned houses, many of which are pre 1900 houses in a character housing area, does diminish character housing stocks considerably. Suggest the removal of the Toowong connection to ensure there is no need to resume any 'character housing stocks' in Toowong whatsoever.	**B.12.2 / 1**
108	11.1.4 11.2.2	The statement that the SEQIPP was most recently amended in May 2007 is incorrect. It is amended annually, with the last amendment published in June 2008. The statement that the IRTP has been superseded by the SEQRP is incorrect; this is a 25 year strategic plan that acts as a supporting document to the SEQRP. The statement that the project is identified in the SEQRP as a "project under investigation" is misleading; it identifies the Northern Link Tunnel project under "further TransApex investigations".	**B.11.1 / 2**
109	11.2.2 11.2.3	Despite claims of reduced traffic as a result of the project, the EIS' own data indicates that traffic will still increase. Statements in the EIS do not provide adequate detail of specific, practical and measurable strategies to manage impacts. The Toowong connection option is clearly inconsistent with a range of statutory planning instruments and these inconsistencies have not been satisfactorily addressed within the EIS. Suggests the project be thoroughly and objectively assessed against all the planning instruments mentioned in Section 11.1 of the EIS and present the findings in the supplementary EIS.	**B.11.2 / 5**
110	12.2.3	Vibration effects on Toowong Cemetery are mis-presented, incorrectly assessing vibration only from the average predicted rates of advance, when the TBM is operating in its steady state. Effects of high pressure grouting are not considered. This may fill voids in monuments or cavities in graves. No mitigation is proposed for dust on the monuments, such as cleaning following completion of the works. The EIS claims that on completion of the project, Frederick Street will be a more tranquil environment; however traffic volumes and exhaust emissions will greatly increase at the southern end of Frederick Street. Finally, the EIS states that no written submissions or correspondence have been received from Friends of Toowong Cemetery in relation to vibration or any other issue of relevance. However, the president of the Friends of Toowong Cemetery was a member of the CRG and the minutes of the 16 June 2008 meeting (on the Northern Link website) specifically refer to the Cemetery and construction/vibration impacts.	**B.12.2 / 2** **B.12.2 / 6** **B.12.2 / 7**

111	12.1.7 (pp. 12-13)	Construction works will not maintain or enhance the character of the Toowong area. The EIS states that there are no strategies available to mitigate the effects of the demolition of character houses in the area. The solution is not to construct the Toowong connection. The proponents' claim that Croydon Street works will result in an "improved" landscape is inappropriate and a view likely to be disagreed with by most people.	**B.12.2 / 1**
112	12.2.2 (p. 19) TP 12	The EIS identifies 38 character places at Toowong which will be resumed for the purpose of building the optional local access, the Toowong connection. The EIS further states that there are no measures available to mitigate the loss of cultural heritage as a result of these resumptions. However, the EIS does offer a mitigation solution to this impact. In one line, it suggests the only mitigation measure available is "to not proceed with this development option." TTS Group agrees with this statement and urges the Coordinator General to remove the optional Toowong Connection from the project design. Suggests the removal of the Toowong connection from the project design. Thereby, implementing the only mitigation measure available to the people of Brisbane.	**B.12.2 / 1**
113	TP 13 22.7	The EIS does not adequately address a number of significant adverse social impacts that are raised. The project does not demonstrate social equity, justifying this inequity by implying that the regional benefits of the project outweigh the impacts that would be experienced by the community [of Toowong]. Suggest that a more detailed analysis of the benefits, impacts and proposed mitigation measures for [Toowong] is required for the Supplementary EIS. Suggest providing compensation (monetary or other) to those [residents] who will be negatively impacted by the project. Suggest that removal of the Toowong connection to redress social inequity and eliminate that majority of impacts in Toowong.	**B.22.7 / 1**
114	3.1.5	The EIS does not incorporate traffic modelling for the 'without' the connection scenario. This is necessary to enable 'proper' decision making about the effects of the project on the Toowong area. Concerned that the Toowong connection would result in increased traffic volumes on Milton Road, Croydon Street, Sylvan Road, Gregory Street and other connecting streets. Suggest that traffic modelling for the 'without' the Toowong connection scenario be included in the Supplementary EIS. Suggests the Toowong connection be removed from the project to minimise impacts.	**B.3.4 / 4** **B.5.6 / 17**
115	13.3.2	The EIS does not address increases in rat running likely to occur in specific areas of Toowong. The Toowong connection would not enhance connectivity for motorists, pedestrians or cyclists and would not improve access to local medical services. Concerned that rat running through our local neighbourhood would increase in order to access the Wesley Hospital and Toowong Private Hospital. Concerned that the proposed loss of the right hand turn from Jephson Street to Sylvan Road would increase rat running through Lissner Street and Bennett Street. The EIS largely ignores the rat running through north Toowong of vehicles coming from Bardon. It occurs now and can be expected to worsen as some from the north seek to gain entry to Northern Link via Morley Street and its connecting streets.	**B.4.2 / 10** **B.4.2 / 11** **B.13.3 / 8** **B.5.6 / 18**
116	TP 13	The suggestion in the EIS that Milton Road and Coronation Drive are barriers to pedestrian and cycle connectivity overstates their overall impact on access and connectivity in Toowong and surrounding suburbs. Milton Road and Coronation Drive are easily	**B.13.2 / 2**

		traversable by pedestrians and cyclists, even during peak times. This overstatement operates as a justification for the inclusion of the Toowong connection, which will significantly worsen connectivity, particularly on Croydon Street, where there is no issue of connectivity.	
117	2.4.1	The EIS misrepresents and overstates the impact and extent of the railway line in impeding connectivity in Toowong, Milton and Auchenflower. This appears to be an attempt to misrepresent Toowong as a suburb and underplay the impacts of the Toowong connection.	**B.13.2 / 2**
118	13.3.4 (pp. 25-27) TP 13, Section 5.1, 5.2, 5.3	The scale of the Toowong connection and surface works at Croydon Street would provide major barriers to pedestrian and cycle movement in Toowong. Specific issues include: 1. Increased traffic from Moggill Road would cause Jephson Street to become a barrier to pedestrian movement. 2. Fewer formal pedestrian crossings on Milton Road and Croydon Street, which would be a significant reduction in amenity for Toowong. 3. Project would significantly impede access in Toowong and to Toowong State School, creating safety concerns for students of the school who would have to cross the busier and wider Croydon Street. 4. The two-lane left turn from Croydon Street into Milton Road would pose a significant safety risk for cyclists seeking to get across to the northern side of Milton Road into Morley Street.	**B.13.3 / 3** **B.13.3 / 4** **B.13.3 / 8** **B.13.3 / 16**
119	13.3.4 (pp. 25-27)	The grossly widened Milton Road with ramps and noise barriers will pose a distinctly "non urban vista", which residents will not judge to be an enhancement. The same applies for Croydon Street.	**B.14.5 / 2**
120	13.3.4 (pp. 25-27)	It is misleading to describe the Toowong connection as "local access", when a resident of [north Toowong] would have to drive further and effectively 'rat run' through streets on the southern side of Milton Road to get home.	**B.4.2 / 10** **B.5.6 / 18**
121	11.2.3	The [reference project] would not maintain safe and equitable access to all Community Use Areas [i.e. Toowong State School].	**B.4.2 / 15** **B.5.6 / 39**
122	TP 13 2.2.9	The Toowong connection would discourage active and public transport in Toowong, by making it more difficult and less inviting to walk or cycle around the suburb, and is therefore in conflict with the *living in Brisbane 2026* and *City Plan*.	**B.4.2 / 13** **B.11.2 / 5**
123	3.1.2	The EIS understates the adverse impacts on the amenity of Quinn Park. It neglects to identify the following impacts that may occur due to construction: 1. Loss of remaining park area temporarily given over to construction activities, including the building of a retaining wall separating Quinn Park from Milton Road. 2. Loss of trees and landscaping affecting the visual amenity of park users. 3. Loss of visual amenity in the surrounding area due to the construction activities. 4. Use of construction vehicles, heavy equipment use and construction personnel movement further inhibiting access to the park. 5. Loss of the use of the playground area. 6. Reduction in pedestrian and park safety due to construction vehicle activity in Quinn Park. 7. Loss of available parking for park users due to potential use of Quinn Street for parking for construction workers.	**B.11.4 / 1** **B.13.3 / 13**

124	2.4.2 3.1.2 11.2.3 11.8	The EIS fails to suitable address mitigation measures for the loss of a large portion of the park and the reduced accessibility to the park. It outlines a bike path in the park, but it is unclear where the entry and exit point are and how it would connect to pedestrian and cycle activity in the area. The inclusion of the bike bath would cause Quinn Park to be "lost as a park" as it would essentially become a bike path.	**B.13.3 / 13** **B.20.5 / 2**
125	3.1.1	The EIS does not identify all the impacts on local amenity during construction. Impacts on local amenity omitted from the EIS include: 1. Construction noise beyond 1 km of the worksite, particularly at night time when ambient noise is lower and construction noise travels further. 2. Night time construction works resulting in sleep disturbance. 3. Impacts of construction dust for residents beyond 1km from the worksite, particularly when affected by differing weather patterns such as wind and storm activity. 4. Resumption and removal of over 40 character homes. 5. Negative changes to local character and visual amenity due to the worksites being 'visual eyesores' and their locations. 6. Changes to local character due to loss of trees, greenery and parks. 7. Noise and congestion associated with construction traffic, including workers' vehicles and construction vehicles, in and around the worksites. 8. Loss of connectivity and access for residents within construction areas. 9. Greater congestion on surface roads, particularly [close] to construction activity. Suggests construction impacts need to be clearly describes as to enable a comprehensive review of the project.	**B.9.3 / 1** **B.12.2 / 1** **B.13.3 / 8** **B.5.7 / 3**
126	TP 13 2.4.1	The EIS omits sightlines of areas that will be significantly impacted by the project, particularly in relation to the Toowong connection. This omission of potentially important visual information that would more fully inform the community of the impacts of the Project makes it difficult to properly evaluate the design and its impact Section 14 (vantage point TC6) is misleading as it shows the Toowong connection without ramps, which are shown in vantage point TC1, and would result in much worse visual amenity. As the EIS does not specify what streetscape works would be implemented, one cannot determine how connectivity would be improved or hindered by the planting of trees. The inclusion of sound barriers as recommended in the EIS will present an unacceptable impact on visual amenity.	**B.14.8 / 3** **B.14.8 / 5**
127	13.3.2	The western ventilation outlet would impact on the 'visual outlook' of nearby residents. The outlet would be significantly higher than all buildings in the local community and would impose a massive physical structure in an area renowned for its botanic and visual appeal.	**B.3.5 / 1** **B.4.2 / 22** **B.14.8 / 4**
128	13.3.7	To state that the proposed Toowong connection would support property values is entirely speculation, based on premature information form uncompleted tunnel projects in completely different location of Brisbane. It is suggested that the Supplementary EIS include updated data on property values in Brisbane, in general, and should "undertake independent research to obtain unbiased information on the impacts of tunnel project on	**B.13.3 / 11** **B.15.5 / 2**

		property values in Australia, including potential impacts of property values as a result of the entire suite of TransApex projects."	
129	13.3.4	Throughout the EIS the adverse impacts regarding the Toowong connection have been "routinely minimised" to downplay the level of impact the surface works would impose on local residents. EIS Section 13.4 does not provide a detailed outline of the mitigation measures, their practical application, auditing, monitoring and management, and instead refers readers to the technical reports.	**B.13.4 / 1**
130	13.4.1 TP 13	The project would not meet its objectives [as stated in the EIS] of enhancing pedestrian and cycle connections in the Toowong area. The project should outline specific enhancements and practical measures for mitigating loss of cycle and pedestrian access. The mitigation measures outlined in Technical report No. 13 are non-specific and 'softly' worded objectives with little practical detail. They are not presented as requirements for mitigation and appear to be designed to enable the project to deliver minimal mitigation to the community. Allowance should be made for further social impacts to be included as and when identified and a requirement to design appropriate, specific strategies to mitigate against those impacts. Suggests that residual land be used for free space and parkland to provide a buffer for residents closest to the surface connection and to retain, as much as possible, the visual amenity of the suburb. Suggests that best mitigation measure would be to remove the local connections, including the Toowong connection.	**B.13.4 / 2**
131	TP 14 14.7.2	The Toowong connection does not meet the project objective stated in the EIS to retain and manage residential character areas such as that in and around Toowong. The widened Croydon Street and Milton road would not be consistent with the urban environment in which it is being placed. The degradation of the appearance of Toowong, which is part of the Hillside Character Precinct, is of concern to the whole city of Brisbane..	**B.4.2 / 13** **B.14.4 / 4** **B.14.7 / 4**
132	14.4	The EIS reference design does not include any crossing of Milton Road at Gregory Street (or elsewhere in addition to the existing formal crossings) and no safe cyclist access is provided between the communities north of Milton Road to the Brisbane River. This conflicts with the requirements stated in Section 14.4, which states that this access would be provided as a minimum guideline for the project.	**B.5.6 / 38**
133	14.4.1	The EIS notes that "pedestrian and cycle experiences" would be [further] diminished by the project and that the "barrier effect" [of widened roads] has been raised as a community concern, but does not suitably mitigate these impacts. Suggests that the project be required, as a minimum, to maintain the current level of pedestrian and cycle access between the areas of Toowong north and south of Milton Road. A new crossing is required between Croydon Street and Miskin Street as informal crossing along this stretch of road would not be possible once the project is constructed. Also suggests providing a dedicated bike path along Croydon Street.	**B.13.4 / 2** **B.14.7 / 1** **B.5.6 / 39**
134	TP 11 6.2.1	The EIS reference design shows that the residual land between Valentine Street and Morley Street (the Valentine Street Triangle) would be regenerated into parkland, but this "park" area would have extremely high noise levels (between 68 and 78 dBA), and therefore would have low amenity and not be an enjoyable place to visit. Section 3.5 of the Department of Main Roads' Road Traffic Noise Management Code of practice (2008), the recommended maximum road traffic noise levels for passive recreational reads is 63 dBA $L_{A10(12hour)}$ over a 10 year horizon. Suggests that the project have a design goal of 63 dBA $L_{A10(12hour)}$ over a 10 year horizon design goal for the Valentine Street Triangle Park. Also suggests that the supplementary EIS include mitigation strategies	**B.4.3 / 8** **B.11.4 / 3** **B.14.7 / 7** **B.20.4 / 2**

		for the adverse effects of the project on Quinn Park. Alternative land uses for the residual land, including industrial, three-storey multi-unit development of high-density residential land, are not desirable.	
135		The proposed reduction of pedestrian crossings on Milton Road and the widening of Croydon Street would make pedestrian access for children to Toowong State School very hazardous and difficult. The EIS does not consider the following impacts: 1. Safety implications for school children on the Eastern side of Croydon Street at Milton Road, who would have to cross the widened busier Croydon Street to get to school. 2. Cyclist access across Milton Road, including crossing the two left-turn lanes at Croydon Street, where it joins Milton Road, raises significant safety issues. 3. Safety aspects of rat-running down Quinn Street for children attending Toowong State School. The EIS does not propose mitigation strategies to ensure local children have safe pedestrian access to the school. Suggest that options to enhance pedestrian and cycle access to the north of Milton Road be developed as part of the project. Suggest that a pedestrian overpass opposite Quinn Park would be the most appropriate way to achieve this.	**B.13.3 / 16** **B.5.6 / 38**
136	22.7.1 (p. 13) 22.7.5 (p. 15)	There is no substantial merit or case made for the local connection ramps/roads, but substantial costs [would be incurred]. The EIS glosses over adverse, negative impacts as "impacts", "changes" or simply issues to be mitigated. Ignoring significant local adverse impacts leads to a superficial consideration of whether key planning criteria are met, it is not socially equitable and does not contribute to Toowong's liveability. Regional, traffic and specifically freight considerations are given inappropriately greater weight than human, social factors. Suggests that critical consideration be given to whether Northern Link with the resulting adverse impacts, including local connection ramps, associated road widening and house resumptions, does in fact meet sustainability criteria and therefore whether the overall conclusion that "this EIS meets the needs of the project objectives" is accurate.	**B.2.4 / 1** **B.22.1 / 1**
137		Supports Council's endeavour to develop long-term solutions to Brisbane's growing traffic demands and understands the need to provide a road linking the [Australia TradeCoast] and the suburban areas to the south east, but consider that the Toowong connection offers little in achieving that goal. The straight through option on its own would achieve the majority of benefits to the regional commuters for whom the project was developed. This is supported by the business case, which showed the mainline tunnel, excluding the local connections, to be a better financial option.	**B.3.4 / 4** **B.15.7 / 1**

Submission No.		**130**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2.6	The requirement of the ToR for the proponent to assess the sensitivity of the modelling assumptions to large changes in global oil availability and oil price vulnerability has been ignored. The proponent has ignored official data on the declining Australian oil production and published research on world oil production trends, misrepresented official reports on the socio-economic impacts of peak oil, ignored research on the vulnerability of Brisbane households to the socio-economic impact of rising oil prices and	**B.2.6 / 1**

		mortgage debt and ignored techno-economic modelling on the introduction of alternative fuels and propulsion systems and the impact of peak oil on the transport sector by the CSIRO and Garnaut Review.	
2	2 5	Core premise of the Project rational is that Brisbane will experience perpetual growth in motor vehicle traffic. There are 3 serious flaws with this premise: 1. Growth in motor vehicle traffic is based on observed data to 2004 with assumption that historic land use, travel behaviour and mode share, and car ownership trends will continue (35% increase between 2007 and 2026 in total person trips in the BMA). These assumptions are invalid based on recently published data. 2. Dependence on untested, exogenous assumptions about perpetual growth in population, economic activity and employment. These assumptions are very unlikely to eventuate in light of the emerging economic outlook. 3. Failure to achieve forecast traffic levels with similar recent projects in Australia. The Four Step Transport Model (FSM) used by the proponent does not adequately address Brisbane's changing transport needs in light of the above factors.	**B.2.2 / 1** **B.2.6 / 1**
3	2.6	There are factual errors and misrepresentations in the EIS Section 2.6. The rate of discovery of crude oil has not generally increased throughout the 20th century. Oil production has already peaked and begun to decline. The proponent's comment about improvements in oil production technology is misleading in that technological advances that increase extraction rates will have the effect of precipitating peak production and subsequent decline rates. There is no evidence for a market expectation of a sufficient response to offset the impact of a permanent decline in oil production apart from the collapsing prices of tunnel project securities. Neither the McNamara report nor the Hirsch Report foreshadow a progressive transition to alternative fuel sources in such a manner that would support the traffic forecasts in the EIS. The Hirsch Report analysis invalidates the assumptions in the EIS regarding the continuation of historical trends in employment growth, growth in person trips and the affordability of private car travel	**B.2.6 / 1**
4	ToR 2.2 2.6 (p. 37)	Rather than investigating changes in global oil availability and oil price vulnerability the proponent has made an amateurish attempt to debunk the reality of peak oil and its implications. Further, it has ignored and/or misrepresented an extensive body of official data, official reports and independent research into the peak oil phenomenon and its implications for both the transport sector and the broader economy which have a direct bearing on the feasibility of the project. Most Importantly the proponent has not assessed the sensitivity of the traffic modelling assumptions to changes in global oil availability.	**4.2.6 / 1**

Submission No.		**131**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Quotes various state and local government policies outlining cycling standards including: 1. SEQ Principal Cycle Network Plan. 2. Transport Plan for Brisbane 2008 - 2026. 3. Brisbane Active Transport Strategy - Walking and cycling	**B.5.6 / 42**

		Plan 2005 - 2010. Both Milton Road and Kelvin Grove Road are identified as routes of regional significance. On-road cycle facilities should be provided on both Milton Road and Kelvin Grove Road, in line with State and Local government policies and strategies.	
2	ToR 4.7.2	Under the Northern Link EIS, there has been absolutely no provision for on-road cycling along Milton Road or Kelvin Grove Road, where these roads are part of the project. Any signalised intersections should be provided with dedicated 'bike boxes' and cycle detection loops. Bicycle lanterns should be provided at all signalised crossings within the project, unless the current law prohibiting cyclists from cycling across a pedestrian intersection is rescinded. To encourage cycling, the use of high speed merging and diverging lanes should be minimised, and where this is not possible, dedicated green cycle lanes should be provide through these sections.	**B.5.6 / 46**
3	4.2.5	The level of service provided by the relocated bikeway should be of a similar or better standard to that currently provided. Incline grades should be no steeper than current, and preferably, they should be similar to those provided for motorists.	**B.4.2 / 1**
4	5.3.7	The project has done nothing to enhance any of the key deficiencies in the Cycle and pedestrian network connectivity identified in the EIS (Volume 1, Section 5.3.7). By not providing on-road facilities on Milton Road and Kelvin Grove Road, the project will be precluding the inclusion of these roads as principal cycle routes.	**B.5.6 / 46**
5	5.6.12	Western Connection - The existing connectivity and function of the Western Freeway bikeway would be maintained as would the connectivity and functionality planned by DMR for the Cycle and Pedestrian Bridge. Eastern Connection - The off-road bikeway on the northern side of the ICB between Kelvin Grove Road and the ICB land-bridge would be re-aligned. The existing connectivity and functionality would be maintained. The existing level of service, not just connectivity and functionality, needs to be maintained throughout the project construction and subsequent to it.	**B.5.6 / 59**
6	5.6.12	Effect on Active Transport within the Inner West Transport Study Area Options to improve pedestrian and cycle connectivity could include: Provision of additional pedestrian crossing opportunities at existing signalised intersections by: • Amending the intersection phasing. • Increasing the available pedestrian crossing time at signalised traffic intersections. • Widened pedestrian and cycle paths. • Additional on-road cycle routes. As stated earlier, the possibility of implementing these improvements has been precluded in the design – there has been no provision of any on-road cycling infrastructure.	**B.5.6 / 46**
7	5.7.7	Western Freeway Connection Detours should be fully signed for the entire route of the detour. The surface of any temporary realignment lasting longer than a month should be to a similar standard as that which is being realigned. The proponent gives no reason for the requirement of the realignment of the bikeway on the southern side of the ICB.	**B.5.7 / 4**

		Detours should be fully signed for the entire route of the detour.	
8	14.7.2	The proponent fails to address any of the mitigation measures mentioned in the EIS (Volume 1) at Section 14.7.2 item 4, Connectivity, for the Toowong Connection. There are no provisions of safe pedestrian or cycling connections as required. Active transport networks are severed by the project, and the lack of any on-road cycling facilities reduces the ease of use by people of all ages and levels of fitness.	**B.14.7 / 2**
9	17.7.3	None of the mitigation measures identified in the EIS (Volume 1, Section 14.7.3, Item 3 Connectivity) have been addressed. In particular there is no safe, legible or comfortable connection for cyclists or pedestrians between the CBD and the Kelvin Grove Urban Village. The project actually makes this connection worse. There has been no evidence of investigation by the proponent of a green link between Kelvin Grove Urban Village and Spring Hill and the CBD, and the project has put a significant "built environment" barrier across Kelvin Grove Road.	**B.14.4 / 2** **B.14.7 / 6**
10	14.7.4	None of the key urban design challenges relating to pedestrian and cycle connections along the western side of Kelvin Grove Road, as outlined in the EIS (Volume 1, Section 14.7.4, Item 4 Connectivity), have been addressed. Amenity for cyclists around the Kelvin Grove connection is significantly worse than the poor amenity already provided. The number of conflict points for pedestrians and cyclists has increased as has the expanse of road space.	**B.14.4 / 2** **B.14.7 / 6**

Submission No.		**132**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		If southeast Queensland is to cope adequately with the transport needs of the future residents of the outer western suburbs, particularly in the context of a rise in fuel costs, it will be imperative that improved public transport be provided via light rail or some alternative means. Such a facility will inevitably impact on the viability of a freeway connection. As far as can be determined from the EIS, the traffic modelling underpinning the present study fails to take any such initiatives into account and is therefore fundamentally flawed.	**B.2.5 / 2** **B.5.4 / 3**
2		Notwithstanding the above concerns regarding the desirability of enhanced public transport and its impact, the Direct Connection from the Western Freeway to inner Brisbane would provide a substantial (if partial) solution to the current traffic bottlenecks around the Toowong roundabout and reduce travel times from fringe suburbs. This is eminently supportable. However, evidence from other cites and locations in Brisbane clearly demonstrates that such benefits are best achieved when freeway status is preserved, and traffic flows are not disrupted by intermediate connections, such as that proposed at Toowong.	**B.5.6 / 17**
3		The rationale for the proposed Toowong connection is questioned on several grounds: 1. The entry (and exit) of traffic will inevitably disrupt the smooth flow of traffic proceeding along the freeway itself. 2. Contrary to claims in the EIS, it will inevitably add substantially to local traffic on Toowong feeder routes, and in local streets. 3. The net benefit in terms of reduced traffic on Milton Road and Coronation Drive (3% - from -18% to -21%) is marginal and well within standard errors of the traffic models used for the project.	**B.2.1 / 6** **B.2.2 / 2** **B.5.6 / 2**

		4. There is no sustainable evidence to support the claims in the EIS and summary documents that the Toowong connection will facilitate traffic movements to and from the Toowong Regional Centre and the University of Queensland. As far as can be determined the traffic modelling simply does not operate at this level of precision.	
4		In light of the above, I submit that the best means of improving road transport in the Toowong region and in the outer western suburbs is to delete the Toowong connection, conceive the Northern Link as a direct through route, and allow the Toowong traffic to find its own level, freed from the encumbrance of through traffic from the outer suburbs.	**B.3.4 / 3**

Submission No.		**133**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	This project is supposed to ease congestion on Milton Road and Coronation Drive. If the Toowong Connection is included, more traffic congestion will result on these roads, both in the short term (during construction) and in the long term. The local community will gain no benefit but will face serious disruption to the safe and efficient function of the neighbourhood.	**B.5.6 / 20**
2	5	A large increase in traffic in Croydon Street and Jephson Street will have serious adverse consequences including: 1. Difficulty crossing the street (especially for school children and the aged). 2. Rat-running (already a problem) making side streets more dangerous and noisier.	**B.5.6 / 18**
3	5	There is no Sylvan Road bikeway for North Toowong and Auchenflower.	**B.5.6 / 39**
4	8	The greatly increased traffic will have a deleterious effect on residential areas, including Toowong school and pre-school sites. The change in traffic type (more heavy vehicles) which will further increase pollution in the long term. Effects will result from dust and fumes during construction. Toowong connection will be directly responsible for major pollution.	**B.8.2 / 1**

Submission No.		**134**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	9	Inadequate provision has been made for noise mitigation. Noise will be disruptive, especially for school children and stressful for all residents. Barriers will disrupt the community.	**B.9.5 / 3** **B.9.5 / 4** **B.13.3 / 2**
2	13	Sound barriers will not only be ineffective, but will disrupt community life, restricting access to schools, shopping centre (Cat and the Fiddle) and other Morley street businesses. This is a great inconvenience to local residents and puts businesses into jeopardy leading to a potential destruction of the local community.	**B.13.3 / 2**
3	13	Loss of a large part of Quinn Park is damaging to green space and adversely impacts on the lives of families who use the area.	**B.11.4 / 1** **B.13.3 / 13**
4	14	This will be an unnecessary eyesore! Brisbane City Council has committed to retaining streetscapes. This uncongenial and unattractive project will lead to the demolition of several original	**B.14.4 / 4** **B.14.6 / 4**

		properties, including listed cottages, replacing them with barren areas disruptive to the community flow and causing distress to owners of properties scheduled for destruction. Do not include the Toowong Connection.	

Submission No.		**135**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		No need or justification for the Toowong Connection is provided in the EIS. The Toowong Connection is grossly over scaled and will destroy the suburb.	**B.2.1 / 6** **B2.2 / 2**
2		Having to keep doors and windows closed for 3.5 years during construction to protect against undue noise and dust will be unbearable and will severely and unreasonably impact on our lifestyle. The mitigation measures in the EIS are not suitable.	**B.8.2 / 1**
3		I currently walk to work at the corner of Milton Road and Miskin Street and my wife rides to work and to the Wests Rugby Ground. The enjoyment and safety of this is going to be greatly reduced by the removal of an existing road crossing at Milton Road, increased traffic and noise on Milton Road and Croydon street and the visual 'scar' of sound barriers.	**B.13.3 / 2** **B.13.3 / 3**
4		Safe and convenient cyclist access must be provided between Bicentennial Bike path and Toowong north of Milton Road. This could be via a cycle lane and safe crossing at the Milton Road/Croydon street intersection or by a pedestrian crossing across Milton Road from Gregory Street to Quinn Street (or similar).The retention of the existing crossing facilities should be considered paramount for pedestrians to retain mobility and accessibility around the suburb.	**B.5.6 / 38**
5	5	Modify the traffic model to include Morley Street, Musgrave Street, Gilrey Street and other streets connecting to Frederick Street to Gregory Street and rerun the model to assess the impacts to these streets. Provide information on the increased traffic numbers on Morley Street west of Gregory Street in the Supplementary EIS.	**B.5.6 / 23**
6	15	Conduct a study on the construction and long term impacts on property values on properties within 100 m to major road infrastructure projects such as Northern Link. We want compensation for the lost value of our property.	**B.13.3 / 11**
7	15	Remove the ability to enter the tunnel from Morley Street and cul-de-sac Morley and Musgrave Streets at Frederick Street.	**B.4.2 / 6**
8	21	Sound walls should be designed to: • Resemble 'tin and timber' houses and should complement the historic leafy character of the suburb. • Be covered in vegetation such as creepers or vines.	**B.14.7 / 3**
9	20	Milton Road and Croydon Street should have median strip plantings down the middle of the road, including jacarandas, poinsettias, palm trees, golden cane and other traditional Brisbane trees. 'Avenues' of trees are [preferred]; use this opportunity to improve the design if the current streetscape is to be decimated.	**B.20.5 / 3** **B.14.7 / 1**
10	21	The residual land between Valentine Street and Milton Road should be planted with trees to act as a visual screening from the flyovers. The project must not be used as an excuse to increase medium to high density residential or industrial areas on land resumed for the project.	**B.20.4 / 2**

Submission No.		136	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Our house is located only 30 m from the proposed worksite and following construction of the Toowong Connection, will be only 50 m from the portal entrance. I believe that Northern Link, specifically in relation to Toowong, has failed in the EIS process, as detailed in my submission. I ultimately want the Toowong Connection removed from the Northern Link Project. Failing this, the Toowong connection design needs to be taken back to the drawing board and significantly redesigned.	**B.3.4 / 2**
2	IAS Fig 2	I am concerned about poor quality community consultation and engagement. The project bears no resemblance to that in the Initial Advice Statement (IAS). The figure and project description in the ToR also gave no indication of the scale of works at Toowong, meaning the design when released came as a significant shock to myself and the community	**B.1.7 / 2**
3	ToR Fig 1	The method of informing residents was not appropriate. With a select number of residents in the street shown plans and others not (as they were not 'impacted persons'), was distressing and not good engagement practice.	**B.1.7 / 2**
4		Project brochures were initially distributed (May and early June 2008) in a plain unsealed envelope addressed to "the resident". As such, they were treated as junk mail and many people did not receive them until project information was eventually sent to rate notice holders. Suggests that it is not good practice to deliver important information in 'junk mail' format.	**B.1.7 / 2**
5		The community consultation team leader did not appear conducive to receiving community feedback on the Project. Most questions were responded to with "wait until the EIS is released, the answer will be in there." That was not the case. Suggests that the community consultation process needs to act as an independent voice to which residents can voice their concerns.	**B.1.7 / 2**
6		Residents along the eastern side of Croydon Street, including at least one elderly couple in their eighties and another elderly lady in her eighties, have had no one-on-one consultation about the project. These people are highly impacted by the work, with seven lanes of traffic and massively increased traffic volumes and noise levels on their street. Suggests that for elderly residents, for whom the internet and public information sessions are difficult to access, one-on-one consultation sessions are necessary.	**B.1.7 / 2**
7		Being familiar with the EIS process, I reviewed NSBT and Airport Link EISs and pre-empted some of the issues covered in these EISs that I believe inappropriate for Northern Link, and advised the project team of my concerns. No consideration of most of these items has been given in the EIS. Suggests that as per her correspondence to the Project team in May 2008, consideration of these items should have been given in the EIS.	**B.1.7 / 6**
8	App B App B Tab 1.12 App B Tab 1.13	There is no evidence of refinement of the Toowong design from community comment in Appendix B of the EIS. The EIS can be judged to be little more than a justification of the design. Suggests Table 1-12 identifies the impact on Toowong but does not provide any outcome for Toowong, this needs to be addressed. Suggests Table 1-13 claims that the EIS examines the feasibility of the project with and without local connections, but this is not the case.	**B.1.7 / 1** **B.1.7 / 6**
9	IB (p. 60)	Biased non-objective language is used in the EIS. By describing	**B.1.6 / 3**

		Toowong as characterised by rental accommodation and young urban professionals, rather than leafy gardens and 'tin and timber', the image is conveyed of an already urbanised area with a transient population. This is just one example of clear bias in the EIS in favour of the proponent's position. Selected biased statements in the EIS that misrepresent Toowong include page 60 of the 'In Brief' document, which inaccurately represents Croydon Street as low in visual amenity, when it has street trees, a mix of Queenslanders and brick houses and the potential to significantly improve from resident's renovations over the next five years.	
10	15 (p. 6)	Page 15-6 of the EIS states that "as there are neighbourhoods in Milton that are still largely residential in character, Milton has a higher percentage of separate houses." No similar statement about residential areas is made about Toowong. This gives the impression that Toowong is not residential and therefore the impacts of the project will be minimal. Suggests that Toowong - apart from the strip along the riverside and the Wesley Hospital and Toowong Business District - is largely residential.	**B.15.3 / 3**
11	TP 13 2.5 (p. 38)	Section 2.5 of Technical Report 13 Social Environment states that Toowong has "a mix of low density character housing and medium-high density housing, with higher densities generally adjacent to transport corridors and the Toowong Centre." However, the greatest impact of the project will be along Croydon Street, Milton Road and Frederick Street. These corridors do not contain high density housing, but are mainly low density, detached dwellings with many "tin and timber" and character homes. Suggests that the greatest surface impact of the project is not on high density corridors, but on low density character homes.	**B.13.3 / 6**
12	TP 13 2.5 (p. 39)	Section 2.5 of the Technical Report 13, Suburb Profile, states "local amenity in Toowong is being compromised by increases in congestion on major road corridors and barriers to pedestrian movement to Coronation Drive." I disagree that barriers to pedestrian movement to Coronation Drive are occurring. Currently, it is an easy walk from all directions of Toowong and surrounding suburbs to access the Bicentennial Bike path, the Regatta Ferry Stop, the Toowong train station and Toowong village. This statement appears to imply that because there are already barriers to connectivity, the impact of the Toowong connection will not be as great.	**B.13.2 / 2**
13	TP 13 (p. 16)	Page 2-16 of Technical Report 13 Social Environment states that "the suburbs of Red Hill, Paddington, Milton, Auchenflower, Toowong, Kelvin Grove and Herston, which are characterised by higher percentages of young professionals and students, who are generally highly mobile and have low levels of disadvantage. These suburbs also had high proportions of medium density housing and more people renting and living in group households." This makes it sound like Toowong is occupied by a transient population of renters. In reality, the area of Toowong with apartments is in the vicinity of Toowong Village and between Coronation Drive and the railway line. Suggests that the parts of Toowong to be impacted by the project consist mainly of retirees, families and couples in free standing Queenslander houses, with a higher proportion of owner occupiers and a lower property turnover rate than Toowong in general.	**B.13.2 / 3**
14	TP 11 (p. 48)	Page 48 of Technical Report 11 Planning and Land Use states "the project would require the acquisition of residential and commercial properties along the western end of Croydon Street". It is not just the western end that will be impacted but the whole western side of the street Suggests that this downplays the impact to Croydon Street.	**Table B-1**
15	TP 11 (p. 47)	Page 47 of Technical Report 11 Planning and Land Use states that some of the properties proposed to be resumed are in	**B.11.4 / 2**

		"various states of repair, with some appearing to have undergone recent renovations or are well maintained and are generally in a good state of repair, while some appear to be in bad repair." Suggests that by saying some properties are in a good state and some properties are in "bad repair", it infers that approximately half of the houses in the area are in each of these states. In reality, only one of two houses on Milton Road next to the Service Station could be called of lesser street appeal and none of the houses appear to be in "bad repair."	
16	TC1	Photo mosaic Vantage Point TC1 falsely represents the size of proposed works, making them appear much smaller than reality. 35 Valentine Street and other houses within the circle are actually being resumed for the project and the tunnel alignment is right on the boundary of this lot.	**B.14.8 / 3**
17	TOR 2.2 3 Tab 3.1	No need and justification for the Toowong connection is provided in the EIS. The EIS does not clearly articulate the need for the Toowong connection and does not present non tunnel alternatives to this portion of the project. The initial Frederick Street connection in TransApex was added for convenience, without any traffic demand assessment.	**B.2.1 / 6** **B.2.2 / 2** **B.3.4 / 4**
18	ToR (p. ii) 3	The ToR identified that the Project proposal is for two parallel tunnels between the Western Freeway and the Inner City Bypass. The EIS should therefore identify the need and justification of the Northern Link tunnel project from the basis of two parallel tunnels; clearly identify the need and justification of each of the option connections. The EIS hasn't addressed the need and justification for the optional connections separate to the main tunnel proposal.	**B.3.4 / 4**
19	ToR 2.2 ToR 3.1 3.2.1 (p. 5) 3.2.2 (p. 10) 3.3.3 (p. 14) Fig 3.3 Tab 3.3 Tab 3.2	The options analysis for the Toowong Connection is flawed. No reassessment of the concept or reference design against the assessment criteria is presented in the EIS. Option 1 has been changed to have much larger impacts but the revise design was not reassessed against the options development criteria. In particular, the TransApex Frederick Street connection layout was "always known to be unfeasible from a design and traffic management point of view."	**B.3.3 / 4**
20		The Toowong connection is totally out of scale with the suburb of Toowong. Removing character housing and installing sound barriers significantly alters the residential nature of Toowong. Local residents, visitors and those passing through the suburb will not be able to avoid the Hale Street blight. The Toowong connection as proposed in the reference design needs to be removed, or alternatively, significantly redesigned. Sound walls should be designed to complement the 'tin and timber' houses and should replicate the leafy character of the suburb Sound walls should be designed to be covered in vegetation such as creepers or vines Milton Road and Croydon Street should have median strip plantings down the middle of the road, including jacarandas, poinsettias, plan trees, golden cane and other traditional Brisbane trees The residual land between Valentine Street and Milton Road should be planted with trees Character housing removed for the project should be stockpiled and returned to residual land following completion of construction The project must not be used as an excuse to increase medium to high density residential, nor industrial areas on land resumed for the project.	**B.4.2 / 6**
21	ToR 4.3 5 (p. 42)	Morley Street traffic impacts have not been picked up by the EIS. The residents of Morley Street have significant concerns that the	**B.5.6 / 18** **B.5.6 / 23**

	Tab 5.2 Fig 5.20	project will increase "rat running" from Frederick Street down Musgrave and Morley Streets to the tunnel connection and from Milton Road / Croydon Street up Morley Street to Frederick Street as at present. The modelling needs to be amended to include these streets and rerun to assess the impacts. Suggests that if the Toowong connection proceeds, that the project cul-de-sacs Morley and Musgrave Streets at Frederick Street and removes the potential to access the tunnel from Morley Street.	
22	TP 12 Fig 6-19 TP 11 (p. 19) TP 12 (p. 354)	Two houses in Morley Street (60 and 62) and two houses in Valentine Street (37 and 39) are proposed to be resumed for the project and are not shown as Character Protection houses in the technical report. These houses appear to be pre 1946 and meet the character protection requirements. The EIS also does not spell out that a commercial character place it to be resumed in Sylvan Road Toowong. Although the BCC Planning Scheme does not apply to this project, the EIS should be updated to include the impacts to these properties.	**B.12.2 / 1**
23	ToR 5.6 11 (p. 5) 5 (p. 46)	The Toowong connection conflicts with plans for a Transit Oriented Development node in Toowong and will greatly hinder the potential for TOD developments, including pedestrian and cyclist friendly facilities. This has not been suitably assessed in the EIS. Jephson Street has high potential for TOD developments and widening Jephson Street would conflict with this aim by creating a significant barrier to pedestrians wanting to access the transport and business centre.	**B.11.1 / 6** **B.5.6 / 11**
24	TP 7 (p. 14)	As discussed on page 14 of Technical Report 7 Air Quality Impact Assessment, atmospheric inversions occur in Toowong between May and October. It appears the impact of these inversions on the trapping of pollutants near ground level and the transfer of noise has not been suitably considered in the EIS. This needs to be qualified and if required, an assessment considering the inversions undertaken.	**B.8.1 / 3**
25	ToR 4.6	A number of complaints about excess noise, dust and other construction relation impacts were made in relation to the NSBT tunnel construction. The EIS for Northern Link is being prepared by the same consultants, and should include an assessment of the lessons learned from NSBT and how to apply these to Northern Link.	**B.19.3 / 3**
26	ToR 5.10 15.5.3 (p. 14-16)	I believe the project is going to significantly impact on our property values over the long term and the EIS has not allayed these fears. Property impacts will be localised, not on a suburb basis as assessed in the EIS. The assessment in the EIS did not appear to assess suburbs that contained surface infrastructure and the assessment only covered project announcement and design phase impacts, not long term impacts. I want studies undertaken to evaluate these impacts, including in the vicinity of the Toowong connection and Croydon Street, based on existing major road infrastructure projects. Suitable mitigation strategies must be developed.	**B.15.5 / 2**
27		The proposed design will result in cyclists being unable to access north Toowong (north of Milton Road) from the Sylvan Road or Bicentenary Bike path, as the current route up Croydon Street will become too dangerous due to vehicle slip lanes into Milton Road and the tunnel. This will result in direct cost impacts for the commuter cyclist who will be unable to cycle to and from work.	**B.5.6 / 39**
28	ToR 5.4.2 9 (p. 19)	Measures for upgrading of building facades suggested in the EIS include changes to windows / closing windows and air conditioning / seals. The proposed measures will result in an unacceptable impact on loss of amenity and lifestyle for the three years of construction. They are also impractical for Queenslander houses. The acceptable noise assessment criteria for construction works	**B.9.3 / 2**

		must be based on noise levels in outdoor living areas or houses with open windows.	
29	ToR 4.7.2	The current main dividing roads for pedestrian access in Toowong are Milton Road, Croydon Street and Frederick Street. The reference design in the EIS is going to significantly reduce the potential for pedestrian access across Milton Road and Croydon Street. Formal pedestrian crossings are required at the mid point of Croydon Street, across Milton Road at the end of Gregory Street and across Milton Road near the Frederick Street roundabout.	**B.4.2 / 13**
30	3 (p. 31)	The Toowong work site is in close proximity to residences and therefore trucking of spoil should only be permitted between 6.30am and 6.30pm Monday to Saturday.	**B.3.6 / 2**
31	1.3.1	The reference design is not a feasible design and does not consider all mitigation measures listed in the EIS. Mitigation measures stated by the EIS relating to pedestrian and cyclist connectivity are not represented in the reference design.	**B.1.6 / 2**
32	20.5.1	Comments in Chapter 20 (Urban Regeneration) suggest a range of urban mitigation measures be considered, including detailed design studies. This infers that the Toowong Connection as shown in the reference design is not an acceptable design and requires redesign before it can be considered acceptable to construct. Suggest redesign of Toowong connection.	**B.14.7 / 2** **B.14.4 / 1**
33	14.7.2 14.4	Section 14.7.2 of the EIS suggests that safe, legible and comfortable pedestrian and cyclist connections are required from north of Milton Road to the Brisbane River and CBD, enhanced pedestrian accessibility and reduced pedestrian and cyclist barrier effects.	**B.14.7 / 1**
34	13.4.2	Section 13.4.2 of the EIS suggests that opportunities should be considered to maximise benefits for public and active transport users, including enhanced pedestrian and cycle connections, including across Milton Road and Croydon Street.	**B.14.7 / 1**
35	Tab 20.2	Table 20-2 in Chapter 20 identifies the need to re-establish signalised pedestrian crossings of Milton Road and Croydon Street as a high priority. Suggests that this comment infers that the author of this chapter does not support the reduction in traffic light pedestrian crossings as proposed in the reference design.	**B.20.5 / 1**
36	Tab 14.2	Table 14-2 in Chapter 14 identifies the impact of the tunnel infrastructure and identifies that existing pedestrian / cycle connections would be improved with provision of an additional crossing of Milton Road at Gregory Street.	**B.14.7 / 1**
37	ToR 6 19.5 19 Element 1 (p. 21) 19 Element 10 (p. 37)	The outline Environmental Management Plan (EMP) lacks sufficient clarity and rigour in the description of objectives and criteria to be put in place and monitored through the construction and operation of the project. Many of the environmental objectives in the EMP are 'softly' worded. These objectives provide no certainty to the community, particularly as the content of the Construction EMP is unknown. Performance criteria in the draft EMP have no measurable outcomes and the measure of compliance / no compliance is often very subjective. Many of the mitigation measures are very wordy and the specific point of importance is therefore unclear. Suggests that in accordance with the EPA Guideline: Preparing Environmental Management Plans: The EIS must contain an EMP of sufficient detail and clarity to allow accurate and complete understanding of the conduct of the construction and operation of the project by all stakeholders. In order to accomplish this, the proponent should in particular: and rigour to the objective Redefine the performance criteria in the EMP to be measurable	**B.19.5 / 1**

		(non subjective) outcomes.	
38	13 (p. 40)	Page 13-40 of the EIS state "Similarly all existing properties that rely on access from the north side of Milton Road, between Frederick Street and Morley Street, would be acquired. Vehicular access to the existing residences fronting Milton Road between Gregory Street and Morley Street, is via a laneway from Gregory Street or from Morley Street. Therefore, access to these properties during construction and operation would be unaffected." This is incorrect, 553 Milton Road gains access only via Milton Road, is not shown as being resumed in the EIS and to my knowledge, the owner has not been informed that this is likely. This is a historic residence with a limited access driveway. Suggests that this information is incorrect and that this house is not shown as required in the reference design.	**B.5.6 / 34**
39		The EIS will need updating to the new Environmental Protection Policies for air and noise that come into effect on January 1 2009, including consideration of background noise creep.	**B.9.2 / 6** **B.8.1 / 2**
40		The extension of the cycle path along Mt Coot-the Road, as shown in the Urban Regeneration chapter, is already largely being undertaken as a component of the State Government's cycle overpasses project, as shown in Attachment 4 of this submission. This upgrade can not be claimed to be part of the Northern Link project.	**B.20.5 / 4**
41	Fig 14.11	Some of the urban landscape works as shown in Figure 14-11 of Chapter 14 are not feasible. The boulevard treatments along Milton Road east of Croydon Street are proposed on narrow footpaths. As presented, the character protected front awning of Two Small Rooms restaurant and the bus shelter would have to be removed.	**B.14.7 / 1**
42	Fig 14.10	Some of the urban landscape works as shown in Figure 14-10 of Chapter 14 are not feasible. An "urban forest treatment" with "significant tree plantings" is proposed for the Mt Coot-tha roundabout and in the median strip along the western freeway. "Boulevard treatments" are proposed on the median strips leading up to the Mt Coot-tha roundabout. Significant tree plantings in these locations would be in conflict with line of sight and safety requirements.	**B.14.7 / 4**
43	Fig 20.2	I do not support 'urban art' for Quinn Park of the style shown in Figure 20-2 of Chapter 20. I do not see public art as an appropriate use of the public benefit portion of funding for the project. The cross section of Quinn park as shown in this figure is also a misrepresentation, as it excludes the retaining wall adjacent to the edge of the road, as is shown in all other representations of the post-project Quinn Park.	**B.20.5 / 2**
44		The project should not become an excuse for medium or high density residential developments, or commercial properties to be located on this site. Suggests that the residual land form the Toowong worksite become a vegetated buffer.	**B.20.4 / 2**

Submission No.		**137**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		I suggest the EIS has either: 1. Failed to consider some relevant and important issues. 2. Chosen not to discuss appropriately significant negative impacts.	**B.1.6 / 4**
2		The Report clearly acknowledges that the fundamental transport	**B.3.4 / 3**

		goals of the project can be met without the connection at Kelvin Grove. This is important because that connection is unacceptable.	
3		The Report does not acknowledge the serious flaws in the design of Hale Street in the Normanby area which must be rectified and seems to take its existing geometry as a given in its base case and presumably its modelling.	**B.21.2 / 1**
4		The Report mentions very briefly that the earlier City West Task Force (CWTF) had proposals for the Normanby area but surprisingly does not outline those proposals, even though they are relevant to its proper assessment of impact. The Northern Link EIS acknowledges that the connections in the Kelvin Grove area will widen Kelvin Grove Road and increase traffic in the area. As such the concept is at odds with the CWTF proposals. The Report asserts that Northern Link base case would not prevent the implementation of (undefined) CWTF proposals but does not amplify. On the grounds of geometry and the knowledge-corridor intentions of CWTF, the EIS statement is inadequate and open to significant question. I have as yet no confidence that the Northern Link project would not prevent or significantly hamper the resolution of the Normanby precinct's and Hale Street's problems.	**B.11.1 / 1**
5		For the Northern Link project to be conceived in isolation from existing traffic and urban problems in the area created by the 1980s Hale Street infrastructure is poor EIS practice. It is inappropriate for the Northern Link project and its EIS to focus only on "mitigating" what it identifies as its own direct impacts in isolation when it should deal also with the impact of not using its project power to fix existing problems in adjacent interconnected relevant infrastructure.	**B.21.2 / 1**
6		The proposals by the City West Task Force were in various ways a fore-runner of the work on Smart Cities and the Brisbane Knowledge Corridor, particularly in acknowledging the importance of the Kelvin Grove Urban Village in the new creative economy of the city and state. There is little or no reference to these important policy directions in the Report which presumably explains why the impact of the project in hampering their advancement in the Kelvin Grove and Normanby precinct is not considered.	**B.11.1 / 1**
7		The importance of the Urban Village as an activity centre is mentioned from time to time in the Report ….. but seems never to be mentioned when the negative impacts of the project are discussed. The negative impacts in the Kelvin Grove area seem to be considered only in terms of immediate residential communities and physical impacts upon their amenity. Indeed when describing the land uses within the Village, the Report fails to mention the substantial tertiary and secondary educational and office uses which give it its special Australia-significant status. This may explain perhaps why there is this significant hole in the EIS document.	**B.11.4 / 5**
8		The Urban Village will derive no benefit from the greater car access to its front door for its award-winning urban planning has sought to manage (if not discourage) private car access and to pursue pedestrian, cyclist and public transit accessibility (including bus services on Kelvin Grove Road). The theoretical advantage of greater accessibility by the tunnels is at best of no consequence and at worst a significant problem if it generates not only lost amenity but also both greater congestion on Kelvin Grove Road and demands for more parking in the Village.	**B.11.4 / 5**
9		The EIS states or implies that the project will maintain or deliver better pedestrian connectivity. With respect to the Urban Village, this is nonsense. The substantial difficulties created for the future Urban Village by the 1980s road planning of Hale Street have	**B.5.6 / 41**

		been widely acknowledged. The City West group were seeking to deliver basic pedestrian connectivity between the Urban Village and the CBD. The tunnel connections at Kelvin Grove will 1) lessen the amenity of pedestrian links to the west and north, 2) fail to deliver pedestrian connectivity to the east and south, and 3) probably prevent the practical CWTF resolution of the major problem.	
10		The delivery of strong supportive land uses in the re-invented urban neighbourhood between the Kelvin Grove Urban Village and Normanby (as proposed by the City West Task Force) was not only important for encouraging extensive, pleasant and safe (consistent with CPTED principles) pedestrian and cyclist movement to and from the city centre, but also for supporting the transport functions of the (now isolated) busway station at Normanby. The EIS Report does not appear to consider the negative impact of its Kelvin Grove connection upon this important transit node (although it in theory has the enhancement of public transport as a goal). That node becomes even more important with the likely decision that any new underground heavy rail "metro" system would not come through Normanby (a recent and relevant study that does not appear mentioned)….. hence supporting the busway system in this area is essential.	**B.11.2 / 1**
11		In its proposals for mitigating its impact on the Kelvin Grove area, the base case appears to deal only in planting trees and other vegetation. While in some particular places that might be reasonable (and the suggested cutting down of significant trees in the locality is noted), there is a fundamental difference between that "cover it with planting" response and the "creating a new urban neighbourhood of pedestrian friendly streets and buildings with active frontages" proposal by the City West Task Force. Indeed some of the EIS drawings of the base case appear at odds with basic CPTED Principles as defined by the Government's own Guidelines document. It is not immediately clear that the EIS Report has considered this important community safety (and therefore social and economic sustainability) issue.	**B.11.2 / 1** **B.14.7 / 8** **B.14.5 / 2** **B.20.5 / 6**
12		The EIS Report appears to neglect significant impacts of the base case proposal to have road connections at Kelvin Grove. I am of the opinion that the substantial road connections at Kelvin Grove proposed by the base case scenario have serious long term negative impacts upon the proper planning of this area which are in the main not acknowledged by the EIS Report. Those negative impacts are contrary to: • The appropriate operation of the award-winning Urban Village activity centre. • The development of an urban pedestrian-friendly neighbourhood around Normanby (as proposed by City West). • The proper connection of the Urban Village to the city centre. • The Smart State and Knowledge Corridor strategic economic policy drivers. • The TOD policy goals of the SEQ Regional Planning processes. • The principles of best practice urban design and planning, including CPTED. • and more.	**B.4.2 / 17**

Submission No.		138	
Issue No.	EIS Reference	Issue Summary	Response
1		The location of the ventilation stacks so close to residential areas. The stack should be placed in commercial, industrial, retail of other zoned land that is not populated 24/7 like residential areas are. Residential areas should be protected. These are not the zones in our community where pollution should be directed and concentrated. Where Ipswich Road already had higher than normal levels of carbon dioxide, carbon monoxide and other air contaminants prior to the construction of its ventilation stack, the area around Toowong is likely to have the levels of contaminants increased as a result of the construction of the stack.	**B.3.5 / 1**
2		The proposal that one stack extract the fumes from the entire tunnel, rather than use of multiple stacks, thereby concentrating fumes at one point. Whilst it may be more economical to locate the plant associated with the extraction systems at one point, it is unacceptable that 100% of the pollution the complete length of the multi-lane roadway should be concentrated on one residential precinct.	**B.4.4 / 4**
3		The height and visual obtrusiveness of the stack. Unlike the one under construction at Woolloongabba off Logan Road, which is located in a commercial area amongst other high density, high-rise structures (or at least the area has been re-zoned to permit the construction of other multi-storey buildings to retrospectively provide “camouflage”), the one proposed for Toowong will be an eyesore.	**B.14.8 / 4**
4		The potential for an increase in heavy vehicles carrying freight through the Northern Link route, resulting in higher levels of particulates and pollution.	**B.8.4 / 4**
5		Residual or particulate pollution from the stack has potential to contaminate rainwater collected from roofs with pollutants such as lead and other toxic chemicals. Given that many in the community have installed rain harvesting systems during times of recent drought and connected the systems for internal use, the project may affect the quality of rainwater collected for use in laundry, toilet flushing, pool top ups and presents an adverse health risk. We are concerned that Toowong residents may be exposed to risks presented by airborne contaminants such as those in north Queensland mining communities.	**B.8.3 / 2**
6		The potential negative impact on the Botanic Gardens. The fumes have the potential to damage the plants at the Gardens. Brisbane’s reputation will be ridiculed when people discover that a ventilation stack was built next to the Gardens.	**B.8.3 / 2**

Submission No.		140	
Issue No.	EIS Reference	Issue Summary	Response
1		The secondary entrance in Toowong with its associated 10 lane widening of Milton Road, 7 lane widening of Croydon Street and 2 flyovers will permanently divide the suburb both north-south and east-west and will be a blot on the landscape for future generations should it go ahead. The associated widening and infrastructure cannot be mitigated in a satisfactory way.	**B.3.4 / 2** **B.14.5 / 1**
2		The Northern Link project without the local Toowong entrance delivers a benefit to the Toowong community whereas the secondary entrance does not deliver benefit but in fact detriment.	**B.3.4 / 3**

3		At the 5 November 2008 Northern Link display at the Toowong Library, a large artist impression of the Northern Link tunnel was displayed. Notable by their absence were enlarged images from the EIS showing massive impact on the Toowong area (i.e. the widening of Milton Road or the view from 'Two Small Rooms'). The artist impression was not from the EIS and did not show the impacts in Toowong as clearly as the images in the EIS. I believe selective imagery used was misleading and a failure to show the Toowong population what the ramifications of this project could be. The images are in the EIS, but are...buried well and truly in the documentation...sanitised marketing exercise and not showing the complete Toowong impacts.	**B.1.7 / 2**

Submission No.		**141**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	The tunnel is not the correct piece of infrastructure for Brisbane at this point in time. In terms of providing a major route between the west of Brisbane and the TradeCoast precinct on the east it makes no sense to make the route run through the middle of well developed suburbs and to within 1 km of the CBD. The freight traffic should be directed onto ring roads around the inner suburbs. Such a route already exists to the south in the form of the Logan Motorway, the SE Freeway and the Gateway arterial road. It is inappropriate to encourage heavy freight traffic into the inner Brisbane Suburbs. Instead plans should be instituted to develop an improved ring road system.	**B.2.2 / 4**
2	2	The tunnel will do little for local residents. The proposed connection at Toowong will worsen traffic congestion within Toowong by funnelling traffic into the suburb. It will not ease congestion and in fact will worsen it for local residents.	**B.5.6 / 11**
3	2	The Toowong connection will also destroy the local suburb – an old well established and historic area which includes the Toowong cemetery precinct. There will be a massive loss of connectivity for local residents.	**B.13.3 / 7** **B.13.3 / 4**
4	8	The EIS neglected to include large parts of the local area for inclusion in the investigation. This includes the area immediately adjacent to the Western Freeway which will be impacted by the increase in emissions from the increase in volumes on the freeway. This is a major omission as the construction of the tunnel and the associated widening of the Freeway will dramatically increase traffic volumes and emissions. There are major implications for the health of residents in nearby West Toowong and around the tunnel opening. The proposed location of the ventilation stack places it in close proximity to residents in West Toowong. A site further west should be chosen.	**B.3.5 / 1** **B.8.3 / 2**
5	8	The absence of filtration at the stack is clearly inappropriate. Relative to the cost of the project the addition of the filter is not overly expensive. In terms of the positive impacts of filters the benefits are hugely valuable – both in dollar terms and in terms of health outcomes. Recent medical research published in the Australian Medical Journal has demonstrated that increased air pollution leads to an increase in mortality from heart failure. This is in addition to the known and well documented increase in morbidity for asthmatics, for those with chronic obstructive airways and for the elderly. An unfiltered exhaust stack in the present proposed location places the health of thousands of Toowong residents at risk. This must not be allowed to proceed. The stack must be located further from residential areas and it must be filtered. Anything less should	**B.8.5 / 1**

		prevent the development from proceeding at all.	
6	9	There will be massive increases in noise levels associated with the increase in traffic and in particular heavy freight traffic associated with Northern Link. There are presently inadequate noise mitigation measures present at the Toowong end of the Western Freeway. Any additional traffic will lead to further excessive noise. There needs to be a massive increase in noise mitigation measures along the Western Freeway in any proposed development.	**B.9.1 / 1**
7	13	The proposed development will destroy the environment of Toowong for residents and small business alike. This will be a disaster for my suburb and for all residents of Brisbane. There is a loss of connectivity and social cohesion. Some businesses will close. The visual impact on a beautiful historic suburb will be horrendous.	**B.13.3 / 8** **B.13.3. 4** **B.13.3 / 14**

Submission No.		**142**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Bicycle Queensland understands the need for infrastructure development to keep Brisbane moving, but has concerns with the effects of major road projects, particularly when they appear to threaten cycling safety and amenity.	**B.5.6 / 46**
2		There is no mechanism in place in Northern Link to sift out excessive private car travel from the more meaningful necessary motor vehicle trips. The toll is the only encumbrance to usage and this could be argued that the toll is low for most users and offers an alternative to 'above ground' access. This has a negative effect of encouraging driving as an easy alternative and discouraging cycling. Conflicts with Council's Brisbane City Plan 2000 desired environmental outcomes for transport and mode share.	**B.2.1 / 7** **B.5.6 / 1**
3		Council's excellent investment in cycling infrastructure stands to be damaged by this challenge which is not sufficiently addressed within the EIS's economic car-dependency analysis and conflict with Council's desired environmental outcomes for transport and mode share within the City Plan.	**B.15.4 / 1**
4		There is opportunity to positively provide a better long term cycling outcome through the design and construction process and relatively small cost, but we see no evidence of this within this project.	**B.20.5 / 4**
5		Our concern is two-fold: better usage of liberated road-space and better long term connections through the high impact construction sites around the tunnel portals. Busy narrow roads such as Milton Road and Kelvin Grove Road have long been recognised on existing State and Council cycle plans as needing cycle facilities. As Milton Road should experience a drop in traffic volumes, the opportunity exists for incorporating cycle lanes onto them.	**B.20.5 / 4** **B.5.6 / 42**
6		An additional concern for Bicycle Queensland if the severance of existing cycling routes by making the road environment unsuitable for cyclists. Specific concern are the following routes: 1. Kelvin Grove Road between Hale Street and Rusden Street. Cycle access along Kelvin Grove Road will become dangerous as the two-lane tunnel will merge with Kelvin Grove Road traffic, with cyclists located to the left hand side of Kelvin Grove Road and having to merge with faster exiting traffic from the tunnel. Pedestrian and cycle crossings will also stand to loose connectivity.	**B.5.6 / 41**

		Follows on in 7	
7		2. Milton Road, Croydon Street and Sylvan Road. Proposed higher radius turns will cause additional risk to cyclists. Limiting range of pedestrian movements on Croydon Street will reduce amenity. 3. Croydon Street. Particularly northbound on Croydon Street itself and the interaction with Milton road (limiting the range of pedestrian movements) will reduce amenity. 4. Inner City Bypass. The Inner City Bypass currently offers reasonable on-road and off-road cycling which will be negatively affected. 5. Proposed higher radius turns onto Sylvan Road from Milton Road and from Sylvan Road onto Croydon Street across the existing flow of bicycle traffic will cause additional risk to cyclists. As the EIS predicts lower motor traffic volumes on Sylvan Road, these changes seem unnecessary.	**B.5.6 / 43**

Submission No.		**145**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	Tab 5-24	The proposed Northern Link road tunnel is poor public policy, with negative impacts that outweigh its benefits, both on a local and regional scale. Governments at all levels claim to be trying to reduce private car use and increase public and active transport mode share, but if the project goes ahead it will do the exact opposite. It will put tens of thousands of extra cars on the road every day and do so at the expense of other modes of transport.	**B.5.4 / 13**
2		The Toowong connection will result in a reduction in service at the Croydon Street/Milton Road/Morley Street intersection. It will make it much harder (and slower) to access the Morley/Gregory area from the bus stop on Milton Road.	**B.5.6 / 39**
3		The Toowong connection will result in people in all of northern Toowong (both Cadell/Bayliss and Morley/Gregory areas) will find it much less safe and convenient to access the Toowong State School area, central Toowong (a major activity centre), and all the public transport located there.	**B.13.3 / 3** **B.5.6 / 39**
4		The Toowong connection will result in a much less safe and convenient access to the Morley/Gregory are from the Bicentennial Bikeway, the Western Freeway Bikeway or the new Toowong pedestrian/cycle overpass.	**B.13.3 / 4** **B.5.6 / 39**
5	ToR p. 20 Fig 5.15 5.2.7	The project's failure to even provide bicycle lanes on important connecting roads such as Croydon Street and even on parts of the principal regional cycle network such as Milton Road and Kelvin Grove Road in indicative of the lack of consideration for cyclists in the projects design and development. The project presents an opportunity to provide quality facilities and a high level of service for all road users at a miniscule or no additional cost. This opportunity is not identified in the EIS, despite the requirement on Page 20 of the Terms of Reference to do so. In Figure 5-15 it even denies the existence of Bicycle lanes on Kelvin Grove Road and in Section 5.2.7 it briefly mentions the existence of on-road bicycle lanes in the road network but then fails to discuss on-road cycling. Ignoring on-road cycling will make cycling on roads much less safe resulting in cycling being virtually stopped.	**B.5.6 / 41**
6		Suggests that the following actions be included in the EIS: 1. A proper analysis be undertaken of the existing on-road cycling environment and impacts and opportunities of the	**B.5.6 / 46**

		project on cycling as per the ToR. 2. Bicycle lanes to be provided on all roads where works are to be performed. 3. Green bicycle lane treatments need to be included at all the intersections where works are being performed.	
7		The project also fails to address connectivity in the provision of crossing roads. An example is the current dangerous informal road crossing between Gregory Street and Quinn Park. The project makes it impossible to cross here at all and people will have to walk 200 m and wait for six changes of lights in order to make the crossing. Crossing time will also be slow and there will be decreased safety on Croydon Street and lack of cycling facilities.	**B.13.3 / 4** **B.20.5 / 1** **B.5.6 / 38**
8	Vol 2 MUTCD W6-7 MUTCD W8-23	Evident in careful inspection of the planning layouts in Volume 2 of the EIS, but not described in the text are: 1. Removal of the existing bicycle lanes on Kelvin Grove Road. 2. Removal of the existing cycle lanes on Musk Avenue approaching the intersection of Kelvin Grove Road. 3. Opportunity to realign the connection between Normanby Terrace and Lower Clifton Terrace has been ignored. 4. The existing two-stage pedestrian crossing from the southern side of Musk Avenue to Lower Clifton Terrace has become five stages.	**B.5.6 / 41**
9		The project will make it much more dangerous for cyclists on the Inner City Bypass as cyclists will need to merge left across the traffic from the tunnel in order to reach the safety of the shoulder. A safe crossing point needs to be provided here.	**B.5.6 / 43**
10	5 (p. 145)	The Western Freeway Bikeway is at risk from severe impacts from the construction of the project. The EIS notes that there are no alternative routes, but implies that there would be some closures of the path anyway. The same goes for the connection at the corner of Sylvan Road and Milton Road. The closure of the new Western Freeway Roundabout Cycle and pedestrian Bridge is likely to be more severe than is mentioned in the EIS. The EIS states that closures will occur during the night time and the EIS needs to state how this will occur and give assurances that the closures will happen during night time only.	**B.5.7 / 6**

Submission No.		**146**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The overall tunnel project will not provide a long-term solution to the city's traffic congestion but rather encourage more people to travel by private motor vehicle, resulting in increased congestion.	**B.2.1 / 7**
2		The EIS details how the intersection of Milton Road, Croydon Street and Morley Street will be upgraded to allow for ten lanes of traffic on Milton Road; six lanes of traffic on Croydon Street; and reduced pedestrian accessibility and safety by removing one of the crossings and making people wait for lengthy staged crossings. The EIS fail to detail how it will worsen this intersection for cyclists and pedestrians, make it very difficult for residents to access their homes and divide the suburb of Toowong.	**B.5.6 / 39**
3		The increase in traffic forecasted to occur in the local area is significant. More concerning is where all the traffic will go once it is forced out of the tunnel and through local streets due to lack of appropriate access. Streets such as Cadell Street, Bayliss Street,	**B.13.3 / 19** **B.5.6 / 18**

		St Osyth Street, Park Avenue, Park Lane, Lissner Street and Bennett Street will experience a dramatic increase in traffic and residents will have reduced access to their homes. The EIS should assess the impact of rat-running on all local streets that will be impacted, not just a select few.	
4		The impact of increased traffic will also split the suburb in three areas and will have effects on active transport. The planned changes will significantly impact pedestrians and cyclists during construction and operation of the Northern Link Tunnel. The planned changes will make it very difficult for cyclists to access to the Sylvan Road Bikeway from Auchenflower.	**B.5.6 / 39**
5		The EIS states that cycle paths will be maintained in some locations, such as along the Western Freeway. The section of the cycle path along the Western Freeway should be designed at the same gradient as the road. Provision of pedestrian and cycle crossings including under and over passes as well as on-road cycle lanes should be included in the design at the same level of details as the roads.	**B.5.6 / 38**
6		Serious social impacts of the local access on the community including loss of character housing both in terms of suburb identity and resumption impacts, loss of open space and significant landmarks like Crows Ash monument should be given consideration in the decision to permanently change the fabric of the suburb.	**B.12.2 / 1** **B.12.2 / 4** **B.13.3 / 6** **B.13.3 / 7**
7	11.4.2 Fig 4.6	The number of homes to be demolished to allow for the local access is horrifying, causing significant disruption to people's lives and the community. Residents affected are unsure of whether their house will be resumed and can no longer sell it for a reasonable price. This causes enormous stress on residents and the ongoing effect should be considered. There is also uncertainty for residents that may require part of their property to be resumed. There is no discussion of residents located on the southern side of Milton Road, east of the Croydon Street intersection that will have part of their land resumed, however the land use plan shows that some people outside of the study are will lose part of their land.	**B.11.4 / 2** **B.13.3 / 10** **B.13.3 / 12**
8		The loss of more than half of Quinn Park will be another blow to the community. The park will lose its open feel, lined by trees due to the tall ramps on Milton Road and the cul-de-sac on Quinn Street, potentially resulting in the park not being a safe place. The footpath that is proposed to be relocated to go down through the park will lead to reduced use of this basic amenity as people will have to walk or cycle further and it will not feel safe to walk down at the bottom of the towering structure.	**B.11.4 / 1** **B.13.3 / 13** **B.20.5 / 2**

Submission No.		**151**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	6.2.2 (p. 48)	The EIS does not address access to the property at 555 Milton Road, Toowong. Currently the only option to access this property is to either turn right into the property from the westbound direction (therefore crossing over eastbound lanes) or by driving directly across from Quinn Street. With Quinn Street becoming a cul-de-sac and the plan to place concrete barriers down the centre of Milton Road access to the property would be removed. Suggest that the requirement for the driveway be redesigned to allow for entrance via the eastbound lane or the ability to enter the property from a rear entrance from Morley Street.	**B.4.2 / 8** **B.13.3 / 12**

Submission No.		152	
Issue No.	EIS Reference	Issue Summary	Response
1	2	The Toowong Connection will cost vast amounts of money to build, cost money to use and disrupt and divide the community with the only benefit being a few sets of lights. The rationale that congestion will be reduced on Milton Road will be nullified by the Toowong connection which will induce more congestion and traffic in the short and long term.	**B.2.2 / 2**
2	5	A 60% increase in traffic volume on Croydon Street and a 27% increase in Jephson Street will make crossing these roads to access local amenities more difficult and dangerous.	**B.5.6 / 39**
3	8	No air quality determination has been made in the vicinity of our residence which is very close to the Primary School. The increased traffic must increase the pollution which is already considerable due to the current truck traffic and general traffic accessing the areas. The construction itself will create pollution and there is no filtration on the ventilation stacks. This pollution will increase the likelihood of asthma as a health issue.	**B.8.1 / 1**
4	9	Residents have to endure three years of construction noise and then once constructed there are only limited sound barriers on the tunnel connection.	**B.9.3 / 1**
5	13	Unfortunately the 10 lane highway and connection will make freedom of movement very difficult. As yet we have seen no real solution to the pedestrian crossing over Milton Road and access to the school and friends will be made much more difficult.	**B.13.3 / 4**
6	14	The Toowong connection is an ugly, over scaled eyesore that will severely impact the visual environment. No provision has been made to compensate for the loss of adjoining parkland in Quinn Park. At the very least any residual land at the end of the project should be converted to green space.	**B.14.5 / 1**

Submission No.		153	
Issue No.	EIS Reference	Issue Summary	Response
1		We do not believe the local community interests have been valued in the consultative process. The Toowong connection should be abolished to ensure community connectivity and liveability which impacts on our children attending their local school.	**B.3.4 / 2**
2		The proposed plans make accessibility more problematic particularly with regard to children crossing busy roads to get to school. There is no realistic solution proposed for pedestrians crossing Milton Road from north Toowong and Auchenflower to access the school on the other side. Increase in traffic on Jephson Street and Croydon Street will also make school access more difficult.	**B.5.6 / 39**
3	8	There is no air quality determination in the vicinity of the school. We have expressed our grave concerns regarding the air quality of the learning environment and the adverse impacts on children's health. The construction will result in much more dust and dirt in an area that is noted for problems arising from the quarry dirt. We are concerned about the lack filtration on the stack.	**B.8.1 / 1**
4	9	The project will produce noise that will impact on the School which	**B.9.3 / 1**

		is so close to the works.	
5	13	Our school catchment is drawn across Milton Road. Children regularly socialise and play across the area. This will be made infinitely more difficult with the division, both physical and mental, created by the ten lanes of traffic.	**B.13.3 / 16**

Submission No.		**155**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The connection to the Western Freeway at the southern end appears to provide all the options for traffic trying to enter and leave from the tunnel or the Western Freeway.	**N/A**
2		The impact from the discharge of air from the tunnel handling southward moving traffic is claimed to be little different with or without filtration treatment. Carbon dioxide is not considered as a pollutant but could occur in significant concentrations which might require extraction using a water scrubber. The EIS indicates that there will be provision for filtration in the design so that if air quality proves to be a problem there can be a retrofit of treatment equipment. We concur with this approach but caution that there may be need to fit water scrubbers because of the concentration of pollutants, particularly carbon dioxide at the discharge point.	**B.8.5 / 1**
3		The provision of connections to the tunnel at Toowong contributes to the complexity and cost of the proposal and impacts on the local environment. It is our opinion that these two links should be eliminated from the proposal, the roundabout at Toowong providing adequate access to the Western Freeway and Northern Link Tunnel.	**B.3.4 / 3**
4		The arrangements at the Kelvin Grove end for access to Kelvin Grove Road and to the Inner City Bypass also appear to allow for suitable ingress and egress from the tunnel and connection to the Inner City Bypass.	**B.4.2 / 17**
5		The ventilation outlet at the northern end is close to Victoria Park. However, we are again concerned that the concentration of exhaust gases from the tunnel could have an adverse impact on air quality around the discharge point and that provision should be made to retrofit treatment equipment if this is found to be a problem. We believe that carbon dioxide should also be considered as a pollutant and that it may be necessary to provide water scrubbers to remove some of the gases prior to discharge to the atmosphere.	**B.8.5 / 1**
6		Our two major concerns at this time are the: 1. Disruption to the Toowong community with the provision of off-ramps at Toowong. 2. The likely impact of potential pollutants including carbon dioxide on the people situated close to the discharge points of air being pumped through the tunnels in both directions.	**B.13.3 / 20** **B.18.3 / 1**

Submission No.		**156**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	The proposed Toowong exit will reduce the quality of life in Toowong. Visually and in terms of noise this massive road	**B.13.3 / 8** **B.14.5 / 2**

		construction will be a disaster for the surrounding area as far as the eye can see and the ear can hear. Also massively increased traffic as far away as St Lucia will be a disaster for this city and undermine public transport initiatives.	
2	5	Croydon Street, Jephson Street and Sylvan Road will become uninhabitable and the Regatta Hotel Precinct will be ruined. Local shopping facilities in Morley Street and the local Toowong school will suffer access and noise problems and will slip into decline.	**B.9.5 / 3** **B.1.3 / 7**

Submission No.		**157**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	5	Insufficient commitment to local area traffic management.	**B.5.6 / 18**
2	5	During construction there will be cars and trucks coming and going in my street, blocking clients' access and parking. All construction vehicles must be restricted from parking in Musgrave Street.	**B.5.7 / 3**
3	9	I require that an inspection is carried out ASAP to determine present condition of recently renovated home/business. I require a commitment for all/any damage and movement caused once construction starts. Vibration and settling may cause damage to my home/business. Mitigation proposed is inadequate.	**B.9.3 / 6**

Submission No.		**159**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Stakeholders in the Kelvin Grove Urban Village are satisfied with the maintenance of the left in/left out access from the ICB to Victoria Park Road.	**B.4.2 / 18**
2		Following meetings with the Northern Link consultation and technical team, we are satisfied with the location of the exhaust vent shaft.	**B.3.5 / 1**
3	20 (p. 8)	Following meetings with the Northern Link consultation and technical team, we are satisfied with the "island" of land between the ICB, Lower Clifton Terrace and Kelvin Grove Road that will be made available for community use after the completion of construction works.	**B.20.4 / 3**
4		It is generally acknowledged that the non-vehicle (pedestrian, cycle, disabled) connections between the city and the Kelvin Grove Urban Village and Kelvin Grove/Red Hill areas west of Kelvin Grove Road are very sub-standard. As part of the development assessment approval in 2002 for the urban village Brisbane City Council levied the Project Partners as a contribution to making such improvements. As yet, this has not been done. It is disappointing to see in the EIS that these opportunities have not been taken up. In fact the current tunnel portal infrastructure designs will lead to a lower standard of amenity for the non-motorised users of the ground plane around the tunnel portals at Kelvin Grove.	**B.4.2 / 20** **B.5.6 / 41**
5		The designs deliver no improvements in pedestrian, bicycle or	**B.4.2 / 20**

		disabled access to the City from the Urban Village or other areas to the north of the tunnel portals.	**B.5.6 / 41**
6		The designs increase the volumes of traffic and number of traffic lanes on Kelvin Grove Road that pedestrians will have to cross. They also contain no specific designs for improvements in amenity for crossing Kelvin Grove Road.	**B.4.2 / 20** **B.5.6 / 41**
7		The designs maintain the currently convoluted route to the Normanby Fiveways surface connections to the city via Kelvin Grove Road, impossible to access by cyclists, disable or mothers with prams.	**B.4.2 / 20** **B.5.6 / 41**
8		The designs leave the multimillion dollar Normanby Fiveways Busway Station in its position of splendid isolation.	**B.4.2 / 20** **B.5.6 / 35**
9		There are no specific designs for improvements in the amenity for what is currently the only practical pedestrian route back to the city from the Urban Village (crossing Kelvin Grove Road at Musk Avenue, walk down Lower Clifton Terrace and then proceed to the city via Waterworks Road and Normanby Fiveways road crossings)	**B.4.2 / 20** **B.5.6 / 41**
10		During the construction phase there are no specific proposals for the management of pedestrian traffic across Kelvin Grove Road wishing to walk into the city.	**B.4.2 / 20** **B.5.7 / 5**
11	20.5.3 22.7.5 (p. 15)	We request that the CG require the Northern Link tunnel project to include in its scope of works the provision of significantly improved surface connections between areas to the east and west of Kelvin Grove Road. Also include in the project scope, significantly improved connections from those areas back to the west side of the city, overcoming the physical barriers of the ICB and Hale Street Underpass.	**B.4.2 / 20**

Submission No.		**160**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		We live at 20 Quinn Street, Toowong...and while we are not opposed to a tunnel between the Western Freeway and the Inner City Bypass, we are opposed to the proposed connection at Milton Road identified as the Toowong connection.	**B.3.4 / 3**
2		The Toowong connection will result in half our local Quinn Park being resumed for the proposed 10-lane road, together with an earth embankment with an extensive noise barrier being placed on top.	**B.11.4 / 1**
3		The Toowong connection will result in the removal of existing hill and buildings to the north of Quinn Street which provides acoustic screening between our house and Milton Road.	**B.9.5 / 3**
4		The Toowong connection will result in the removal of existing buildings and vegetation along Croydon Street which provide acoustic screening between our house and Croydon Street.	**B.9.5 / 3**
5		The Toowong connection will result in a high level of urban intrusion into what is a quiet residential character tin and timber area.	**B.13.3 / 8**
6		The Toowong connection will result in the separation of the suburb on either side of the road infrastructure (resulting in difficult and inconvenient pedestrian and bicycle access across the suburb such as to the local Cat and Fiddle shops).	**B.13.3 / 3**
7		If it is decided that the Toowong connection must proceed, it is requested that consideration be given to minimising construction noise, especially at night.	**B.9.3 / 1**

8		If it is decided that the Toowong connection must proceed, it is requested that consideration be given to minimising post-construction noise from the road (including the expanded Milton Road, Croydon Street and elevated bridge structures).	**B.9.5 / 3**
9		If it is decided that the Toowong connection must proceed, it is requested that consideration be given to including measures to ensure air quality from the 10 lane road connection is maximised.	**B.8.1 / 1** **B.8.3 / 4**
10		If it is decided that the Toowong connection must proceed, it is requested that consideration be given to ensuring that noise barriers are highly durable, attractive and allow light to Quinn Park.	**B.14.6 / 1**
11		If it is decided that the Toowong connection must proceed, it is requested that consideration be given to including vegetation to screen the noise barriers along Milton Roads and Croydon Street.	**B.14.5 / 1**
12		If it is decided that the Toowong connection must proceed, it is requested that consideration be given to maximising the park areas on Milton Road and Croydon Street.	**B.13.4 / 1**
13		If it is decided that the Toowong connection must proceed, it is requested that consideration be given to including public facilities in the parks to ensure they are used and do not attract crime (e.g. BBQ facilities, shelters and children's play equipment).	**B.13.4 / 1**
14		If it is decided that the Toowong connection must proceed, it is requested that consideration be given to ensuring that the right turn to Quinn Street from Sylvan Road and the left turn from Quinn to Sylvan Road are safe (Quinn is proposed to become a cul-de-sac and these turns currently have very short sight distances).	**B.5.6 / 16**
15		If it is decided that the Toowong connection must proceed, it is requested that consideration be given to ensuring the best possible convenient pedestrian and cycle access is provided to cross the road infrastructure.	**B.5.6 / 39**
16		If it is decided that the Toowong connection must proceed, it is requested that consideration be given to reinstating convenient bus stops along Milton Road.	**B.5.6 / 37**
17		If it is decided that the Toowong connection must proceed, it is requested that consideration be given to ensuring the express buses that currently stop at the Toowong cemetery stop do not bypass the local area.	**B.5.6 / 37**
18		If it is decided that the Toowong connection must proceed, it is requested that consideration be given to ensuring that local storm water drainage in Quinn Street is improved (If the Toowong connection is built, we request that the road is not designed for a non-worsening situation only, as this would result in the continued failure of the local drains - as evidenced by the storm water drain failure in the 20 November 2008 storm.)	**B.7.3 / 2**

Submission No.		**161**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The EIS only responds to the acoustic environment (i.e. Sound and vibration) which is a subset of noise and vibration. Other common types of noise include electromagnetic radiation (EMR), electrostatic, magnetic, optical, quantum as well as human verbal communication situations.	**B.9.2 / 5**
2	4	Rather than a pair of tunnels (mainline), each about 12 m in diameter and separated by about 10m - a single tunnel about 19 m in diameter configuration is employed. The rationale for this approach is that a single boring process would simplify operation and mitigation processes.	**B.4.2 / 2**

		A single borer is only one vibration generator. Two borers (vibration generators) will extremely complicate the vibration process as: • One or the other borer may temporarily stop/start or change in cutting speed or trajectory. • The boring "frequencies" emitted will probably vary somewhat from each other and lead to many "phase shift" and related effects resulting in constructive and cancelling vibration interference situations.	
3	4	Consideration should be given to extending the "open" section at the western end of the corridor. The non-tunnel section would be enclosed in a mesh. By careful design and testing, optimal diminishing over distance exhaust venting (via portal) differential may be achieved (almost uniform dispersion over approximately 1 km length). The motion of vehicles, providing a ventilation 'piston effect', would automatically maintain the process and so the process would be passive (minimal energy input by big tunnel operation). This approach mimics the effect of domestic micro irrigation 'dripper' or 'soaker' lines.	**B.4.4 / 4** **B.8.4 / 1**
4	4	The ventilation outlet to be located in the botanical gardens should be relocated to the area at the western end of the study corridor. If the 'aviary' can be practically realised, the ventilation outlet would integrate much better and be of a smaller size.	**B.3.5 / 1** **B.4.2 / 22**
5	4	A passive (minimal energy input) tunnel lighting system should be implemented to assist in minimising the CO2-e footprint and possibly being eligible for funding under Federal Government emission reduction incentives. This would typically involve vehicle headlights, painting the tunnel roadways, walls and ceilings white (incorporating reflective microscopic glass beads or similar), road markings painted black.	**B.4.4 / 5**
6	10	To enable safe migration of fauna between both sides of the Western Freeway, a number of underground pipes/small bridges should be provided.	**B.10.2 / 2**
7	10 14	The proposed Toowong Connection and associated road development will substantially alter the aesthetic character and existing landscape values of the area. The portals and ramps will add a significant visual element to such an extent that the area may no longer retain its existing character. "Visual domination" extends much further than the study corridor and the psychological visual impact of the structure will dominate the local panorama.	**B.14.4 / 4**
8	10 14	The destruction of 'floristically interesting' vegetation generated by site clearing activities is significant and areas of similar vegetation types are not well represented in the area. Additionally the Poinciana is a significant landscape tree that is threatened by the Toowong Connection and the Crows Ash tree on Sylvan Road has special historical significance and will not survive transplantation.	**B.10.2 / 5**
9	17	In the process of spoil handling, the material other than rock should be screened to remove the much smaller material (i.e. dust and silt). Wherever practical to do so. Suggest that dust and silt be blended with finely shredded vegetation material from domestic sources and used to improve local soil fertility.	
10	16 EIS-TX-05 EIS-PL-03 EIS-PL-1 TP 1 (p. 127)	A serious hazardous activity associated with the current tunnel design is major vehicle accidents in the tunnel or acts of terrorism leading to major fires and explosions. The tunnel and Y- Junction is a potential candidate for attack and is greatly more vulnerable than surface roads. Since the tunnel and Y-Junction is a highly residential area there is an extremely high civilian risk factor. Additionally, it is anticipated that inside the tunnel merging will	**B.16.2 / 1**

		result in more crashes due to driver visibility. The removal of the Toowong connection will eliminate the civilian risk factor and contribute to greatly reduced chance of accidents.	
11	8 (p. 8) TP 7	The monitoring sites (Brisbane CBD, Rocklea, South Brisbane and Woolloongabba, Bowen Hills and Kedron) can not be confidently relied upon for detailed forecasted results regarding the Toowong vicinity as they are not qualified to the Bureau of Meteorology standards for site location and data quality. Additionally, all of the six EIS sites are locality biased toward the eastern end or are too far north (Kedron) or south (Rocklea).	**B.8.1 / 3**
12	8 (p. 8) TP 7	No precise figures for duration of either subsidence of surface temperature inversions in the vicinity of the study corridor were supplied. The atmospheric inversion factor is one upon which emission control design of the ventilation outlet should be based i.e. the worst possible potential atmospheric inversion situation.	**B.8.1 / 3**
13		The report fails to mention PANs (proxy acetyl nitrate) - secondary pollutants formed in the atmosphere under the influence of sunlight from the reaction of primary pollutants (hydrocarbons and nitric oxides).	**B.8.3 / 1**
14	TP 8 (p. 171; p. 134-145; p. 177; p. 97)	Many stated values are presented unrealistically in the sense of precision and accuracy because too many significant figures are presented i.e. Page 134-5 states one in 814,444 people, Page 177 states one in 107,933 people.	**N/A**
15	8 (p. 39-42) 9	The EIS does not address the problem of EMR noise and as such it could be anticipated that TV/Radio reception interference effects could be anticipated. Mobile phones and sensitive electronic equipment could also be affected.	**B.9.2 / 5**
16	TP 8 (p. 179))	The report seriously omits the instrumentation technique used for measuring the pollutants. Omission of measurement protocol details raises serious doubt on the validity of reported and predicted values.	**B.8.1 / 3**
17	5	Pedestrian access to the relocated Milton Road bus stops near Quinn Park, the bus depot park and ride stop, Dean Street, Mt Coot-tha Gardens and Toowong Village bus stops will be diminished. An increase in walking times to these bus stops of 10 minutes or more is expected.	**B.5.6 / 37**
18	13	For those who do not travel by a [private] vehicle, the Toowong connection will result in the loss of necessary amenities such as the 24-hour convenience of food, drinks, newspapers and magazines and petrol at the Service Station.	**B.13.3 / 15**
19	2	The Toowong connection concept and ventilation outlet location presented [in the EIS reference design] should be abandoned. Suggests the local connection be relocated to Taringa, linking to a new Toowong roundabout on the Western Freeway that also incorporates a ventilation outlet.	**B.3.3 / 3**

Submission No.		**162**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		I oppose the Toowong entry of the Northern Link tunnel for the disastrous implications it has on Toowong as a suburb, funnelling traffic through a residential area and the consequent widening of roads will divide our suburb physically, visually and psychologically. The proposed secondary entrance will be a blot on the landscape which future generations will regret. The proposed widening of Milton Road and Croydon Street will make it problematic to walk, cycle or catch public transport.	**B.5.6 / 39**

		Walking to the fast rocket service in front of the depot will be even longer and riding to the university will be made more difficult, with the required dismount at the Milton Road / Croydon Street intersection. This is not conducive to cycling. Suggests that the proposed secondary entrance not occur. Supports the Toowong Tunnel Solutions group and their submission.	

Submission No.		**163**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
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2	ToR 4.1 ToR 4.2 IB 4.2.1 5.2.4 TP 1 Tab 10 (p. 79)	There are limited existing public transport options for residents living north of Milton Road. The local access entry to Northern Link will only increase the detour distance we will have to walk to catch a bus. The EIS is misleading to say that the inner west is well serviced by public transport. Better pedestrian access is needed to enable residents to utilise available bus services.	**B.3.3 / 3** **B.5.6 / 40**
3	ToR 4.2 TP 1 (p. 125)	400 people were counted crossing Milton Road at Croydon Street. There is an unmet demand for pedestrian access currently from the Croydon Street and Milton Road intersection to the Western Freeway. We need more pedestrian connectivity not less. The proposed local access in the EIS actually takes one of a current pedestrian access points away and makes a current problem worse.	**B.4.2 / 13**
4	ToR 4.6 TP 1 9.5.3	A local access management scheme is needed, as suggested in the EIS, but this should be instituted before work on Northern Link begins, especially in the vicinity of the portals.	**B.4.3 / 16** **B.5.6 / 18**
5		Significant difficulty was experienced in obtaining accurate information from the Northern Link team on the number of truck movements associated with carrying fill for the Gateway Upgrade project. Underestimation of this truck movement will affect baseline noise and traffic volumes. The volume of truck movement was under reported which presents a flawed representation of normal background noise levels. Even more importantly the difficulty in obtaining accurate information from the project team raises concerns as to other possible errors or misrepresentation of facts in the EIS. I raised this issue at two CRG meetings, two community consultation sessions and a feedback form. I was finally told there were only 40 trucks involved in the project. After representations to my MP, I received a written response from the Gateway Upgrade project that the peak period of haulage of fill for the project was between 600 and 980 truck movements per night.	**B.9.1 / 1**

		Suggests the EIS should include corrections to this inaccurate data, including revision of baseline noise levels so changes that result from the project can be accurately measured.	
6		Toowong has already experienced one year of extraordinary night time noise levels, with Gateway Arterial project trucks, their excessive braking and an industrial vacuum cleaner at the Toowong Bus Depot. Without the Toowong connection, the local community will derive better night time noise levels and derive benefit from the project. This will be the case particularly if in the future, night time trucks can be encouraged to use routes which will have the least impact on residential areas, i.e. the tunnel. Suggests the project delete the Toowong connection. The straight through option delivers the required east west link and also delivers a potential benefit in night time noise levels to local residents.	**B.9.1 / 1** **B.9.3 / 1**
1A		The secondary entrance in Toowong with its associated 10 lane widening of Milton Road, 7 lane widening of Croydon Street and 2 flyovers will permanently divide the suburb both north-south and east-west and will be a blot on the landscape for future generations should it go ahead. The associated widening and infrastructure cannot be mitigated in a satisfactory way.	**B.3.4 / 2**
1B		The Northern Link project without the local Toowong entrance delivers a benefit to the Toowong community whereas the secondary entrance does not deliver benefit but in fact detriment.	**B.3.4 / 3**

Submission No.		**164**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The impact of this Project is even more undesirable by not including a filter for the ventilation outlet. It is commonly acknowledged that an increase in exhaust fumes has a direct correlation with increased instances of asthma and irritated eyes in children. There are at least six schools and numerous childcare centres in the area which will be affected by the unfiltered outlet. If a filter were to be fitted, it would improve air quality and collect the many tonnes of CO2 being produced. It is my understanding that this could be buried as landfill. Trying to cut cost corners now is simply false economy.	**B.8.5 / 1**

Submission No.		**165**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	IB p 10	We were impressed by the detail and scope of the EIS for Northern Link, but we were shocked to find that it lacked any analysis of the 'without connections' option. There was no public consultation regarding this key decision and data and logic behind it has not been made public. It is our view that the Red Hill portal will lead to only modest reductions in traffic on Milton Road and Coronation Drive, especially when considered against the added expensive of this side tunnel and substantial negative social impacts. Suggests that the EIS should include a critical comparison of both options, including in relation to traffic modelling and costings.	**B.3.4 / 4**

Submission No.		166	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Council should implement better filtration systems at the western outlet in view of the fact that pollution will be noticeably increased in the Toowong area. Solutions such as distancing the outlet from housing and from the station (as at Kelvin Grove) by lengthening the outlet shaft, higher stack. Implementing filtration systems now that preserve air quality rather than allow the concentrations indicated in the current modelling to accumulate in the suburb of Toowong.	**B.8.5 / 1**
2		Filtration at the western outlet is needed because this outlet will emit heavier pollution than the northern outlet or than currently exists at Toowong and conditions resulting from traffic events (e.g. accidents, delays must be taken into account).	**B.8.5 / 1**

Submission No.		167	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Proposal to transport spoil by conveyor to the Mt Coot-tha Quarry poses a health risk to residents living north of Mt Coot-tha Road. It will result in noise levels during construction in excess of present levels at sites north of Mt Coot-tha Road. Dust levels may also be higher than present levels also unless the conveyor is adequately screened.	**B.3.6 / 1** **B.9.3 / 5**
2	IB 2.5.4 Tab 9.3 Tab 9.19 IB 9.2.2	Section 2.5.4 of the 'In Brief' states that the Mt Coot-tha conveyor would be enclosed to mitigate potential impact from noise and dust. Tabular data in Volume 1 indicate that this would be insufficient to reduce noise levels sufficiently. The data in Table 9-3 and Table 9-19 indicate that noise levels will be at least as high in volume as the current background noise levels of 51dBa during the day. As night-time tunnelling is proposed (Section 9.2.2 In Brief), the conveyor would be generating day-time noise levels when residents are sleeping.	**B.9.3 / 5**
3	Tab 9.18 IB 9.22 IB Tab 2	Table 9-18 shows that works in the [Western Freeway worksite] enclose, including spoil removal would take 14 months to complete, with operation anticipated to occur on a 24 hour per day basis. The likely noise levels will result in sleep deprivation for residents north of Mt-Coot-tha Road for the duration of the tunnelling operations.	**B.9.2 / 2**
4	IB Tab 5 TP 1	The EIS does not quantify the potential benefit of an express route from the Western Freeway to the Inner Northern Busway stations. Suggests giving preference to public transport and commercial vehicles using Northern Link by levying a proportionally higher toll on cars/light vehicles than on public transport (including buses). Suggests that a better solution would be to create a dedicated busway along the Western Freeway linking to the Inner Northern Busway.	**B.2.5 / 3**
5		Provision of on-ramps from Toowong to the tunnel would create significant barriers to pedestrian and vehicle movements between northern and southern areas of the suburb across Milton Road and Croydon Street. It would: 1. Increase the difficulty of access to Toowong school. 2. Require the closure of half of Quinn Park. 3. Create significant negative impacts on the neighbourhood and visual amenity of suburban Toowong.	**B.13.3 / 3** **B.13.3 / 4** **B.13.3 / 8** **B.13.3 / 13** **B.13.3 / 16**

		4. Lower quality of life for Toowong residents.	
6		The funds earmarked for the Toowong on-ramps could be better used on public transport infrastructure such as a busway along the Western Freeway. Hence the on-ramp proposal should be rejected in the overall evaluation of the Project's feasibility.	**B.2.5 / 2**

Submission No.		**168**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	The Toowong Connection will not be a benefit to the local Toowong community. 1. Cost benefit. 2. Restricted movement around the suburb from areas north of Milton Road. 3. Limited cycle access to Bicentennial Bikeway. 4. Congestion and disruption during construction.	**B.2.3 / 3**
2	5	My access to Bicentennial Bikeway for my twice daily commute to work in the city will not be safe if the Toowong connection proceeds - Croydon Street will be crowded with vehicles and unsafe.	**B.5.6 / 39**
3	8	No filtration on exhaust stack close to Botanic Gardens, homes and schools. The valley containing the Botanic Gardens and the quarry has variable winds. My house northeast of the quarry is already covered in grey quarry particulate so we can not rely on breeze to take gases in the opposite direction as drawn on the map. I suggest you filter the outlets and provide more exhaust stacks along the 'Link'.	**B.8.5 / 1**
4	8	Dust for three years of construction. The valley already suffers dust from the quarry so extra pollutants from exhaust stack will be unsafe and make areas a 'low amenity' area in a highly desirable area.	**B.8.2 / 1**
5	9	Noise levels from spoil conveyor affecting local residents.	**B.9.3 / 5**
6	13	My local access to facilities (i.e. tennis courts, both in Milton Road and Toowong State School) will be impaired.	**B.13.3 / 3**
7	13	Loss of only local petrol station.	**B.13.3 / 15**
8	14	The Toowong connection is far too huge a construction resulting in the old suburb of Toowong being divided and locals left with visual nightmare to live and move around in.	**B.14.5 / 1**

Submission No.		**169**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		We view the straight through tunnel option as a credible and innovative solution to removing transport from Milton Road and Coronation Drive through the city to the major transport routes and hubs beyond. The inclusion of the Toowong connection forms the majority of our objections. We question the prioritising of funds to include a Toowong connection in this project while many of the suburbs that generate traffic onto Moggill Road and the Western Freeway remain unserved by public transport that it not reliant on the road network. The process under which the project has been developed and the reference project design finalised have caused concern in the escalation of the scale of the Toowong local connection and the inadequacy of the community consultation.	**B.3.4 / 4**

		The benefits attributed to the Project are not applicable to the Toowong portion.	
2	5.7.7	The EIS and the reference design do not adequately describe any enhancement to pedestrian and cycling connectivity. As a recreational and commuter cyclists and having a child dependent on public transport to and from school, the Toowong connection makes this access more difficult. Design of the project should not include pedestrian and cyclist considerations as an afterthought, but make them an integral part of the project design. Many of the difficulties created by the current design would be mitigated by a reduction in the scale of the proposed Toowong connection.	**B.5.6 / 46**
3	5.6.9	Currently much of the traffic using Valentine Street uses the connection with Frederick Street. The changes proposed mean that all traffic must now access Valentine Street via Gregory Street past the front of our property. Suggests an upgraded footpath to the eastern end of Valentine Street as part of the project.	**B.5.6 / 34**
4	8.2.1	The EIS identifies our streets as a site for potential impact on air quality. The length of time of construction and the potential adverse impacts on our health and wellbeing are of great concern. The proposed construction site layout means our property is in close proximity to the wheel wash facility which should be incorporated into the noise reduction structures of the work site.	**B.8.1 / 1**
5	9.3.5 19	The proposed methods of reducing the impact of noise include retrofitting of window seals, closing windows and fitting secondary window systems. None of these options are in keeping with the age of our home or desirable.	**B.9.3 / 2**
6	14.6.2 14.5.7 14.7 14.8.3 14.8.4	The visual impact of the construction site to our residence is recognised in Section 14.6.2, with construction site hoardings suggested as mitigation. Hoardings would need to be 12 – 20 m high to provide some mitigation and would not protect from dust or noise. This chapter does not select a vantage point from the northern side of the Toowong connection. The project design show our home to have its view of green tin and timber suburbia replaced with a view of a noise reduction barrier and two multi layer flyovers.	**B.14.6 / 1** **B.14.5 / 3** **B.14.8 / 2**
7	1.7.3	At no time has there been consultation in this project, the proponent has accepted input from parties only as a means of determining mitigation from the effects of the project. This has been dissemination of information and these sessions have not resulted in consideration of alternative proposals.	**B.1.7 / 1**
8	App B App B Tab 1.8 App B Tab 1.13	During the consultation process, we provided feedback forms which never received a response. Table 1.8 states that the proponent's property team was available to provide advice on the impact of the project on property values, however this advice consisted of restatement that our value will rise due to proximity to improved infrastructure. Table 1.13 indicates the rejection of a number of alternative suggestions from the community, but this is a limited selection and does not detail the reasons. This table also indicates that the Toowong connection impacts are examined in detail in the EIS, but this information is not provided with/without the connection for comparison.	**B.1.7 / 2** **B.1.7 / 6**
9	ToR 2	Representatives of the proponent made it clear that alternative designs for the Toowong connection were eliminated at an early stage. No details have been provided for these deliberations. Alternative arrangements for the PPP are not explored. The EIS does not provide any detail of the rationale behind the project design, including any engineering limitations on the design of the Toowong connection. No alternative designs are provided, nor are alternatives suggested through the community consultation	**B.1.6 / 1**

		process mentioned. Suggests that the intent of the Terms of Reference be complied through the development of alternative solutions for the Toowong connection. These alternatives should then be subject to a detailed assessment against the current reference design. Suggests that the design limitations of the Toowong connection should be detailed in the EIS.	
10	ToR Part B 3	The [EIS preparation Guidelines - ToR] requires the proponent to ensure the EIS remains an objective assessment of the project. It is clear through deficiencies in the document that the proponent has downplayed the impacts.	**B.1.6 / 4**
11	3.1 3.2 3.3	No design option is considered for any alternate connection in Toowong other than from Croydon Street, with no consideration made of local connection portals in the vicinity of the Dean Street bus depot, or connection to MetRoad 5 to and from the North. This is a major flaw in the design. Suggests the reissue of the EIS conforming with the key principle detailed by the ToR.	**B.3.3 / 3**
12	ToR 4.1 5.2.8	The EIS in describing the existing transport network describes two sources of freight traffic within the study area. The traffic on Milton Road contains a much wider variety and quantity of freight than is described in the EIS.	**B.5.2 / 2**
13	5.3.3	Croydon Street is not described in the Transport Network Performance section (5.3) of the EIS despite it being a street heavily impacted by the project.	**B.5.3 / 4**
14	5.6.2 5.6.4 Tab 5.26 Tab 5.37	The forecast of traffic growth shown in table 5-26 appears inconsistent as it predicts a major (22%) growth of traffic at Moggill Road in Toowong without a commensurate growth in the local community forecast trip ends or traffic at the reporting points at Indooroopilly. This causes concern that the figures are inaccurate and inflated. This figure when it appears on Table 5.37 shows a sizeable decrease in traffic at this point with the project constructed.	**B.5.6 / 23**
15	14.8.1 14.8.2 14.8.4 TC1 TC2 TC3 TC4	This chapter includes predicted views of the project from a number of vantage points in order to demonstrate the visual impact of the project and the effect of various mitigation measures. The vantage points do not include views of the project from the northern side of Valentine Street. The photographs are misleading in terms of scale (TC1 - TC4). All the mitigated views show the expected appearance of the project once the planting of trees have grown to full maturity, but this could take twenty years or more.	**B.14.8 / 3**

Submission No.		**170**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	ToR 2.2 ToR 3.1 3.2.1 (p. 5) 3.2.2 (p 10) 3.3.3 (p.14)	The Consultation process has not gathered all the evidence required to satisfy the ToR and Sections 3.2.1-3. Very few, if any, local Toowong residents have been interviewed by the proponents in depth to ascertain what sort of travel options they are looking for. The only dialogue with these residents has largely been to get a feel for their feedback and then work out how best to either largely or totally ignore it.	**B.1.7 / 1** **B.1.7 / 2**
2	ToR 2.2 ToR 3.1 3.2.1 (p. 5) 3.2.2 (p 10)	One of the reasons I have been given for the need for the local connection at Toowong was to cater for increased traffic to the University of Queensland. I understand that their plans are to cap the number of car parks there to the current level and encourage students and others to use public transport options.	**B.2.2 / 2**

	3.3.3 (p.14)		
3	ToR 2.2 ToR 3.1 3.2.1 (p. 5) 3.2.2 (p 10) 3.3.3 (p.14)	It is highly disappointing in this age of concern with global warming that we are planning this local entry at a likely cost of $500M or more. Its likely effect will be to encourage more people to hop in their cars and drive.	**B.2.1 / 7**
4	ToR 2.2 ToR 3.1 3.2.1 (p. 5) 3.2.2 (p 10) 3.3.3 (p.14)	The impact on the suburb will be quite devastating. The loss of a large number of character houses and major division of the suburb - north and south of a ten lane motorway!	**B.13.3 / 6** **B.12.2 / 1**

Submission No.		**171**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	5	A 60% increase in Croydon Street traffic will reduce ability to cross these streets. There is a regular walking route for myself and many neighbours along this area which requires us to cross Croydon Street. Increased traffic on Bayliss Street will create increased safety and noise disturbance concerns.	**B.5.6 / 39**
2	13	Access from my neighbourhood to the Toowong school will be significantly impacted. The possibility of a child's death is increased due to the increased traffic on Croydon and Jephson streets. I will not be able to access local shops at the cat and the Fiddle shopping centre.	**B.13.3 / 16** **B.13.3 / 3**
3	14	The noise barriers proposed create a visual barrier and reduce aesthetics of the [Toowong] neighbourhood.	**B.14.8 / 5**
4		Please abandon the Toowong tunnel connection and proceed with the main tunnel only	**B.3.4 / 3**

Submission No.		**172**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	5	The EIS does not demonstrate effective planning for the significant increase in traffic which will be both: 1. Cutting through Toowong residential streets to access the tunnel. 2. Traffic exiting the tunnel which will be dumped in Croydon Street and prevented from directly accessing the major arterial road that handles through-traffic now - Milton Road. The rat running through residential streets will be out of control. This is contrary to TransApex Strategic Context Report evaluation's key network outcome of "a reduction in traffic in residential areas." It is also contrary to Brisbane City Council's Brisbane Long Term Infrastructure Plan objectives.	**B.5.6 / 11**
2	5	The local access tunnel will create a traffic delta where a large number of vehicles are dumped into Toowong on exiting the tunnel with no management for how this will be effectively moved through this residential suburb.	**B.5.6 / 18**

3	5	The traffic delta will work the other way too, where a significant number of vehicles from surrounding suburbs will now be travelling through Toowong residential streets to try to get to the tunnel, rather than funnelling to the arterial roads.	**B.5.6 / 18**
4	2	The proposition that the local access tunnel will benefit local residents is false. Local residents will not use the local access tunnel. For Toowong residents, access to the tax-payer funded and non-toll ICB is extremely good. Residents will have no need to use the local access tunnel and pay it toll. The only rationale evident for including the local access tunnel is an attempt to make the building of the main Northern Link tunnel more appealing to a private development partner, as it may provide a secondary revenue catchment area for their toll tunnel.	**B.5.6 / 2**
5	2	The proposed benefit of the local access tunnel does not compensate for the destruction of people's homes, Quinn Park and local amenity and quality of life. The local tunnel [at Toowong] 'will knock down people's houses and carve up an historic suburb for a commercial venture. The suburb will lose its amenity, heritage and future development possibilities...it will not be compensated for this loss by the building of the local access tunnel.	**B.11.4 / 1** **B.13.3 / 8** **B.13.3 / 13**
6	5	Preventing traffic from Croydon Street turning right onto Milton Roads - The EIS does not adequately discuss how local residents are supposed to access Milton Road. Are we supposed to rat-run on our neighbours in Cadell Street? This appears to be a deliberate strategy to channel local residents away from taxpayer funded and non-toll roads such as Milton Road and the Inner City Bypass and onto the Northern Link toll tunnels (both the local access tunnel and the Northern Link Tunnel).	**B.5.6 / 18**
7	5	Preventing traffic exiting the local access tunnel from continuing inbound on the major arterial road, Milton Road - Instead the EIS proposes that traffic will be dumped in he middle of Toowong via the planned Croydon Street 'Canyon' of expanded lanes and high sound barriers. Where to then? Onto residential streets, pathetic.	**B.5.6 / 18**
8	6	Western Freeway bicycle path and Sylvan Road bicycle lane. The EIS' provisioning of safe access for cyclists using the Western Freeway bike path and adjoining Sylvan road bike lane - which are used by hundreds of cycle commuters a day - is unclear and inadequate.	**B.5.6 / 5**
9	5	Pedestrian crossing Milton Road and Croydon Streets. The EIS' provision of pedestrian crossings for these streets is inadequate.	**B.5.6 / 39**

Submission No.		**173**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	The Toowong connection will not benefit the local community in any way. There will be more congestion on the roads leading to the link in Milton Road and Coronation Drive if the Toowong connection is built and that will be especially bad during construction.	**B.5.6 / 20**
2	5	There will be a greater volume of traffic in adjacent streets to the connection which will affect local access to schools and local services. Croydon, Jephson and Sylvan will become very busy streets. Bike access will be diminished in that area also as no access is provided for North Toowong and Auchenflower residents to join up to Sylvan Road.	**B.5.6 / 16**

3	14	The Toowong connection is unnecessarily huge and will impose negative visual and acoustic effects on the local community.	**B.14.5 / 1**
4	14	Insist on the preservation of residual land as green space when the project is finished.	**B.20.4 / 2**

Submission No.		**174**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	EIS All	The report as a whole doesn't justify the proposal to have a feeder onto and off the tunnel to and from Milton Road. The associated resumptions will disrupt lives that are all considered expendable.	**B.2.2 / 2**
2		The widening of Milton Road heading outbound up to Croydon Street is unnecessary. The road is wide enough now. The associated resumptions will adversely affect our property at 524 Milton Road. They are going to widen the road to put in a row of trees.	**B.4.2 / 8** **B.5.6 / 20**
3		The ventilators of the tunnels have no filters. People within a 5 km radius are considered expendable. The deleterious effect on our health will not be immediate and the powers that be are content to let us suffer this injury to our health that will be hard to prove.	**B.8.5 / 1**

Submission No.		**175**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The EIS states that it will compare the impacts of a tunnel proposal without local connections (at Toowong and Kelvin Grove) with a tunnel proposal that has those local connections. The EIS does not do this. No response has been received from Mr Justin Bold, the BCC's project manager of Northern Link EIS, since enquiries were made on 3 December 2008.	**B.3.4 / 4**
2		In relation to the "innovative PPP" proposal, it states at the very start of the report that a "no local connections proposal" is feasible. Clearly the proposal for local connections is intended only to make the project more attractive for private investment by increasing revenue from tolls. The local connections are the cause of major impacts with the community and the significant costs have been externalised from the financial impact of the proposal.	**B.1.3 / 2**
3		A letter from the Office of the Lord Mayor states that no final designs can be described until after the completion of the Tender Process for private involvement in the project. Therefore the EIS cannot be valid as it cannot assess the specific impacts of an unresolved design proposal that has a high probability of varying significantly from that published - it is not a preliminary or reference design rather it is one of several possible options.	**B.1.6 / 2**
4	3 (Croydon Street Option A)	It is probable that in a final design, the Toowong connection to Milton road would swing further to the east connecting with Croydon Street (Croydon Street Connection Option A). This would result in the loss of a valuable local centre and further urban disconnection within a small residential area. This has not been assessed in the EIS and the Preliminary Design proposal does not rule out such an option being put forward as a financially feasible option. Suggests that the EIS cannot be valid as the design may vary dramatically.	**B.1.6 / 2**
5	TP 15 (App A & B)	Appendices A and B for Technical Report No 15 - Economics were omitted from the website version of the EIS. Therefore full	**B.1.7 / 2**

		equitable access to all information has not been provided to all in a way that meets community expectations and normal contemporary standards. Suggests that equitable access to information within the EIS was not provided to all.	
6		The assessment of the urban design impacts is inadequate, possibly incompetent and misleading. The specific built elements are not shown in context and so their dimensions, scale and actual visual impacts cannot be understood and assessed (e.g. ventilation stacks). No bad views are shown, e.g. the view to the 10 lane part of Milton road. Grass and trees will not grow under the raised ramps. Tree plantings shown on Gregory street cannot occur as the footpaths are too narrow.	**B.14.7 / 4** **B.14.8 / 3**
7		The EIS does not investigate and address the impacts of the energy consumption and hence Carbon Dioxide emissions of the construction process and the ongoing operation of the system.	**B.8.6 / 1**
8		The community consultation process does not appear to have been properly carried out. Anecdotally, aged local residents are unaware of the visual, acoustic and air quality impacts on their homes. As an example, at a community consultation meeting, the existence of the Croydon Street connection was denied.	**B.1.7 / 2**
9		The EIS assumes a growth in vehicle use projected from past growth and current studies show this to be wrong. Peak oil will have a major impact on private vehicle use, as will community concerns about the environment and residential amenity and the ongoing increase in the density of cities.	**B.2.6 / 1**
10		The basis of the tunnel process, the exponential increase in vehicle use, does not take into account the potential for public transport to provide an alternative. Therefore the EIS rests on an assumption that is demonstrably questionable and therefore incomplete.	**B.2.5 / 2**
11		The proposal for a Northern Link is referred to and supported by the new Regional Plan, but this does not foresee local connections.	**B.11.1 / 2**

Submission No.		**176**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The lack of guidelines for pollutants does not mean that they do not pose a health risk for tunnel users. The methods used to monitor air quality may not be the most appropriate in terms of the quantities being representative of health risk. The commonly employed approaches are biased towards compliance with the National Environment Protection Measures. Current approaches may under-represent the impact on health of ultrafine particles and the effects associated with the short-term exposure and odour. People who live near tunnels or stacks may be at risk if the presence of the tunnel alters the ongoing quality of the neighbourhood ambient air risk. Of particular concern is an association between impaired lung development in children and traffic. The bus depot has already impacted on residents as a source of air pollution. The hilly nature of the area also suggests that air pollution may be trapped, including emissions from the stack in its current location.	**B.18.3 / 1**

Submission No.		177	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		I have concerns about the overall integrity and independence/impartiality of the process. It would be fairer to fund Citizen Action Groups to allow them to obtain their own experts on subjects such as noise and air pollution, than two consulting companies working with the BCC (who are committed to the project proceeding). For the CG to be fully informed, there should be an opportunity for a 'no' case to be presented, drawing attention through expert opinion of serious misgivings about the validity of the opinions which form the basis of the current feasibility study.	**B.1.6 / 3**
2		The example of BrisConnections and the inconsistencies between the feasibility study and the prospectus shows that the Northern Link process needs to be objective and transparent. However, at all stages of the project, the engineers and BCC have treated it as a given that the project would proceed.	**B.1.6 / 3**
3		The people of Brisbane are infrastructure out. Those living in the Kelvin Grove area have had major works frequently for 10 years. Most tunnels in Australia have been economic disasters and in some cases environmental nightmares. Rather than building more infrastructure, we should be restricting car parking in the CBD. Public transport systems should also be dramatically improved, with costs halved to encourage long term use. To build more roads is to lead to more traffic at a time when we are seeking to reduce carbon emissions.	**B.2.5 / 2**
4		The Inner City Bypass cannot cope with traffic loads at the moment, with frequent delays. The predicted traffic increases will further exacerbate this problem.	**B.5.6 / 6**
5		Public money would be far better spent increasing the quality and extent of our bikeways. In addition, the city needs time to assess the North South Bypass and Airport Link prior to embarking on this project, including what effects these new projects have on traffic and travel times. Delay will allow a better comparison between the projected cost and actual final costs of these projects.	**B.1.3 / 2**
6		Anecdotal accounts from local citizens would indicate that the longer a tunnel is, the less likely people are to use it, particularly if there is traffic at the end (e.g. from the ICB).	**B.4.1 / 1**
7	TP 8 IB	The site of the ventilation stack at Victoria Park Golf Course is surrounded by the hospital, schools, nursing homes, QUT and medium density and single density residences. Similar comments apply in relation to the ventilation shaft proposed for the western end of the tunnels. This is not aesthetically or environmentally acceptable. I challenge Dr O'Meara's assessment that there will be no or minimal impact on our environment by pumping out concentrated polluted air from a four lane 6 km tunnel in such a heavily built up, sensitive environment.	**B.8.3 / 4**
8		I object to the Toowong / Kelvin Grove connections. I have a direct interest in this as a large industrial shed (the eastern portal) would be constructed approximately 50m from my front door. My objections are the shed will be ugly, it cannot be sound proofed, and there will be considerable dust and noise, including reverse beeping trucks.	**B.14.5 / 3** **B.14.8 / 2**
9		The northwest end of Upper Clifton terrace is to be excavated to a distance of about 150 m. This means excavating into the side of a significant hill of solid rock with two apartment blocks and numerous houses demolished the process. There is no way the noise pollution and dust pollution can be minimised while that part of the project is undertaken.	**B.9.3 / 1**

10		A significant objection to the Kelvin Grove portal is that a 6 km tunnel terminates at a set of traffic lights. A traffic accident at the intersection of Kelvin Grove Road and Musk Avenue would have the potential to create a lengthy build up of cars unable to exit from the tunnel.	**B.5.6 / 4**
11	ToR par 2 (p. 4) Project Summary 1.6; 1.11; 12; 5.3.5 IB 2,4,1	To suggest the additional expense to the rate payers and the enormous permanent inconvenience to thousands of citizens can be balanced against "presently unrecognised benefits for Council and the community" smacks of a failure to appreciate precisely what the EIS objectives are.	**B.3.4 / 2**
12		I expect the Toowong/Kelvin Grove connections have been added to make the project more attractive to the toll concession holder rather than for genuine traffic flow needs. If the tunnel is built and western traffic is diverted to the ICB, this would make Milton Road and Coronation Drive more available for city bound traffic, lessening the need for the Kelvin Grove diversions. Suggests that the Toowong/Kelvin Grove connections will add significantly to the cost of the project for little benefit to road users and enormous detriment and risk to thousands of local citizens.	**B.2.1 / 8**
13		Residents of Aldersgate Court in Upper Clifton Terrace (a residence of elderly people) and many other locals walk down to the end of Upper Clifton Terrace, down a set of steps and cross at the lights to the new shopping complex in Kelvin Grove. The proposed worksite will treble the distance these elderly folk have to walk to get to shops, they do not have cars.	**B.13.3 / 5**
14		Give individual citizens and community groups access to funds to consult experts on air and noise pollution prior to the project proceeding Ensure a truly independent body is set up as a community monitoring measure to have regard to all complaints during the construction phase If the contractors intend any significant change from the plans contained in the feasibility study, it should be mandatory that there be further public consultation. Ensure ventilation shafts have filters fitted. Ensure noise barriers are visually attractive, erected at all times during construction and after completion of the project to current best standards.	**B.19.3 / 1** **B.19.3 / 2**

Submission No.		**178**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2.1 IB 2.4.1	The inclusion of entry and exit points at Kelvin Grove and Toowong will impact severely on the residents in these suburbs and will see the cost increase from $1.66 billion to $2.65 billion. The communities in Toowong and Kelvin Grove strongly oppose the inclusion of local connections and while the EIS document makes brief reference to this opinion, it chooses to dismiss it. The EIS document was prepared by consultants who had access to generous funding, while the public were not given access to any funds to present their case or engage expert advice. The preferred tenderer will not be bound by the reference design. The CG is called upon to be mindful of what communities are asking for, make statutory provision for what they ask and give them access to public funding for independent professional advice to present their case at all stages of the design, construction and operational aspects of the project.	**B.1.6 / 2** **B.1.6 / 3**
2	IB 4.3.3	The inclusion of the Kelvin Grove connections would see traffic	**B.4.2 / 17**

		discharging onto Kelvin Grove Road, which is already heavily congested. The intersection at Musk Avenue is of grave concern. Suggests that this intersection could impede traffic flow, discourage people from using the tunnel and be blocked by inbound traffic on Kelvin Grove Road.	
3		The worksite is to be situated at the end of my street, with smaller workstations along Kelvin Grove Road. 30 private properties will have to be resumed with enormous social and environmental impacts. Brisbane will lose more of its "tin and timber" homes and displaced residents will be unlikely to find similar homes in the vicinity.	**B.14.8 / 2**
4		The proposed excavation into the Hill will necessitate resumptions and impact on private property. The topography will concentrate dust, noise and fumes back up the hill. The size of the planned excavation is enormous compared to the local landscape and will mean three to four years of disruption to local people.	**B.9.3 / 1**
5	IB 8.4.3	Dust and soil deposits from the worksite will contribute to the deterioration of homes in the area. The proposed mitigations do not provide sufficient safeguards for residents.	**B.8.2 / 1**
6	IB 8.4.2	After hours spoil removal and work proposed are excessive and should be reduced. In addition, the entry/exit to the work shed should be redesigned to avoid the trucks having to reverse and the beeping noises this will cause.	**B.3.6 / 2** **B.4.3 / 5**
7		Noise and vibration due to surface and sub surface rock breaking, drilling and blasting and other construction works will impact heavily on the surrounding community. Noise barriers need to reduce the impact on local people and should be visually attractive and lessen noise reflecting back on residents to the west of Kelvin Grove Road. Suggest noise barriers to reduce the impact on local people. Suggest that local people be involved in the design of these barriers.	**B.9.3 / 7**
8		The volumetric property resumptions will reduce the value of property and would be perceived as a negative by potential buyers. In addition, during the construction phase, the visual impact of properties and their value will be compromised	**B.15.5 / 3**
9		In the local area west of Kelvin Grove Road, several residents in Upper Clifton Terrace will be unable to access Musgrave Road directly and will need to be diverted. Other diversions, such as Victoria Street, will result in rat running through small local streets. This will make it increasingly difficult to travel locally and will impact heavily in a community where streets are very narrow and on road parking at a premium.	**B.5.6 / 31**
10		The construction phase will see the removal of several large fig trees, other significant trees and shrubs which will affect the visual amenity of the whole area. Suggests consideration be given to immediate planting of large trees during the construction phase, with residents involved in this process.	**B.14.5 / 4** **B.14.6 / 3**
11		The project will impact on the land use in the area immediately west of Kelvin Grove Road, with loss of "tin and timber" homes and impacts on existing residential and leisure activities. Suggests planting a vegetation buffer zone, protecting the street character of Upper Clifton Terrace in particular and hiding noise barriers with appropriate landscaping.	**B.14.7 / 5**
12	IB 5.3.3	The NEPM monitoring protocol were not designed to apply to monitoring peak concentrations from major emission sources. The EPA will be adding ventilation outlets from road tunnels to Schedule 1 of the EPA Regulations as from January 1, 2009. Suggests rigorous scientific analysis of the statistics from air quality monitoring.	**B.4.6 / 4**

		Suggests that this scientific analysis is independent of the project proponent's views. Suggests that the scientific results are made available to the public. Suggests that the good health and best environmental outcomes for the community need to be assure.	
13	IB 8.5.4	The project design does not propose installation of filtration equipment in the tunnel or ventilation stack outlet, but rather for retro fitting in the future. The NSW experience should demonstrate that this should be done in advance. The cost of filtering in the tunnel and ventilation stacks pales in comparison to the future costs generated from a population suffering from ill health as a result. Suggest that communities should be given public funds to engage professionals in the air quality field to represent them Suggest the Coordinator General needs to give the highest priority to the health of people using the tunnel, local residents, school children, hospital patients and workers, regardless of cost Suggest that ventilation stack filtration and in tunnel filtration should be mandatory and in place and operational from day one of the tunnel opening Suggest that provision should be made for these systems to be maintained indefinitely.	**B.8.5 / 1**
14		Given the current worldwide financial situation, it would seem financially inappropriate for the PPP to undertake the more costly of the two options. This could lead to failure of the PPP and the public sector having to take on the burden of construction. The communities of Kelvin Grove and Toowong do not want the inclusion of local connections.	**B.1.3 / 2**

Submission No.		**179**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	8 IB 5.3.3 Tab 12	The locality of the venting outlets should be further away from housing and sensitive centres, such as St Johns Home for Aged Men and St Mary's Refuge for Women, which were not included in the EIS. No consideration of future tunnels (such as an East West link or Toowong to Everton Park) has been given, in terms of the generation of traffic exhaust and air pollution. The neighbourhood will experience in excess of double the predicted maximum ground level concentrations due to emissions relative to the northern outlet. Suggests additional investment in air quality filtration systems at the Western Outlet to ensure the local residents are not disadvantaged by having the tunnel here. Suggests the exhaust venting outlet be separated from the station as at the Northern outlet. Suggests that the venting shafts to the exhaust outlet be extended away from housing. Suggests an increased number of vent outlets along kilometres of tunnel between Toowong and Kelvin Grove.	**B.8.5 / 1** **B.8.3 / 2**

Submission No.		**180**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The Toowong connection is not required if the aim is to move traffic away from the city, including Toowong. If the objective is to move traffic from the Ipswich and Centenary Motorways to the	**B.3.4 / 3**

		airport, northern suburbs etc, Toowong would not be a necessary jumping off point. Presumably access to Toowong can still be achieved by electing not to enter the proposed tunnel.	
2		If you are going to build a ventilation tunnel, you need to have appropriate filtration. I would not want my children who attend St Ignatius at Toowong to suffer simply because the government was not prepared to follow health, safety and basic decency principles.	**B.8.5 / 1**
3		We can hear the motorway from our home during peak periods. I do not relish hearing it all night and day. We left Wishart to escape the Gateway night works for the same reason.	**B.9.1 / 1**
4		As a patron of the Toowong Botanic Gardens, I do not relish the invasion of its grounds by earth movers, etc for this project. The Gardens are designed to give people a place of quiet and greenery. I'm not sure resuming parts of the Cemetery and the Gardens count as maintaining a green belt.	**B.14.5 / 5**
5		As a regular user of the petrol station at the Toowong roundabout and the shops at the Cat and Fiddle Precinct, I would not appreciate their loss or lack of access to them.	**B.13.3 / 15**

Submission No.		**181**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		I wish to submit my strong concerns about the proposed ventilation outlet stack near Toowong roundabout. I am greatly disturbed to note that there is no filter planned for the outlet. Bad enough that we have to accept the Northern Link tunnel but to completely disregard our health, let alone our emotional wellbeing, with the omission of such a fundamental safety feature is beyond comprehension. Suggest inclusion of filtration for tunnel ventilation.	**B.8.5 / 1**

Submission No.		**182**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		We are against this proposal for the following reasons. It will divide the suburb, ruin the lifestyle of at least 57 households, wipe out two blocks of residential housing and turn our leafy inner suburb permanently into a concrete structure. Utilising existing infrastructure better - e.g. railway lines - build tunnels under these if there is a need. Suggests more efficient public transport, no cars allowed within city limits, use of bikes and train access every 500 m in city (underground system) and car parking at train stations (better managed system).	**B.2.5 / 2** **B.13.3 / 8** **B.13.3 / 14**

Submission No.		**183**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	8.5.3	The ventilation stack (W1) is not high enough to adequately disperse the pollutants from the tunnel in all weather conditions. A contour map of nearby streets shows the W1 stack is virtually level with some residential housing. As the temperature of the gas coming from the tunnel will be lower than the above ground surface temperature, the gas will have the tendency to fall to the ground. The suggestion that the tunnel will remove traffic from the	**B.8.5 / 1** **B.8.3 / 2**

		immediate area and therefore people will be no worse off is incorrect. Suggests the stack should be a similar height to power stations stacks, e.g. Swanbank (40 m height) or the EastLink tunnel in Melbourne (47 m). Suggests the emissions / tunnel gas be heated to at least 100c before being released via W1. Suggests the stack be designed for worst case scenario, e.g. fire in the tunnel. Suggests filters to remove dust should be mandatory.	
2		Who will enforce the Environmental Management Plan? The BCC has been polluting residents in Toowong from the bus depot and quarry and are not capable of self management.	**B.19.3 / 1**
3		Nearby residents will hear the ventilation noise from the W1 stack as the height is level with some housing in Wool street. The maximum exit velocity of 18 m/s is over 60 km/hr and this wind speed can be clearly heard.	**B.9.5 / 4**
4	13	The Toowong connection roadway does not allow easy and safe access for school children to cross the road. Crossings are required in a number of locations. The roadway divides the community and it inhibits children living in the Toowong school catchment area from walking to and from school.	**B.13.3 / 16**

Submission No.		**184**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		My issues are the increased traffic volume along Victoria Park Road and the safety impacts of this. Since the establishment of the Urban Village, Saturday markets and additional high-rise and low-rise accommodation has been introduced to the area, there has been lots of speeding and vehicle accidents in the area and right outside my house. Failure to make Victoria Park Road a cul-de-sac is life threatening.	**B.5.6 / 24**

Submission No.		**185**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	ToR 1.3.1	The EIS is designed to comply with the detail of the ToR, but is a shallow and deceptive marketing tool. The EIS fails to meet the community's expectation of professional engineering and scientific standards with specific reference to health and safety. No detailed environmental assessment information has been provided in relation to the straight through option. No alternative is available for assessment and the majority of the potential noise and vibration problems relate to the secondary entries/exits. Suggests a supplementary EIS should be submitted for the straight through option and clear comparisons for noise and vibration for the two options shown.	**B.3.4 / 4**
2	ToR 4.3 5.6.1	Operational noise and vibration estimates are subject to traffic estimates which may vary considerably. Night traffic needs to be considered. There is a degree of uncertainty over the long term traffic forecasts and related noise and vibration, as the EIS only considered average and peak flows for a best estimate scenario. From a noise impact perspective, night flows and resulting noise estimates that have not been analysed. An analysis based on one growth scenario and two year cases (2014 and 2026) is also	**B.9.5 / 3**

		inadequate. Suggests that a supplementary EIS should be submitted that takes into account low and high growth scenarios and also considered five year increments out to 2046. This work should also include night traffic so that a full range of possible night disturbance can also be estimated.	
3	ToR 5.1.1 6	The nature of the noise / vibration has a high impact on the level of sleep disturbance. Blasting which combines noise with vibration in an occasional frequency is the worst. The cyclical rock grinding of road-headers is also a disturbing pattern. A continuous rumble form a tunnel boring machine would be the least obtrusive. The EIS does not provide a level of technical certainty as to where the various excavation methods will be used. Suggests that more comprehensive geotechnical data should have been provided in Section 6 of the EIS. This should be used to provide more certainty on mining methods to be used. If several options are to be considered, then the evaluation of the noise and vibration impacts of all construction options should be reported.	**B.6.1 / 1**
4	ToR 5.4.3 9.1 (p.1)	For the purpose of this EIS, the Environmental Protection (Noise) Policy 1997 as discussed should have been replaced by the Environmental Protection (Noise) Policy 2008. The revised policy considers important issues such as hierarchy of controls and noise creep which are not adequately examined in the EIS. Suggests a supplementary EIS should be prepared that is compliant with the Environmental Protection (Noise) Policy 2008 and addressing issues such as hierarchy of controls, noise creep and maximum noise levels.	**B.9.2 / 6**
5	ToR 5.4.1 Tab 9.1	With regard to the Toowong access, there are very limited noise data collection points. These exclude areas such as Milton Road, Croydon Street and Jephson Street junction. As modelling has been formed from the limited sample points it might be concluded that they would produce inaccurate models. Experience with the North South Bypass Tunnel shows regular complaints about excessive noise and BCC has not discussed these problems and how Northern Link may improve noise management. Elevated ramps generate more noise and vibration than normal road surfaces. Suggests a new noise monitoring program should be conducted. This will redefine the baseline and the assessment criteria on which it is based to a realistic level. The noise model should be rigorously calibrated and verified and the model should also consider 'no secondary exit' options.	**B.9.1 / 1**
6	ToR 5.4.3 9.5	Baseline background noise level monitoring occurred between the 14 and 27 November 2007, during which time an unprecedented number of trucks involved in the Gateway Upgrade Project were using Milton Road. These additional truck movements have not been considered as abnormal in the baseline noise assessment. During this time, GUP has reported that an average of between 600 and 940 truck movements occurred at night. The impact of such a high number of truck movements would no doubt increase the normal traffic noise levels and from our investigations has not been considered in the EIS. Suggests a new noise monitoring program should be conducted now the GUP truck movements have ceased. This will redefine the baseline and the assessment criteria on which it is based, to a realistic level. Suggests putting truck movement restrictions on surface roads in residential areas such as Milton Road. If Northern Link goes ahead, night time truck movements should be restricted to the tunnel.	**B.9.1 / 1**
7	ToR 5.4.2 9.2.2 (p. 10)	Section 9.2.2 states that the "construction noise sources would begin to resemble a permanent rather than temporary feature of	**B.9.3 / 2**

		the noise environment." in contradiction on page 9-10, the document states the "proposed construction works are not permanent" and concludes therefore that a lesser level of requirement be imposed for assessing night-time levels. It seems that the EIS proposes the NIASP approach be adopted as this provides a lesser obligation on the part of council. Suggest that given the extended construction time, noise objectives should be the same for construction as for the operational phase. These objectives are unlikely to be achieved for the secondary entry / exits. The no secondary entry / exit option is recommended. If secondary entries are considered, real time monitoring and trigger levels for intervention should be applied.	
8	ToR 5.4.2 9.3	A range of improvements to reduce outside noise are identified as possible during the construction phase. While these may achieve the desired noise reduction, this is a significant imposition on local residences, particularly where Queenslanders are designed for outdoor living. The document makes no commitment as to which houses would receive these modifications and when. Suggest a definitive and specific commitment to noise / vibration monitoring and installation of household noise mitigation needs to be made based on accepted standards for permanent noise around residential dwellings. Relocation options also need to be well publicised, equitable and transparent.	**B.9.3 / 2**
9	5.4.2 Tab 9.16 Tab 9.17 Tab 9.19	The Tables 9-16, 9-17 and 9-18 identify the noise and vibration associated with different construction techniques. The study fails to go to the next step and define where each method will be used. Without this important information, the noise and vibration effects in specific properties cannot be estimated. Suggests geotechnical data needs to be incorporated into the study to resolve which method is used at what site. The principal noise and vibration issues are associated with the secondary entries / exits, so the no secondary entry / exit option is preferred.	**B.6.1 / 1**
10	ToR 5.4.2 9.3.3 (p. 35)	"Advance notification of the time, type and duration of noise intensive works" is unacceptable and irrelevant as a noise mitigation measure. Even with prior notification, avoidance of the noise by people living in residences in the region is not feasible, because of the extended duration of the proposed construction period. The proposal to "potentially" assist some residents to upgrade acoustic insulation is not adequately defined or committed to. Suggests noise levels must be maintained within accepted guidelines and where expectations are that it will exceed these guidelines it needs to offer adequate actual noise mitigation or relocation to local residences. The commitment needs to be clearly defined not generally made. The style of Queenslander houses limits the effectiveness of a number of mitigation options This work will be extensive and socially disruptive in the areas of the secondary entry/exits, so the no secondary entry / exit option is recommend.	**B.9.3 / 1** **B.9.3 / 2**
11	ToR 5.4.2 Tab 9.16 Tab 9.17 Tab 9.19 Tab 9.37 Tab 9.38	Tables 9-16, 9-17, 9-19, 9-37 and 9-38 indicate that a number of houses may be a risk from damaging or disturbing vibrations as a result of construction and / or operation of the tunnel. The problem is more widespread with secondary entry / exits. Disturbing vibration may be intermittent and should be measured by a data-logger attached to a series of geophones. Some should be cemented to bedrock to assess vibration on footings while surface geophones are used to detect surface vibration. Suggest houses at risk and where complaints are made need to have vibration monitoring and where the critical level is exceeded,	**B.9.5 / 5**

		a voluntary relocation option should be triggered. Suggest where blasting is to be undertaken, a predetermined blasting schedule should be advertised and exclude 7pm to 7am. Suggest pre and post tunnelling building condition inspections need to be undertaken in areas at risk of superficial and structural damage. Suggest professional geophysical services should be used to monitor and record ground vibration. The vibration effects will be more extensive and socially disruptive in the areas of secondary entry/exits, so this option is not recommended.	
12	ToR 5.4.3 9.2.2 (p. 12) 9 (p. 52) Tab 9.9	Given the sources of noise and vibration, it is most likely that heavy transport vehicles in the tunnel in its operational phase would contribute significant regenerated noise in houses at locations where the tunnel is at shallow depth. Because of the nature of the construction of old Queensland houses in the area, the level of regenerated noise would be expected to be higher than that for the typical slab-on-ground brick construction. The timber floors and walls would act like a diaphragm under vibration actions transmitted through the house stumps. Suggests a high level of internal noise and vibration monitoring using data loggers should be undertaken on houses that are potentially at risk. Trigger levels, based on table 9-9 of the EIS, should be established for voluntary relocation / purchase plans during the operation phase of the project and need to be included in the supplementary EIS. Policy and dispute resolution measures need to be implemented to ensure rapid, equitable and transparent resolution of conflicts.	**B.9.3 / 6**
13	ToR 5.12.2	Where traffic merges underground, as is the case with secondary entries, the risk of fire or explosion due to accidents or acts of terrorism is elevated from low to moderate. Any incident would affect the local community through emissions from the ventilation outlets as well as those motorists trapped underground. Reference should have been made to the "Guidance Note for Safe Design" published by the Australian Safety and Compensation Council that recommends hazards should be eliminated at the design stage.	**B.16.2 / 1**
14	ToR 5.13 (p. 41)	The EIS only identifies the hazards and should have identified risk and policy and procedures to monitor and implement remedial actions. The EIS makes little reference to the health and safety of construction workers, including tunnel workers. Persons 'at risk should be identified and given assistance in accessing medical services that would assist in monitoring for adverse affects, with an equivalent level of protection to mine workers.	**B.18.1 / 2**
15	ToR 5.13 18.6.1 9.2.2	Noise sleep disturbance is a particular risk, in that noise modelling results are subject to wide variation from atmospheric conditions. The nature of the noise / vibration has a high impact on the level of sleep disturbance. Blasting which combines noise with vibration in an occasional frequency is the worst. The cyclical rock grinding of road-headers is also a disturbing pattern. A continuous rumble form a tunnel boring machine would be the least obtrusive. The EIS does not provide a level of technical certainty as to where the various excavation methods will be used. Suggests an improved outcome may be achieved by implementing real time noise monitoring at sensitive sites. More comprehensive geotechnical data is needed to provide more certainty on mining methods to be used. Persons at risk should be identified and given assistance to access medical services that would monitor and manage adverse effects.	**B.6.1 / 1**
16	19 Element 6	The EIS acknowledges there may be exceedances and complaints but there is no discussion in relation to policy for optional relocation or optional property buy out related to disturbance or property damage.	**B.19.3 / 2**

		Suggests an independent community based tribunal be established with both technical and legal expertise to review monitoring procedures and assess the basis for compensation and relocation.	
17	ToR 9.2 App B Tab 1.11	The CRG was to be used as a means of selling the project and would have minimal impact on Project design. No formal minutes were kept and made available, although some notes were subsequently distributed. There was no opportunity to modify project design where the CRG identified design flaws. Suggests the secondary entries/exits are unnecessary and would have a significant negative impact on local communities in terms of access, traffic, land values, noise and vibration. The secondary entry/exit, particularly at Toowong, should be removed from the Project design.	**B.1.7 / 4**

Submission No.		**186**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Given the recent Airport Link share prices decrease, if the Northern Link project commences and then becomes financially embarrassing, then its completion will rely on further government funding.	**B.1.3 / 2**
2		The EIS does not address the possibility of a straight-through design, which gives one to wonder what exactly is happening, to what extent the reference design will be altered when the tender has been let, and to what extent, and more importantly by what criteria re-evaluation will be sought from the CG for amendments during the final design and construction stages.	**B.1.6 / 2**
3		Another issue of concern is the BCC is having valuations made of properties some months before the CG's evaluation will be conducted (with possibilities of changes to/revisions of the reference design) and at least a year before work will commence. This would appear to indicate that the project will proceed, despite any finding by the CG of significant effects on the community which might require a re-evaluation of the accuracy of the Business Case. In other words, there is probably truth in the commonly-held view in the community of "what's the use - it's a done-deal". This has led to a wide-spread community opinion that the EIS process can only result in "some mitigation of relatively minor effects, with very slim possibilities of reductions in major consequences."	**B.1.6 / 3**
4		I recommend that the CG should mandate that the project has an effective monitoring process, which involves community representatives, at all stages from final design to construction and initial operation.	**B.19.3 / 1**
5		I recommend that the CG should mandate that, where residents are affected by construction/operation, there is a process whereby individual/grouped residents can be supported by a 'Community Advisor' in their dealings with the proponent, chosen consortium, contractors and sub-contractors.	**B.19.3 / 2**
6		I recommend that the CG should mandate a process to enable individual/group appeals to be made against minor or major decisions, made by the PPP associates, which would bear too adversely on individuals or communities.	**B.19.3 / 2**
7		I recommend that the CG should mandate a set of criteria whereby the CG and the public (particularly those most affected) are able to examine and make submissions on proposed changes which lie outside the rulings and spirit of previous 'approvals' for	**B.1.6 / 2**

		this project.	
8		I recommend that the CG should mandate that all proposed changes falling outside the rulings and spirit of previous approvals for this project must be submitted for evaluation as for an original EIS, and consequently treated as such with public invitations for submissions.	**B.1.6 / 2**
9		I recommend that the CG should, before releasing the EIS for implementation, mandate that further research should be conducted into the whole question of the effects on community health arising from emissions from both vents, with a strong emphasis on site-specific implications, ultra-fine particulates and toxic materials.	**B.18.3 / 1** **B.18.4 / 1**
10		The reference design and the EIS do not consider the effects of topography and wind in very site-specific areas, which have the potential to create 'dead zones', where the emissions from the vents may be concentrated at much higher levels than those predicted in the EIS.	**B.8.1 / 3**
11		I recommend that the CG should mandate that the portals at the ICB be moved further away from the Victoria Park road/Normanby Terrace intersection, by another 400 m, to reduce the direct effects from the combined emissions from the ICB and the tunnels on residents living nearby.	**B.4.2 / 16**
12		Several types of vertical structure are illustrated [in the EIS], in an endeavour to mitigate noise while providing for some visual amenity; these structures allow considerable levels of noise to lift over and then down to the recipients. Suggests that a 'concave' barrier be used instead. Also suggests the use of totally-enclosed noise and emission barriers, effectively half tunnels, made of a clear/tinted plastic.	**B.14.7 / 3**
13		One has to consider the enormous lengths of time it has taken from smoking tobacco, asbestos mining and use in buildings, emissions at Mt Isa and Whyalla and coal dust to be accepted as severely hazardous by authorities [inferring that in years to come emissions will be considered severely hazardous and requiring filtration].	**B.8.5 / 1**
14		Several types of vertical structure are illustrated [in the EIS], in an endeavour to mitigate noise while providing for some visual amenity; these structures allow considerable levels of noise to lift over and then down to the recipients. Suggests that a 'concave' barrier be used instead. Also suggests the use of totally-enclosed noise and emission barriers, effectively half tunnels, made of a clear/tinted plastic.	**4.9.5 / 8**
15		I recommend that the CG should refer the issue of mitigating emissions and noise back to the proponent to reinvestigate and modify the EIS after considering the suggestions posited above in my submission [noise wall design, total enclosure of the ICB between Kelvin Grove Road and the ends of the NL transition structures, noise protection to Normanby Terrace at earliest time - before construction begins, cover ICB works site completely throughout construction}, and any others which will be more effective in mitigation, be less intrusive on amenity and be more attractive.	**B.9.3 / 13**
16		[Tree] plantings (and whatever other mitigations/ enhancements are in the final design) should be finished as early as possible, and preferably before major works are begun.	**B.4.3 / 2**
17		The EIS does not mention any covering over all or part of the actual construction site at the ICB connection (as opposed to that at the Kelvin Grove Road site, where a very large acoustic structure is proposed).	**B.4.3 / 5**
18		I recommend that the CG should mandate that the results from the re-investigation of emissions and noise sought in this submission	**B.1.6 / 2**

		be made the basis for a fresh reference design attempt, and then an invitation made for further submissions as if it were the original EIS.	
19		I recommend that the CG should mandate the need for all actual construction sites to be covered as early and as far as possible, to mitigate effects on nearby residents.	**B.4.3 / 5**
20		I recommend that the CG should mandate the effective community consultation, enhancements and improvements to local areas be undertaken as effectively and as early as possible, in the interests of health, safety and harmony, and that there be community involvement in the design of this and similar community-related consultation measures.	**B.19.4 / 1**
21		I recommend that the CG should mandate that effective and continuous monitoring and reporting systems be installed which are transparent, are seen to be transparent, and are operated by an independent authority.	**B.19.3 / 1**

Submission No.		**187**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Strongly disagree with the access link at Toowong. The project has serious flaws that need to be addressed. The EIS has serious flaws and is unbalanced. It has been undertaken by those with a self-interest in the development. The EIS does not show or prove the need for access at this point. The EIS shows that the access link is not socially or environmentally justifiable. However, the document conclusions are too unclear to highlight this.	**B.1.6 / 3** **B.3.4 / 2**
2		The tunnel makes sense on its own - to move traffic through the inner city areas without destroying them or creating a visual blight on leafy residential areas.	**B.3.4 / 3**
3		The ventilation stacks will emit huge amounts of car fumes out into the Botanical Garden and surrounding suburbs. The people in the Gardens and suburbs will be badly affected by the fumes and there should be filters on the stacks before cars are allowed to use the tunnel.	**B.8.5 / 1**
4		Just where will the traffic come from to use this access point? There is no discussion of future road development. How can congestion be eased by channelling more traffic into this area? It needs to bypass the inner suburbs.	**B.5.6 / 2**
5		Inner city living in this area will be badly affected as Toowong and Auchenflower would become a sprawl of roads to justify the access point.	**B.13.3 / 7**
6		The EIS does not address the impact on the social needs of the residents. Where are the benefits outlined?	**B.13.3 / 1**
7		Pedestrian crossings - Not enough provision for pedestrians to cross Milton, Croydon and Frederick streets.	**B.5.6 / 38**
8		The cemetery can not be altered as it is 'heritage' yet the area in front of the cemetery will be irreversibly damaged. Access to the cemetery will be seriously curtailed. What provision will be made for this?	**B.12.2 / 3**
9		Rat running will increase.	**B.5.6 / 18**
10		Why is there no connection or discussion of bus routes and development of public transport? The EIS only looks at the cars and not the people.	**B.5.6 / 37**
11		Access to local amenities will be seriously curtailed. The Cat and Fiddle, parks and schools will be more difficult to access	**B.13.3 / 3**

12		Loss of park space and access to park space made more difficult.	**B.13.3 / 15**

Submission No.		**188**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The proposed secondary local access and associated road works in Toowong are in broad conflict with: 1. Relieving inner suburbs of traffic congestion. 2. Maintaining liveable and attractive residential spaces for inner city living. 3. Maintaining the character of current attractive residential areas of the city.	**B.13.3 / 8** **B.13.3 / 6** **B.5.6 / 11**
2		The EIS does not show any rationale for this access link. The access link is in conflict with the EIS objectives and there is no convincing argument for it. Just where will the traffic come from to use this access point? There is no discussion of future road development that will be a requirement if this access point is to be used. Any further road development would destroy Toowong and Auchenflower as a residential area.	**B.2.3 / 4** **B.5.6 / 2**
3		The EIS is not a balanced or independent assessment as it was undertaken by agents who will benefit from the development and who have designed the scheme. The EIS is too narrow in its assessment. It does not extend to a thorough assessment of the future and the various scenarios for the alternatives.	**B.1.6 / 3**
4		For the access link there was: 1. No convincing or substantiated analysis of the basis for access at this point. 2. No analysis of the future impact of the 'with' or 'without' access options. 3. No information of what the socio-economic costs would be of such an option and the assessment being extended to other options such as efforts by Council to reduce traffic in the inner-city. The EIS actually shows that on balance the access link is not socially or environmentally justifiable. However the document's conclusions are too wishy-washy to highlight this.	**B.3.4 / 4**

Submission No.		**189**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	ToR 5.13 (p. 41)	A childcare centre within the study area needs to be chosen and monitored for effects of air quality before any tunnel ventilation shafts begin operation to offer a comparative before and after scenario to monitor the health of this important population sub-group. This has not been done to date. The health of sample children should also be monitored.	**B.18.5 / 1**

Submission No.		**190**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		When trucks start using the tunnel the emissions dispersed from	**B.8.5 / 1**

		the ventilation outlets will have a very bad impact on air quality. The design of the ventilation system must include a filtration system right from the start.	

Submission No.		191	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		I will no longer have safe access to my property at 39 Croydon Street due to increased traffic and the widening of Croydon Street. I would like consideration to be given to providing a slip lane for safe access.	**B.4.2 / 9** **B.5.6 / 33**

Submission No.		193	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		With BCC having valuations made, of potentially affected properties, months before the CG's evaluation can be expected it would appear to indicate that the project will proceed, even if the CG finds significant adverse impacts on the community. In other words, there may be some truth in the commonly held view of the community of "what's the use - it's a done deal".	**B.1.6 / 3**
2		The EIS does not address the possibility of a 'straight through' design which questions what is actually happening; to what extent the reference design will be altered when the tenderer is chosen and importantly by what criteria re-evaluation will be sought from the Coordinator General for amendments during the final design and construction stages. Recommend that the project has an effective monitoring process which involves community representatives from final design to construction and initial operation. Recommend that residents affected by construction/operation can be supported by a 'Community Advisor' in their dealings with the proponent. Recommend that individual/group appeals can be made against decisions made by the Public Private Partnership associates, which would bear too adversely on individuals or communities.	**B.1.6 / 2** **B.3.4 / 4** **B.19.3 / 2** **B.19.3 / 1**
3		I recommend that the CG mandate a set of criteria whereby the CG and the public are able to examine and make submissions on proposed changes which lie outside of the rulings and spirit of previous 'approvals', and that all such proposed changes must be submitted for evaluation as for as original EIS and consequently treated as such with public invitations and submissions.	**B.1.6 / 2**
4		Much consideration is given to the proximity of schools/kindergartens/QUT to the ventilation stacks with regards to community health. Nothing is said about those living permanently near the exhaust vent. Another recommendation is that the ICB portals be moved another 400 m away from the Victoria Park Road/Normanby Terrace location to reduce direct effects on residents.	**B.4.2 / 16** **B.8.5 / 1** **B.8.3 / 5**
5		The EIS does not consider the effects of topography and wind in very site specific areas which have the potential to create 'dead zones' where the emissions from the vents may be concentrated at much higher levels than those projected.	**B.8.1 / 3**
6		No assurance is given in the EIS that there will be no situations when levels at such locations will not exceed those considered as 'safe' over a very long time by the EIS's own standards.	**B.8.1 / 3**
7		Concave noise barriers should be constructed instead of vertical	**B.9.5 / 1**

		barriers as noise is able to lift over the top of these barriers. This will go further to mitigating noise and road emissions insofar as residents living along/near major roads and portals are concerned.	
8		Planting and mitigations/enhancements should be finished as early as possible and preferably before major works are begun.	**B.14.6 / 3**
9		If the project is commenced and then becomes financially embarrassing (due to economic situations), then its completion will rely on further governmental funding. These monies will come from one or more governments which means that there will be environmental effects because public funds will have to be diverted from other causes, raised by borrowing or deducting from budget surpluses.	**B.1.3 / 2**
10		Sympathetic and effective monitoring and consultation are the key themes to minimising strong public feelings of anger, disappointment and general feelings of frustration at having been let down by its elected representatives, and potentially by the outcomes of the BCC Tendering process. For many of us and our families, this will be the greatest single disruption ever to our lives, and its effects will be felt forever on these communities.	**B.19.3 / 2**

Submission No.		**194**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The EIS does not address the desirability and feasibility of the straight through tunnel separately from those of the optional connections at Toowong and Kelvin Grove. It therefore fails to justify the preferred option of a design which incorporates both optional connections. Given that the objectives of the tunnel can be achieved without the two connections and that the Toowong connection will have severe negative effects for the local community in terms of traffic patterns, property resumption and value, and public amenity, it would appear that the EIS should address all options separately. It fails to articulate the need for a Toowong connection.	**B.3.4 / 4**

Submission No.		**195**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2.1 (p. 1) 1.3.1 (p.6) 3.4.1 Tab 3.3 (p. 11) ToR	The need and justification of the proposal for the two parallel tunnels between the Western Freeway and the Inner City Bypass will have quite different arguments in regards to: • The national, regional and local strategic context. • As Chapter 3, Table 3.3 suggests the benefits, costs and impacts of construction are substantially different with and without each of the optional connections. From this basis alone, under the ToR it is clear that within the EIS the main project proposal (and each of the optional connections) should be set out under separate frameworks based on separate arguments in regard to their need and justification. These two connections need to be argued not just on their relevance to the Northern Link proposal but also the relevance of their location to the Toowong connection and the future East-West tunnel component of the larger AusLink road network framework.	**B.3.4 / 4**
2	2.1 2.1.1 (p. 1)	Northern Link is identified as a lesser element of the AusLink road solution within the larger complex road/rail and intermodal connection solution for people and freight connectivity. Northern Link and the other AusLink road projects will only provide part of	**B.2.1 / 1**

		the transport solution. The EIS needs to clearly identify and justify its need by identifying how it fits into the larger more complex road/ rail and intermodal freight and people connectivity. Simply arguing that these strategic policies support the need for this particular solution is simplistic and does not deal with the broad and contradictory nature of these policies.	
3	2.1 2.1.1 (p. 1)	Even if you include the 'draft CityShape Implementation Strategy' and the location of Local Growth Management Strategy (LGMS) areas of Toowong and Indooroopilly, it does not support the need for a local connection at Toowong via Croydon Street. The EIS needs to demonstrate how the Northern Link proposal will not induce further car use - in particular the Toowong Connection component. The EIS also needs to demonstrate that the need for the Toowong Connection is not simple an ill thought out short-term costly connection when you take into consideration the East-West tunnel.	**B.2.1 / 6** **B.2.2 / 2** **B.3.4 / 2** **B.3.4 / 4**
4	2.1 2.1.1 (p. 1) 5.5.1 (p. 71)	The contradictory nature of the rationale for Northern Link with the Toowong connection becomes even more obvious when it is assessed against the need to meet the Commonwealth 'Carbon Reduction Scheme' Target for Transport. Section 5, page 5-71 of the EIS forecasts a growth in weekday vehicle trips from 2007 - 2026 of 34%, including a 48% increase in commercial heavy vehicle trips, while only a 3% increase in Public transport. The EIS needs to demonstrate why the implications of the Carbon Reduction Scheme have not been included in the Project Rationale Alternative options argument. Providing proper consideration to the need to meet the carbon reduction target would provide a greater rationale for the need for an alternative that is more greenhouse gas friendly.	**B.2.5 / 11**
5	2.1 2.1.1 (p. 1)	This project is not simply focused on connecting people, but is substantially framed around the movement of freight. The EIS needs to demonstrate if it has factored in this increase in freight in their modelling. And, to what extent was an increase in rail freight and intermodal systems factored into the Project Rationale Alternative options scenarios argument.	**B.2.5 / 11**
6	2.2.1 (p. 2-3)	The AusLink network identified Northern Link as a secondary freight route. While this may support an argument for the Northern Link optional connection to the CBD, it does not support the need for a Toowong connection at Milton Road into Croydon Street.	**B.2.2 / 5**
7	2.2.1 (p. 2-3)	Toowong may be classed as a 'Major Activity Centre' but Indooroopilly is the 'Principal Activity Centre'. It would be far more logical to have the optional connection connect to Indooroopilly via a tunnel from the Centenary Highway, before Northern Link tunnel connection. This would provide a far more long-term functional link than the future proposed 'East- West Link'. From a cost/benefit analysis, a tunnel from the Centenary Motorway to Indooroopilly would be significantly offset by the savings from savings achieved from the deletion of the Toowong Connection and subsequent upgrades of local connection roads.	**B.2.1 / 6**
8	2 (p. 1-2)	The EIS states "The network is intended to support national economic growth.....and improve transport productivity on nationally strategic and export-oriented freight corridors". [2.1.1] If the scenarios were to be offered as a feasible alternative within Chapter 2 Project Rational, they would have to be combined into one scenario. This would allow the alternative scenario to reduce private motor vehicle trips through framework of the first scenario, while optimising the utility of the existing road network to support freight movements. Even if it is argued that Northern Link , as part of the AusLink road network is essential for freight movements from the western corridor to the trade coast , this does not stack up when assessed against the projected increases in Brisbane freight movement.	**B.2.2 / 4**

Submission No.		196	
Issue No.	EIS Reference	Issue Summary	Response
1	13	Loss of safe access to bikeway on Coronation Drive [Bicentennial Bikeway] from past Jephson Street.	**B.5.6 / 39**
2	13	Loss of a large portion of Quinn Park including a historic monument.	**B.13.3 / 13**
3	13	Loss of pedestrian access to all local shopping centres and major public transport corridors due to changes to intersections at both ends of Croydon Street.	**B.5.6 / 39**
4	13	Loss of pedestrian access to cemetery, Botanic Gardens and Mount Coot-tha.	**B.13.3 / 3**

Submission No.		197	
Issue No.	EIS Reference	Issue Summary	Response
1		Access for residents in the Federal Street and adjacent street area will no longer have vehicular access to the Kelvin Grove shopping centre which will significantly and adversely impact business owners.	**B.4.2 / 19** **B.5.6 / 31**
2		The access points to these streets [streets bounded by Musgrave Road and Kelvin Grove Road] will now only be Windsor Road and Musgrave Road. Both these roads are major incident areas due to blind spots and/or large traffic flows. The result will be a large reduction in value of properties in this area which will be a direct result of the action proposed.	**B.13.3 / 11** **B.15.5 / 1** **B.5.6 / 53**

Submission No.		198	
Issue No.	EIS Reference	Issue Summary	Response
1	2 13	Toowong connection isolates and 'discommunicates' all factions of our local community - elderly will be disadvantaged, schools will be harder to get to, local centres and businesses will suffer.	**B.13.3 / 3**

Submission No.		199	
Issue No.	EIS Reference	Issue Summary	Response
1	5	There will be a huge increase in traffic on local streets. Local facilities (i.e. Toowong Shopping Centre) will be a lot more difficult to get to and traffic will be more congested. There are already too many 'rat runs' through local streets and the proposed Toowong connection will encourage more of this.	**B.5.6 / 11**
2	8	The ventilation stack is close to homes and dust and pollution will spread over valley. There is no filter system on stacks.	**B.4.2 / 22** **B.8.5 / 1**

Submission No.		200	
Issue No.	EIS Reference	Issue Summary	Response
1	2	Northern Link is to ease congestion on Milton Road and Coronation Drive; however, the Toowong access will only induce more congestion and traffic. People who live in Toowong already have to put up with huge volumes of traffic, it isn't fair to put even more thoroughfares here.	**B.5.6 / 11**
2	2	I work at Toowong State School and catch the train every day. If more people were encouraged to do this, we wouldn't need to turn Brisbane into a motorway city.	**B.2 / 1**
3	2	The access tunnel would separate the school from most of Toowong by a 10 lane road. We don't need it or want it.	**B.13.3 / 16**

Submission No.		201	
Issue No.	EIS Reference	Issue Summary	Response
1		The community was not even consulted. We were simply given the end product as a done deal.	**B.1.7 / 1**
2		Too bad about the people whose homes will be resumed.	**B.13.3 / 10**
3	14	The Toowong connection is over-sized for its supposed benefits. Negative visual impacts as well as noise and air pollution will occur during construction and operation.	**B.8.3 / 3** **B.9.3 / 1** **B.13.3 / 8** **B.14.5 / 2**
4	14	The urban design around Toowong should be traditional in style, not ugly motorway constructions.	**B.14.4 / 4**

Submission No.		202	
Issue No.	EIS Reference	Issue Summary	Response
1	2	The project will wreck the local character and green environment reducing liveability [for Toowong].	**B.13.3 / 8**
2	5	There will be too much traffic in the already clogged Jephson Street/ Sylvan Road area	**B.5.6 / 16**
3	8	Concerned about greenhouse gasses and pollution and dust during three years construction.	**B.8.2 / 1**
4	8	The western ventilation stack will be right in front of our house and we are allergic to dust.	**B.3.5 / 1** **B.4.2 / 22** **B.8.5 / 1** **B.18.3 / 1**
5	9	[Concerned with] noise and vibration during construction.	**B.9.3 / 1**
6	13	One-third loss of Quinn Park.	**B.13.3 / 13** **B.14.5 / 1**
7	14	Character of the area will be severely damaged – reduced liveability	**B.13.3 / 8**

Submission No.		203	
Issue No.	EIS Reference	Issue Summary	Response
1	13	Loss of necessary amenities such as the service station and tennis courts, as a result of the Project.	**B.11.4 / 1**
2	13	I don't want Toowong divided by a 10 lane road. Not only would we lose existing facilities through resumption, but other facilities would be harder to get to, especially on foot or by bike.	**B.13.3 / 3**

Submission No.		204	
Issue No.	EIS Reference	Issue Summary	Response
1	2	[The Toowong connection provides] no benefits for the local community.	**B.3.4 / 2**
2	5	The Project will cause huge traffic congestion, increase rat-running in the area and diminish bicycle access. No Bike access to Sylvan Road Bikeway.	**B.5.6 / 18**
3	8	Concerned about greenhouse gasses and pollution and dust during three years construction.	**B.8.2 / 1** **B.8.6 / 1**
4	8	The Ventilation stacks are not filtered and will be ugly and polluting.	**B.8.5 / 1** **B.4.2 / 22**
5	9	The project will increase noise and pollution in the surrounding area.	**B.8.2 1**
6	9	Ugly barriers in Croydon Street.	**B.14.6 / 1**
7	13	The project will create a division of Toowong - Oldest community in Brisbane.	**B.3.4 / 2**
8	13	Access to services (Petrol station, Cat and Fiddle, etc.) will be inhibited.	**B.13.3 / 3**

Submission No.		205	
Issue No.	EIS Reference	Issue Summary	Response
1	2	The project will be a disruption to locals and will divide the community.	**B.13.3 / 4**
2	2	The project will increase noise and pollution.	**B.8.2 / 1**
3	5	The project will increase rat-running in our area.	**B.5.6 / 18**
4	8	Visual of ventilation stacks will be ugly and dirty.	**B.14.8 / 4**
5	13	The project will inhibit access to our services - petrol station and bakery etc.	**B.11.4 / 1** **B.13.1.3 / 3**
6	14	Our character housing and parkland will be destroyed.	**B.12.2 / 1** **B.14.4 / 4**

Submission No.		206	
Issue No.	EIS Reference	Issue Summary	Response
1		The design of the Toowong entry in its current form is not	**B.3.4 / 2**

		supported and should be removed. The desire to provide a direct access from Northern Link to St Lucia is flawed.	**B.5.6 / 11**
2		The urban design analysis is selective, ignoring key qualities and aspects of the neighbourhood. The way the community is able to use the neighbourhood has not been understood. This has resulted in an extremely poor design of the entry with catastrophic impact on the local community, unprecedented within Brisbane.	**B.14.4 / 3**
3		The widening of Croydon Street and Milton Road with 6 - 10 lanes of traffic is unacceptable through the centre of a neighbourhood in Brisbane.	**B.14.4 / 3**
4		Crossing Milton Road and Croydon Street to shops and to schools will be extremely difficult and will compromise pedestrian safety.	**B.13.3 / 3**
5		The overpasses are visually intrusive with major noise impacts. No landscaping, artwork or design theming will adequately mitigate these impacts.	**B.9.5 / 3** **B.14.5 / 1** **B.14.7 / 4**
6		Quinn Park is reduced in size, edged to the north by an 8m high acoustic wall with overshadowing impacts.	**B.14.5 / 1**
7		The parks provided by the roadworks are in residual spaces left over after the road construction in undesirable locations next to the road infrastructure.	**B.11.4 / 3** **B.20.4 / 2**
8		The imagery of the road views only shows trees, a freeway in a landscape, not an integral part of a neighbourhood. There is little reference to the existing place.	**B.14.8 / 3**
9		The residential amenity on Valentine Street is destroyed.	**B.13.3 / 8**
10		A large swathe of freeway infrastructure through the middle of this established neighbourhood with significant visual impacts from the number of lanes, size of acoustic treatments, overall width and scale and extent of flyovers.	**B.13.3 / 8** **B.14.5 / 2**
11		Pedestrian crossing at the Milton Road/Croydon Street/Morley Street intersection is severely compromised.	**B.5.6 / 39**
12		Major impact on residential uses. Frontages to a 6 lane road and high acoustic wall.	**B.13.3 / 2**
13		Quinn Park is significantly reduced in size and overshadowed by high acoustic screens making it less usable and less accessible.	**B.14.5 / 1**
14		A new park on the corner of Milton Road and Croydon Street opposite the shops can link into existing playing fields and open space but has poor urban interfaces and is hidden behind a high acoustic wall.	**B.11.4 / 3** **B.20.5 / 2**
15		Other proposed parks along Milton Road and Croydon Street are on residual land in poor locations edged by high acoustic walls and freeway flyovers.	**B.20.4 / 2**
16		Absolutely no improvement to safe pedestrian crossings at the Toowong roundabout.	**B.13.3 / 4** **B.5.6 / 40**
17		The Reference Design cannot be made into an acceptable design in its current location and form and should be abandoned.	**B.3.4 / 2**
18		The tunnel is very close to the surface until well past Thorpe Street and the extent of noise and vibration impacts has not been properly identified.	**B.4.2 / 3**
19		The boundary for the study area should be made smaller and moved to the west of Frederick Street. This means that any local Toowong entrance is west of the Toowong roundabout.	**B.3.3 / 3**
20		If any alterations are made to Milton Road, Croydon Street, Sylvan Road, Miskin Street, they should be re-formed as urban boulevards with appropriate street trees, footpaths and development fronting and overlooking the street.	**B.14.4 / 1** **B.14.7 / 1**

21		Recommended that Cycle-ways are included along Milton Road and Croydon Street linking the western freeway cycleway to the river through the centre of the neighbourhood.	**B.4.2 / 14**
22		The Toowong roundabout should be reconfigured as a signalised intersection to allow safe pedestrian and cycle crossing (the fly over could remain, if necessary).	**B.4.2 / 5** **B.5.6 / 40**
23		Additional signals should be incorporated along Milton Road near Gregory Street to enable safe pedestrian access to Quinn Park and access to Toowong primary school.	**B.5.6 / 38**

Submission No.		**207**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		I believe the exit roads from the tunnel at the Kelvin Grove connection would create a permanent traffic hazard and continual traffic jams as Brisbane traffic continues to increase.	**B.5.6 / 4**

Submission No.		**209**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	Newsletter Dec 07	Agree in principle with the straight through option, but strongly oppose the Toowong local access tunnel.	**B.3.4 / 3**
2		Do not believe that affected residents were consulted in an adequate or timely manner with respect to being notified of the likely scale of the Toowong local access tunnel. The Dec 2007 Northern Link newsletter identified an 'indicative construction area' which is vastly different to the reference design. As a result, we did not nominate to be on the Community Reference Group but when we found out about the extended study corridor boundary, we and our neighbours asked to join the CRG but were denied. Given the changes, further places should have been made on the CRG or a further group should have been formed to allow those affected by the new plans to be sufficiently represented.	**B.1.7 / 2** **B.1.7 / 4**
3		Distribution of brochures to residents was made via letter-box drops and sometimes delivered in plain, unaddressed envelopes. Given the level of impact to residents, it would have been appropriate for landowners to have been notified by personally addressed letters (these were only received after signing up to the mailing list). As such, owners of greatly impacted properties who do not reside in those houses were not notified at all and it was left to neighbours to try and contact the owners and advise them. The consultation process was flawed and denied residents and landowners sufficient opportunity to make representation and provide input into the project planning process.	**B.1.7 / 2**
4	2.5.3	The Toowong local access tunnel encourages more traffic onto Croydon Street from Moggill Road and from the University of Queensland thereby increasing congestion including near Toowong Village, adversely affecting this commercial and retail centre.	**B.5.6 / 16**
5	2.5.3	The Toowong local access tunnel reduces the capacity for, and appeal of, pedestrian or cycle access cross Milton Road thus inducing more vehicular traffic. The flyovers and widening of Milton road and Croydon Street obstruct access to existing cycle ways.	**B.5.6 / 39**

6	2.5.3	The Toowong connection changes the current sustainable urban environment to an arterial hub dividing the community and impacting accessibility.	**B.13.3 / 4**
7	2.1.3	The Toowong local access tunnel divides the community and destroys local heritage and otherwise significantly adversely affects the community.	**B.13.3 / 7** **B.12.2 / 1**
8	2.1.3	Current pedestrian access across the south-western (Milton Road) side of the Milton Road/Croydon Street intersection (the crossing closest to proposed bus stops) has been reduced to a cumbersome three-way crossing, forcing pedestrians to cross 3 roads instead of one.	**B.5.6 / 39**
9	2.1.3	No measures have been taken to provide a pedestrian crossing across Milton Road between the Croydon Street and Frederick Street roundabout.	**B.4.2 / 13**
10	2.1.3	Given that the existing Milton Road outbound bus stop will be removed, pedestrians will avoid walking back to Milton Road, to the only (albeit cumbersome) designated crossing, instead of making unsafe crossings.	**B.13.3 / 4** **B.5.6 / 37**
11	2.1.3 2.4.1	Any economic benefits to the community are outweighed when taking into account the cost of the project and the social costs to the community and financial costs to business. Effective and empirical assessment of the straight-through option of the project is impossible without data to illustrate the impacts of this option.	**B.3.4 / 4**
12	5.5 5.6	The 60% increase in traffic volume on Croydon Street and 27% increase on Jephson Street will impede local pedestrian access and access to local businesses. This is completely unnecessary if only the straight-through option is implemented.	**B.5.6 / 39**
13	IB 5.7.2	We strongly object to the opinion that Croydon Street is visually unappealing.	**B.14.4 / 4**
14	13.3.4	We submit that the Toowong local access connection is over-scaled, divides to community, imposes significant visual impact and on the whole represents a huge negative impact to the community for a relatively very small gain.	**B.14.5 / 2**

Submission No.		**210**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	Problems with access and connectivity to community services in Toowong area.	**B.13.3 / 3**
2	14	Community will be divided by the tunnel and access roads. Only access to Botanic Gardens will be by footbridge now under construction.	**B.13.3 / 3**

Submission No.		**211**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	1.3	We support the basic 'straight through' Northern Link tunnel project i.e. without any Toowong Local Connection. We understand that this: • Will contribute to the creation of improved national road infrastructure. • Will meet the Project objectives.	**B.3.4 / 3**

		• Is the 'Best Business Case' (according to quotes from the Lord Mayor in media over the past few months). • Will benefit the Toowong community - not harm it. • Will free up funds for other major infrastructure projects (e.g. public transport) that would otherwise be consumed by Toowong Local Connection.	
2	1.3	We strongly object to the proposed Toowong Local Connection which should be deleted from the project because: • It is contrary to several State and Local government policies. • The assumptions in the EIS with respect to future traffic behaviour are questionable, particularly with regard to the escalation in oil price. • Impacts and costs on the Toowong community and environment will be too great and cannot adequately be mitigated. • The benefits reported are questionable and do not outweigh the costs. • The EIS does not seem to provide information comparing impacts, costs and benefits of the Project 'without local connections'.	**B.3.4 / 4** **B.11.1 / 2**
3	1.3 PAR 6.2 (p 39-40) PAR 6.3 (p. 41)	The Toowong community - its valued character, heritage, sense of place and sense of community would be profoundly impacted upon for what is an absolutely marginal benefit to future traffic conditions on Milton road and Coronation Drive combined. The marginal benefit of -3% is within typical range of modelling error so it is questionable. We can only conclude that the primary proponent - our Council - is keen to pursue the local connectors to attract more traffic through the tunnel. The more traffic that can be attracted, the more the private sector might be attracted to enter a PPP arrangement.	**B.2.1 / 8** **B.13.3 / 1**
4	1.3 (p. 6)	Appendices from Technical Report 15 Economic Assessment were not provided on the website.	**B.15.9 / 1**
5	EIS all TP all	We are deeply concerned that the EIS is biased in favour of the reference design - it is not a balanced assessment of the Project for the following reasons: • The EIS overstates the benefits and in some cases appears to avoid discussion of negative impacts. • In some cases the language 'softens' between the Technical Reports and the EIS which may mislead some people. • The EIS includes a number of clearly inappropriate value judgements such as the community might prefer the widened version of the proposed Croydon Street. • Some of the drawings are misleading. • The EIS does not include images of future conditions from some very public key viewpoints. • Some comments suggesting that the loss of historic character housing is of little consequence given the stock of housing in Toowong - misses the point completely.	**B.1.6 / 3**
6		We question the adequacy and integrity of the community consultation process. There seems to be a continuing conflict between what is constituted as 'information' and genuine 'consultation'. Our direct experience is that some members of the study team have been at times evasive and arguably to the point of being deceitful.	**B.1.7 / 1** **B.1.7 / 2**

		There was a preoccupation with transport solutions during the consultation process. This led to inadequate recognition of the profound impacts on the Toowong community generally and peoples lives (including financial impacts).	
7	1.3 (p. 6) ToR 1.4 (p. 11)	We strongly object to the overlapping EIS and project tender processes. The current process is fundamentally flawed and it makes a mockery of what the EIS process is supposed to provide - a balanced assessment of the project. How can the EIS provide a balanced assessment of the impacts, costs and benefits if the design may change? This is a profoundly inequitable process. The Toowong community within the study corridor have to remain in a state of anxiety until a preferred tenderer is announced. Do we and our neighbours 'sell now' or hope that the Toowong Local Connections will be abandoned or at least stay where it is shown in the Reference Design?	**B.1.6 / 2**
8		While we do not support the provision of a Toowong Local Connection, we strongly believe that if such a connection is to proceed it should remain in the location shown in the Reference Design, i.e. Along busy traffic routes. If the Toowong Local Connection were to move further east into the existing residential area the impacts of the project would be even more dramatic and devastating that those associated with the Current Reference Design. While it is hard to imagine that Council and the Queensland Government would entertain any such proposal, we and other members of the Toowong community would be comforted if council and the government would reduce the Study Corridor area in Toowong and unequivocally rule out this possibility.	**B.1.3 / 1** **B.4.2 / 7**

Submission No.		**212**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	2	The rationale for the project that it will relieve traffic congestion is not supported for the Toowong area in the EIS, where there is an estimated increase in traffic on both Croydon and Jephson Streets as a direct result of construction of the Toowong Local Access.	**B.2.2 / 2** **B.5.6 / 16**
2	2	As several houses to be removed on the western side of Croydon Street are between my back deck and the street I can expect either to have a much noisier back yard and deck or a feeling of being corralled by sound barriers. It will be more difficult and dangerous to walk to the 'Cat and Fiddle' shops, Toowong Village and the public transport corridors around the Village because of the expected increase of traffic on Croydon Street and Jephson street.	**B.13.3 / 2** **B.13.3 / 3** **B.9.5 / 3**
3	5 Fig 1.13 (p. 35) TP 6 Plan 4 of 11 EIS-PL-05 A EIS-TM-04 A1	My property is on an overland flow corridor identified in the Langsville Creek Catchment, Relief Drainage Investigation carried out by Neville Jones and Associates for BCC. The corridor has at times become a swiftly flowing stream. The Flooding Potential Report (EIS, Volume 3, Technical Report 6) does not address potential interference of the Project with this catchment. The points of most concern are: • The reinforced earth embankment on Milton Road along Quinn Park, blocks the overland flow path. • The proposed sound barriers would block overland flow across Croydon Street. • The proposed road works to widen Croydon Street are likely to block or significantly change water flow patterns. • The temporary road-works at the Mt Coot-tha Road	**B.7.3 / 1**

		roundabout appears likely to block a drainage basin, but I could not see any mitigation measures to deal with the changed water flow pattern, or any indication that the basin and its significant level of vegetation would be restored. I am not convinced that the proposed storage dam in the botanical gardens will cope with/or mitigate against the Langsville Creek local flooding issues. Suggest that the study needs to be done again with adequate significance and mitigation measures attributed to flooding issues identified in the Langsville Creek Study.	
4	5	I note that all traffic leaving the Toowong Local Portal must traverse Croydon Street even if the destination is the Botanical Gardens, Wesley Hospital, Cemetery or University. Most of these destinations are likely to encourage 'rat-running'.	**B.5.6 / 18**
5	5	Croydon Street has been increased from four lanes to a maximum of 7 lanes. The potential for increased air pollution is apparent.	**B.8.1 / 1**
6	5	The unnamed lane that runs one way from Croydon Street to St Osyth Street is used to access off road parking. The proposed future of this lane is not clear in the EIS. In some parts of the EIS it is ignored and sound mitigation walls are proposed across its entrance whereas in other places it is left with the access from Croydon Street. Suggest that the access point to the unnamed lane be changed to be from St Osyth Street and use some of the resumed land at Croydon Street end to make a turning space. This would also allow sound mitigation measures barriers along Croydon Street to be continuous and more effective.	**B.4.2 / 9**
7	5	Treatment of the intersection at Croydon Street, Jephson Street and Sylvan Road does not deal with the issues of efficient use of available land and safety for cyclists and pedestrians. The current proposal to close the right turn off Milton Road into Sylvan Road could reduce the inbound traffic on Sylvan Road, to be predominantly local traffic. Suggestion that a detailed study may show a reduced need for the right hand turn inbound into Jephson Street and no need for a slip left turn inbound from Sylvan Road into Croydon Street. This could also improve safety for cyclists and remove the need to widen Sylvan Road west of the intersection.	**B.4.2 / 11** **B.5.6 / 46**
8	5	One set of traffic lights will be removed in this proposal. This is part of my normal route to the "Cat and Fiddle" shopping centre. I would like to see the access from Croydon Street to Morely Street on the western side reinstated.	**B.5.6 / 39**
9	8	The increase in vehicle exhaust emissions in Toowong is of concern to me, particularly as there is no expectation of filtration of the emissions from the Northern Link tunnel. There has also been little attention paid to the increased emissions as a result of vehicles on surface roads, particularly around the Toowong School Grounds. The Outside School Hour Care (OSHC) programme will be located at the corner of Quinn Street and Sylvan Road. The OSHC programme has its peak usage between 7am - 9am and 3pm - 6pm, so will be highly populated at the times of high vehicle transit along major corridors like Milton Road.	**B.8.5 / 1**
10	13 14	I have a sense that this infrastructure will split my community in a real and irreversible way. Not only will I lose many neighbours (via resumptions) whose households back onto the unnamed lane that passes the back of my house, but access to my local 'corner' shops will be a trip along a bitumen and vehicle dominated route.	**B.13.3 / 3** **B.13.3 / 10**
11	13 14	Council planted a memorial tree to celebrate the 100th anniversary of Oxleys landing in the Toowong area. The tree and its memorial will be destroyed if the proposal is approved in its current form.	**B.12.2 / 4** **B.12.2 / 1** **B.13.3 / 7**

		The local connection at Toowong does not blend itself into the area, The scale and over-engineering of the connection completely ignores the traditional characteristics of the area.	
12	13 14 TC3 TC4	The change to the Croydon Street area will be enormous. Just on that street a house built in the 1880's will have to be removed or demolished along with several other pre-1946 homes. It is of interest to me that there are no current photographs of Croydon Street in the EIS or mock ups of what it will look like, similar to the examples of vantage point TC3 and TC4 on Milton Road. Will there be one sound barrier running down one side of Croydon Street leaving the residences on the other side to cope with the extra reflected noise or will we have an artificial canyon with sound barriers on both sides?	**B.11.2 / 6**
13	13 14	I will also find the loss of the service station at the Milton Road end of Sylvan Road very inconvenient. The loss of this facility will impact on the amenity of the area where I live.	**B.13.3 / 15**
14	13 14 TC3 TC4	The change to the Croydon Street area will be enormous. Just on that street a house built in the 1880's will have to be removed or demolished along with several other pre-1946 homes. It is of interest to me that there are no current photographs of Croydon Street in the EIS or mock ups of what it will look like, similar to the examples of vantage point TC3 and TC4 on Milton Road. Will there be one sound barrier running down one side of Croydon Street leaving the residences on the other side to cope with the extra reflected noise or will we have an artificial canyon with sound barriers on both sides?	**B.13.3 / 2** **B.14.5 / 1**
15	13 14	Loss of green space with the resumption of at least one third of Quinn Park. This park is of historical interest as it was the site of the Toowong City Pound and is currently a park adopted by Rotary for care and attention. It will be bounded by an enormous retaining wall, the scale of which will be overbearing.	**B.11.4 / 1** **B.13.3 / 13** **B.14.5 / 1**

Submission No.		**213**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	11.4.2	Our home at 512 Milton Road is not in the investigation area defined in the EIS and yet we have been told by some Council employees that our house will be resumed. The EIS [Section 11.4.2] does not imply that our home will be resumed.	**B.13.3 / 12**
2	11.4.2 (page 40)	The only slight reference to our property is in the subsection "Access and Traffic Movement" in the fourth paragraph on page 11-40, "East of Croydon Street, access to properties on the south side of Milton Road would be temporarily relocated to permit the widening of the roadway. This includes the commercial properties on the corner of Croydon Street, the Toowong Private Hospital, and a small number of residential properties". However, this does not mention land acquisition, only temporary relocation of access to Milton Road (although our home isn't even in this category since we do not require access to Milton Road - we have back access to Cadell Street via a right of way easement).	**B.11.4 / 4**
3	Figure 14.11	Our home is shown as a vacant block of land in Figure 14.11 which implies that it will be resumed and will later be sold to developers. I do not see why the road widening cannot comply with the easement "Notice of Realignment of Milton Road No	**B.13.3 / 12**

		601210115(1967)".	

Government Submission Summaries

Submission No.		69 (Department of Housing)	
Issue No.	EIS Reference	Issue Summary	Response
1		Having reviewed the EIS, the Department considers that it addresses the concerns the Department raised in the draft ToR namely, access to and egress from the proposed road tunnel and the location of ventilation shafts.	**N/A**

Submission No.		120 (Queensland Police Service)	
Issue No.	EIS Reference	Issue Summary	Response
1		The impact of components of the project on traffic management needs to be considered during the planning phase. In particular, the impact of new on and off ramps on traffic flow through existing road infrastructure needs to be examined in detail. This would be more favourable than examining these effects post-construction and would allow the planning of traffic management strategies at the earliest possible opportunity.	**B.5.6 / 12**

Submission No.		125 (Department of Communities)	
Issue No.	EIS Reference	Issue Summary	Response
1		The Department considers it is crucial that the communities impacted by the construction of the tunnel and other complementary infrastructure projects around the city are kept fully informed about the project's development as well as the cumulative impacts of the many infrastructure projects. Also, that appropriate measures are taken to ensure that community concerns are monitored and responded to in a timely manner.	**B.13.4 / 1**

Submission No.		139 (Department of Natural Resources and Water)	
Issue No.	EIS Reference	Issue Summary	Response
1	12	Under Section 23 of the Aboriginal Cultural Heritage Act 2003, a person who carries out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal cultural heritage (the "cultural heritage duty of care"). As stated in the EIS, any proposed works will need to comply with the gazetted cultural heritage duty of care guidelines. An assessment of the proposed activity against the duty of care guidelines will help determine whether or to what extent Aboriginal cultural heritage may be harmed by the proposed development.	**B.12.1 / 2**
2	7.5.5 11.1.1	The information provided in the EIS is insufficient to determine if State Planning Policy 2/02 (SPP 2/02) applies to this project. The volume and depth of likely acid sulphate soils (ASS) to be excavated have not been stated. The EIS indicates that small areas with a low risk of ASS at the boundary of the road tunnel corridor are unlikely to be excavated during project construction. However, Figure 6-5 shows that low to medium hazard ASS traverses the corridor near Milton. No	**B.6.2 / 2**

		chemical data have been provided to ascertain the severity and extent of the hazard. Both the volume and depth of any excavation below 5 m AHD have not been indicated.	
3	4.6.2	The EIS states that assessable development for operational works includes clearing of vegetation of native vegetation on freehold. However, the Vegetation Management Act 1999 (VMA) and Integrated Planning Act 1997 (IPA) regulate the clearing of remnant native vegetation on freehold land (Schedule 8, Table 4, Item 1A IPA) and the clearing of remnant and non-remnant native vegetation on State land (Schedule 8, Table 4 Item 1B-1G IPA) (including council land that is not freehold). NOTE: Any clearing exemptions sought under the VMA and IPA may be impacted upon by the zoning of the subject area under Brisbane City Council's Planning Scheme (i.e. City Plan 2000).	**B.4.6 / 6**
4	10.1.1	The EIS (Volume 1, Chapter 10, Section 10.1.1) states that the VMA regulates clearing of mapped remnant vegetation on freehold and leasehold land. However, the VMA and IPA regulate the clearing of remnant native vegetation on freehold land and the clearing of remnant and non-remnant native vegetation on State land (including council land that is not freehold).	**B.4.6 / 6**
5	19.6.5	Table 19-7 Summary of Approvals, states that the trigger for the VMA and IPA is the clearing of native vegetation on freehold land. However, the clearing of remnant native vegetation on freehold land and the clearing of remnant and non-remnant native vegetation on State land triggers the VMA and IPA.	**B.4.6 / 6**
6	7	Any of the following activities proposed within the bed and banks of any reach of a 'non-tidal reach' watercourse will require a Riverine Protection Permit from NRW: - Destruction of native vegetation.- Excavation of material.- Placing of fill material. However, if the applicant is an 'entity' under the entity guidelines, then they will be exempt from the requirement of such a permit for proposed activities in the watercourse.The taking of or interfering with water in any 'non tidal' watercourse will require either a Permit to Take Water (if the activity has a foreseeable end date) or a Licence to Take Water or Licence to Interfere with the Flow of Water (if the activity will be ongoing).Any one or a combination of these authorities may be required from NRW during the course of construction of the Northern Link Tunnel. Final details of activities that are to occur in any defined watercourse, will need to be known before the need or otherwise for an authority can be determined by the department.	**B.4.6 / 7** **B.7.5 / 1**

Submission No.		**143 (Queensland Health)**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The department considers that in general the potential health risks have been sufficiently identified and appropriate mitigation strategies outlined.	**N/A**
2	4.3.5	The EIS indicates a number of utilities will need to be replaced, modified or relocated during the construction phase of the project. Some of these utilities provide services to the Royal Brisbane and Women's Hospital and Royal Children's hospital. It is essential that the services to these facilities are maintained at all times or temporary measures implemented to ensure continuity of service. The proponent should consult with the Royal Brisbane and Women's Hospital and Royal Children's hospital regarding any changes to existing utilities to ensure that services are not disrupted.	**B.4.3 / 6**

3	5.2.7	Some communities (e.g. residents living on the north side of Milton Road) may be disadvantaged by the project due to a lack of connectivity to cycle and pedestrian infrastructure on the southern side of Milton Road and along the Western Freeway, thus limiting their opportunities for physical activity.	**B.5.6 / 43**
4	8	The EIS states that during the construction phase the project will meet the EPA's 1997 Air Policy standards. As of 1 January 2009, there will be an updated air policy (EPP (Air) 2008). In the EPP (Air) 2008 the air quality objective for 24 hour PM_{10} level has been specified as 50 µg/m^3, compared to the previous limit of 150 µg/m^3. The proponent should provide further information regarding the Project's ability to meet the air quality objectives in the EPP (Air) 2008 or additional mitigation measures that will be implemented to reduce dust levels in areas potentially affected by construction activities.	**B.8.1 / 2**
5	8	The department's assessment of impacts has been undertaken on the assumption that the exposures predicted in the community through modelling are valid. It is important to note that the air modelling studies indicate a small increase in air pollution levels at a local level and hence the associated predicted health impacts are also likely to be very small and impossible to detect through health surveillance. It is acknowledged that air pollution levels close to some of the feeder roads to the project will increase. However this increase would occur whether the Northern Link project was constructed or not. It is also expected that vehicle emission levels will decrease over time due to more stringent fuel specifications and vehicle design requirements.	**N/A**
6		The department is of the view that the construction and ongoing use of the roads of Northern Link will not result in an unacceptable increase in health risk to the community from the predicted small increase in air pollution levels.	**N/A**

Submission No.		**144 (Department of Education, Training and the Arts)**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The department has a major presence within Kelvin Grove. Our facilities are grouped together in close proximity of each other and also near the proposed exit and entry portals for Northern Link. It would appear that the local containment of the Kelvin Grove suburb is to be affected adversely by the proposal. The size of the portals would seem to be quite out of scale with the local area. Significant destruction of the urban fabric to make way for these portals would need to occur.	**B.13.3 / 17**
2		The access to Toowong State School is adversely affected - parents will need to negotiate additional [traffic] lanes.	**B.13.3 / 16**
3		The car and bus travel needs of residents from western suburbs of Brisbane appear favoured to the detriment of the local Kelvin Grove and Toowong communities. This appears opposed to the concept of sustainability - there should be encouragement for more people to live closer to the city.	**B.2.4 / 1**

Submission No.		147 (Disability Services Queensland)	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Recommends the development of an Equitable Access Statement in consultation with Disability Service Queensland, prior to construction.	**B.13.4 / 1**

Submission No.		148 (Queensland Treasury)	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Treasury understands that many forms of transport (including certain types of heavy vehicles, vehicles carrying dangerous goods and livestock, etc.) would be excluded from the Northern Link tunnel. However, there does not appear to be any reference to these exclusions in the EIS (or studies on the number of excluded vehicles currently using surface routes). There appears to be an arbitrary classification of business light vehicles and regional freight without definition or justification/reference to studies showing where these terms and associated statistics have been derived. Rather, it would appear that transport modelling has extrapolated a general percentage for types of transport on above ground routes and applied this to the Northern Link modelling. This appears to be done without regard to the types of transport excluded from Northern Link.	**B 5.1 / 1** **B 5.2 / 2** **B.5.2 / 3**
2		A toll of $3.93 (in 2008 dollars, including GST) has been assumed for modelling of traffic demand. However, there does not appear to be any discussion surrounding the derivation of this toll price in the EIS, and Treasury suggests that this should be given consideration.	**B.5.4 / 11**
3		Treasury notes the concept of city-connections (at Toowong and Kelvin Grove) may contradict the objective of providing a cross city bypass.	**B.2.3 / 4**
4		The EIS does not appear to have considered the current financial crisis in the assessment of the economic environment and Treasury suggests that this should be updated.	**B.15.3 / 1**
5	15.3.4	A reference is made to SEQIPP as a funding commitment. This should be omitted as SEQIPP is a program of infrastructure, not a funding commitment.	**B.15.3 / 2**
6	2.1.3	The Statement "By moving cross city travel out of the inner city and the congested arterials of Coronation Drive and Milton Road, Northern Link would enhance the road network and contribute to the safe and efficient movement of people and goods with and across the city" may contradict the 'City Connections' premise. Specifically, the connections at Toowong and Kelvin Grove, would appear to be promoting travel from Northern Link to within the city, rather than promoting an orbital bypass of the city, and may be contrary to the project's objectives.	**B.2.3 / 4**
7	3.6.3	Truck haulage of spoil would potentially have significant impacts on traffic, as well as noise/environmental consequences. DMR may need to be consulted as to whether a traffic management plan is required. Treasury notes that there may be economic costs associated with the above impacts. It is Treasury's preference for these costs to be considered in a cost-benefit analysis. However, at the very least, these costs should be discussed in the EIS.	**B.3.6 / 3**
8	4.1	Suggest there is a need for consistency with the document with regard to Project length i.e. the description of 6km and tunnel	**B.4.1 / 1**

		length of 4.3km differs from 5 km and 5.5 km stated elsewhere in the EIS.	
9	4.3.18	The EIS notes a large volume of truck haulage (i.e. 58 loaded trucks per day on the Western Freeway for 14 months; 43 loaded trucks per day leaving Toowong worksite; and 49 loaded trucks per day from Kelvin Grove for 2.5 years). When unloaded trucks are returning, the above figures are likely to be double. Treasury suggests that consideration should be given to including the impacts (i.e. noise, pollution, increased traffic congestion, etc) in the economic analysis.	**B.15.7 / 3**
10	5.4.5	Some discussion should be provided on the derivation of the $3.93 toll in the EIS (for example, is $3.93 sufficient to generate a commercial return for a proponent?) Further, the cumulative impacts of other toll roads do not appear to have been given consideration in the EIS. Refer to general comments above regarding 'Opportunities for Improved Freight Distribution'.	**B.5.4 / 11**
11	15.3	Suggest that this section is updated to reflect current economic environment, particularly given the changing growth and employment outlook.	**B.15.3 / 1**
12	15.3.3	Last sentence, last paragraph – there is a reference to 'with Northern Link 40% of dwellings being rented' which is confusing in the context of the rest of the sentence.	**B.15.3 / 3**
13	15.6	Please confirm that employment figures for toll collection do not include attendants at toll booths (given that Northern Link will employ e-tolling).	**B.15.6 / 1**
14	15.7.1	Last paragraph: as noted in general comments, it is difficult to understand why freight distribution along the Western Corridor to the Brisbane Airport/ATC route would have significant benefits as there are very little modelled benefits of above ground traffic along this route, and the majority of freight transport would appear to be excluded from the tunnel.	**B.5.2 / 2** **B.5.2 / 3**
15	15.7.3	Treasury suggests that justification/rationale for a $3.93 toll price should be provided in the EIS.	**B.15.7 / 4**
16	15.7.4 Tab 15.3	With reference to "Table 15.3 Northern Link CBA cost model assumptions table" a common base year should be used for all assumptions. Suggest that 2008 may be appropriate as this has been used elsewhere, and that assumed figures i.e. VOC and Road Safety benefits, be indexed to this figure (including an explanation of the indexation rate used).	**B.15.7 / 1**
17	15.7.5	Suggest that $550 NPV figure may not contain economic impacts associated with construction (i.e. haulage of spoil, noise, dust, etc.) and that, if these costs are not to be factored in, some reference should be made to these costs.	**B.15.7 / 3**
18	15.7.5 Tab 15.5	Table 15.5 Discounted travel time savings by vehicle type Suggest that explanation is provided for the category business light vehicles (including derivation of these figures). What is the basis for Heavy Vehicle time savings? Specifically, what Heavy Vehicles are allowed in tunnel (most classes would appear to be excluded) as there do not appear to be significant time savings on surface road travel across the Western Corridor to the ATC/Airport route that Heavy Vehicles travelling freight would presumably travel.	**B.15.7 / 6**
19	TP 15 2.1.3	Reference to tidal flow along Coronation Drive is incorrect.	**Table B1**
20	TP 15 3.4.2	This section would not appear to reflect the current market environment and should be updated accordingly	**B.15.3 / 1**
21	TP 15 5.1	Because there is Inconsistency between the straight through option and the connected option it would be appropriate to do a CBA on each.	**B.15.7 / 1**

22	TP 15 5.2	In the Project Description with reference to the CBA it is suggested that patronage figures/bus services (routes) that are being referred to as part of 'improved journey times for express buses using the tunnel' be included.	**B.15.7 / 6**
23	TP 15 5.2	The statement 'The proposed tunnel will carry 6% commercial vehicles, of which 36% is regional freight' requires further explanation. Treasury understands that the basis for 6% commercial vehicle assumption is derived as a percentage of current commercial freight using surface routes. Treasury questions the reliability of the estimate, as it does not appear to take into account freight that would be excluded from the tunnel. The term regional freight requires definition (and explanation as to how these figures were derived should be provided).	**B.5.2 / 3** **B.5.3 / 5**
24	TP 15 5.3.2	There is insufficient information presented to determine whether these cost assumptions would appear reasonable. For example, raw materials that form part of construction costs, have had significantly different escalation rates for goods such as steel when compared with cement, and escalating these costs by, say, the building price index would not be reasonable if these raw inputs were materially significant.	**B.15.7 / 10**
25	TP 15 5.4.5	Have the externalities associated with construction been included as an economic cost and set off against the benefits of the project?	**B.15.7 / 3**
26	TP 15 5.6	It should be noted that this is an economic NPV as the term NPV usually relates to the financial cash-flows of a project, discounted at an appropriate rate, not the economic costs.	**B.15.7 / 8**
27	TP 15 5.7	The window of opportunity referred to should be updated to reflect current market conditions. There is a significant degree of uncertainty about labour costs in particular and increased costs of 5-10% would appear unlikely in the current economic climate.	**B.15.7 / 7**

Submission No.		**149 (Department of Main Roads)**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1	1.4 (p. 8)	Agreed that pedestrian and cyclists be prohibited from the tunnel. However, issue of pedestrian and cycle movements within the study area remain unresolved and should be included in the scope of the Project. Suggest pedestrian and cycle access "should demonstrably influence the reference design".	**B.4.1 / 2**
2	2.1.2 (p. 2)	The EIS emphasises the need for an alternative connection between the Cunningham/Warrego Highways to the Port and Australia Trade Coast but it is silent on the Logan Motorway and its designation as a priority freight route. The EIS should identify the Logan Motorway as a priority freight route and the Northern Link as an alternative.	**B.4.2 / 4**
3	2.1.2 (p. 3)	Claims that Section 2.1.2 "implies that Northern Link (and BCC's TransApex) is crucial to delivering SEQIPP and SEQRP whereas BCC's TransApex is independent of these". Suggests that the EIS should state the Northern Link is consistent with and complements the SEQRP and SEQIPP.	**B.2.1 / 2**
4	2.1.2 (p. 6)	Whilst Northern Link would satisfy criteria for priority infrastructure by improving bus services linking Toowong Centre with the CBD, BBCC makes no commitment to bus priority on Coronation Drive in the EIS. The State is seeking bus priority measures on Coronation Drive as part of a balanced approach towards addressing the impacts of high traffic growth in urban centres.	**B.2.1 / 3**
5	2.1.2 (p. 6)	Recommended EIS Condition "That BCC develop and implement	**B.2.1 / 3**

		a Public Transport Plan, in consultation with Queensland Transport (QT) to support the enhanced public transport outcomes derived from the implementation of the Northern Link project and to satisfy the State that the public transport benefits of the project have been realised. This plan is to include the provision of bus priority measures on Coronation Drive.	
6	2.1.2	Notes that the EIS assumes that the Centenary Motorway Northern Link Interconnector (CMNLI) is a certainty and included in Northern Link planning. EIS requires clarification as CMNLI is not confirmed.	**B.2.1 / 4**
7	2.1.2	Recommended EIS Condition: "The Northern Link Project must be viable on an assumption of no Centenary Motorway Northern Link Interconnector (CMNLI) upgrade by the State.	**B.2.1 / 4**
8	2.1.2	"EIS does not reflect the need for Inner Orbital linkages and priority". The EIS text requires identification of Inner Orbital linkages/issues.	**B.2.1 / 4**
9	2.1.2	Recommended EIS Condition: "The Inner Orbital and Centenary Motorway connection shall be planned as a continuous motorway route. The Northern Link interchange must be planned as a system interchange with that continuous route. The planning should also demonstrate consideration of the TransApex East West Link. The proposed planning, design and procurement for the Northern Link connection to the Centenary Motorway must show, to the satisfaction of the State, that the Inner Orbital connection as described can be both designed and constructed with Northern Link in place."	**B.2.1 / 4**
10	2.1.4	EIS makes reference to Northern Link completing a missing link in the network. "Main Roads sees the Centenary Motorway to Inner Orbital as the continuous motorway route. Other routes including Milton Road, Northern Link, East West Link would be of a lower road hierarchy".	**B.2.1 / 4**
11	2.1.4	Federal funding mentioned in summary but not in the body of a chapter. Federal Government funding problems (including commitments and timing) should be identified.	**B.2.1 / 5**
12	2.1.4	Quotes the EIS "...Northern Link would be consistent with an overall , co-ordinated response to the transport challenges in the Western Brisbane Corridor in the short term..." and claims that Northern Link is a short term solution and doesn't recognise the role of the Inner Orbital. Requests that the impact of Inner Orbital on Northern Link should be recognised and reflected.	**B.2.1 / 4**
13	2.2.1	Requests that Airport Link be noted as a State project.	**B.2.1 / 9**
14	2.2.3 (p. 17)	Reference to Brisbane Urban Corridor on the context of Transport Network Gaps. Suggests EIS needs to broaden scope of issues to include the role and function of Logan Motorway. Main Roads concerned that additional freight traffic would use Milton Road rather than Northern Link. If there are no freight increases on Milton Road, Main Roads questions whether the freight benefits of the project are overstated as most freight would travel via Logan Motorway to the Australia Trade Coast and not use Northern Link.	**B.2.2 / 4**
15	2.2.3 (p. 17)	Logan Motorway is the primary freight route from the Western Corridor to ATC and together with heavy vehicle restrictions on BUC, would alleviate congestion on key cross city road links. Asks for a forecast of the amount of traffic diversions (commercial and non-commercial) to Northern Link from Logan Motorway, Milton Road and Kessels Road.	**B.2.2 / 4**
16	2.2.3 (p. 18)	Is the forecast decline in traffic speed on key routes without Northern Link based on a 'do-nothing' scenario, with or with out SEQIPP, etc.? Asks for assumptions to be clearly stated with regard to data and supporting conclusions.	**B.2.2 / 3**

17	2.2.4	Notes that the EIS refers to capacity enhancements and extension of the Centenary Highway. Main Roads state that capacity enhancements are not part of the current SEQRP. Refers to previous comments made, i.e. is Northern Link feasible without such capacity enhancements?	**B.2.2 / 6**
18	2.3 (p. 18)	Notes that secondary objectives for the Project are to provide opportunities for additional public transport capacity. Asks where and how these are provided.	**B.2.3 / 2**
19	2.3	Notes that the EIS "positions Northern Link to provide for movements between western suburbs and the northern suburbs". Claims that the Inner Orbital would provide this and the "transport function of Northern Link therefore must be defined in conjunction with other infrastructure (WBTNI) being considered by the State or the wider network".	**B.2.1 / 4**
20	2.3	Clarify project timeframes. Objectives state Northern Link aimed to be completed by 2013, 2.2.1 of the EIS states 2014.	**B.2.3 / 5**
21	2.5.1	Notes that the 'do-minimum' option includes SEQIPP projects and notes that these projects may not be funded and that SEQIPP is not a commitment to implement all projects. Suggests that the EIS needs to consider that there is no commitment for the State to deliver all SEQIPP identified projects.	**B.2.5 / 1**
22	2.5.3	Review Northern Link traffic forecasts to reflect removal of tidal flow system on Coronation Drive and the Hale Street Link project."	**B.2.5 / 4**
23	3.2	Include more detailed information on capital, community and engineering impacts that clearly provide a picture that the bored option, as compared to the railway option, is the best choice.	**B.3.2 / 1**
24	3.2.1 (p. 5)	With regard to strategic options development (Table 3-2), clarify what is meant by regionally significant freight. Suggests that the clarification include a comparison with the Logan Motorway and identification of relative freight carriage between Milton Road and Northern Link.	**B.3.2 / 3**
25	3.3.2 (p. 11)	Western Freeway connection. Any safety issues with the Northern Link portals on outside and HOV lanes on the inside? Does this arrangement allow for adequate length of HOV to be useful on motorway standard road?	**B.3.3 / 1**
26	3.3.2 (p. 11)	During October and November 2008, BCC and Main Roads formulated a reference design. Main Roads requests that this design be placed in the Data Room as previous designs lacked detail and thorough consultation process.	**B.3.3 / 1**
27	3.3.3 (p. 14)	Clarify access requirements to Dean Street inbound from the Western Freeway. Include details on relocation of bus workshop/depot and both long and short term access arrangements for Dean Street.	**B.3.3 / 2**
28	3.3.2	EIS states that Main Roads agreed that the Western Freeway would ultimately provide two general-purpose and one HOV lane in either direction. Main Roads does not support this statement. Main Roads request that BCC review the EIS to recognise that there is no current commitment to upgrade the Centenary Motorway.	**B.3.3 / 1**
29	3.3.2	How would Northern Link allow for the ultimate design, including Inner Orbital, of four lanes each way? Requests that the Northern Link design is to ensure 'best value' and 'buildability' of constructing a potential Inner Orbital, as identified in WBTNI.	**B.3.3 / 1**
30	3.3.2	Northern Link design may constrain the State with regard to HOV lanes as the State requirements are for HOV lanes to flow continuously onto Milton Road. This may mean that they should be provided on the verge side of the motorway. Requests that Northern Link design give consideration to a continuous HOV reroute from Centenary Highway to Milton Road.	**B.3.3 / 1**

31	3.6.3	EIS states that spoil would be taken to Mt Coot-tha quarry and that truck movements out of the quarry would be the same. Requests clarification of this and clarification of truck movements (in 2007 values) and the number of additional truck movements projected from Northern Links works.	**B.3.6 / 4**
32	3.6.3	The EIS does not address cumulative impacts of spoil haulage by North South Bypass Tunnel, Airport Link, Hale Street Link and Northern Link. Requests that the cumulative impacts be reviewed and addressed (in 2007 values).	**B.3.6 / 5** **B.21.3 / 1**
33	3.6.3	EIS does not appear to have adequately addressed noise impacts of road haulage truck movement impacts during evening and early morning particularly on Kelvin Grove Road and Milton Road.	**B.3.6 / 6**
34	3.6.3	Recommended EIS condition: The Project must be constructible under traffic to maintain operation of the road network to the community. That Brisbane City Council develop a traffic management plan for each stage of the construction of the Project and submit for approval with Main Roads if within a State Controlled Road. Each construction traffic management plan must: 1. Be developed in consultation with relevant stakeholders, including the Department of Main Roads, Queensland Transport, Queensland Police, the Department of Emergency Services, the Translink Transit Authority and any contractors responsible for nearby projects. 2. Analyse impacts on road users and affected stakeholders and shows how those impacts would be mitigated and how acceptable levels of service would be maintained. 3. Show impacts of nearby projects and how those impacts would be mitigated and managed.	**B.4.3 / 16**
35	3.6.3	Request that EIS be reviewed to include noise assessment of proposed Mt Coot-tha conveyor, including mitigation measures and residential impacts.	**B.9.3 / 5**
36	3.6.3	Request that EIS be reviewed to reflect issues associated with the conveyor including EPBC Act and other government permits which would be required.	**B.4.6 / 1**
37	4.1 (p. 1)	Project description does not include options to enhance pedestrian and cycling connectivity in the study area. Requests that Brisbane City Council address the enhancement of pedestrian and cycling connectivity within the scope of the EIS.	**B.4.1 / 2**
38	4.1 (p. 1)	Chapter 4 of Northern Link provides limited advice on commissioning a limited number of items, i.e. tolling, lighting, electrical etc but not decommissioning of worksites. Requests that BCC include details of decommissioning for specific worksites.	**B.4.3 / 20**
39	4.1 (p. 1)	Recommended EIS Condition: "Brisbane City Council must design and construct pedestrian and cycle ways that form part of the project, or that are impacted by the project, in consultation with the Department of Main Roads. Brisbane City Council must reinstate and reconnect existing pedestrian and cycle networks safely and conveniently through Project Works. Existing pedestrian and cycle movements are to be maintained (or suitable alternative connections are to be provided) during construction of Project Works. Alternative connections must be approved by Main Roads and be of at least a standard comparable to the existing condition at all times."	**B.4.1 / 2**
40	4.2.1 (p. 5)	The EIS states that there are no Australian design standards for tunnels. However, there are DMR standards which have been supplied to BCC. DMR standards are used as a reference in 4.2.2 (lane widths etc). It is suggested that BCC be required to reflect the DMR tunnel standards in the design.	**B.4.2 / 1**
41	4.2.5 (p. 10)	Western Freeway connection. The Northern Link portals on	**B.4.2 / 4**

		outside and HOV lanes on the inside offers little advantage to those entering the motorway from Moggill Road i.e. 1km max usage of HOV facility. During October and November 2008, Brisbane City Council and Main Roads formulated a reference design. Main Roads requests that this design be placed in the Data Room.	
42	4.2.5 (p. 10)	Pedestrian access at Toowong Connection. The ability for pedestrians to cross Milton Road between Croydon Street and Frederick Street is limited to the signalised intersection, and then only 3 of the 4 approaches. Main Roads concerned that level of service for pedestrians in this area will be lower than existing. Requests an analysis of pedestrian demand at the Milton Road/Croydon Street/Morley Street intersection, comparing journey times 'before and after' Northern Link. Consider the inclusion of a pedestrian overpass/underpass.	**B.4.2 / 13**
43	4.2.5 (p. 18)	Concerned that a 2 lane (general purpose traffic) exit onto Kelvin Grove Road would encourage commuter trips to the CBD and disrupt CBD inbound peak flow on Kelvin Grove Road. Requests analysis of demand, signal phasing and impact on both general traffic flow and public transport services on Kelvin Grove Road.	**B.4.2 / 17**
44	4.2.5	Inner Orbital precedence and connection needs to be reflected in the EIS. The Western Freeway connection as described is based upon 3 lanes (2 general purpose plus transit and elsewhere as 2 general purpose plus HOT - consistency requested).If the Centenary Motorway/Northern Link Interface project (a 5th and 6th lane on the motorway between Moggill Road and the Northern Link ramps) does not proceed, Main Roads concerned with safety and efficiency of the connection as described in the EIS. If CMNLI does not proceed, can 4 outbound lanes safely merge into 2 lanes without congestion? Main Roads wishes to see demonstration of safe and efficient merge and diverge arrangements. In addition, Main Roads requires it to be a condition that Main Roads is able to restrict traffic to and from the tunnel should there be road safety/queuing/congestion issues on Milton Road or the Centenary Motorway.	**B.4.4 / 3** **B.4.2 / 4**
45	4.3.18	Mt Coot-tha quarry conveyor. Residential impacts are too vaguely described, with discussion around "provided its operation does not exceed the goals for noise and dust generation". Requests that EIS is amended to include an assessment of the noise impacts, mitigation measures and residential impacts.	**B.4.3 / 17**
46	4.3.19	Workforce/working hours details. Residential impacts, consultation process and mitigation measures are not addressed. Impact and mitigation measures to be assessed and included.	**B.4.3 / 18**
47	4.4 (p. 50)	There is no mention of planned and unplanned incident management other than fire. There is no mention of road-based enforcement measures, particularly speed management. Requests details or approach to both planned and unplanned incident management and speed enforcement. Requested that BCC check with QPS (assumed Main Roads mean Queensland Police Service?) as to their requirements.	**B.4.4 / 2**
48	4.4 (p. 50)	Recommended EIS Condition: Brisbane City Council will be responsible for any modification or additional elements to the existing traffic management and control system used to operate the Brisbane metropolitan road network (including the systems at the Brisbane Metropolitan Transport Management Centre) required due to the addition of the Northern Link Tunnel to the road network. To ensure the safe and efficient movement and management of all traffic and road users, Brisbane City Council must prepare, implement and operate a Traffic Management and Traffic Control System for the Northern Link Tunnel and surrounding road network that is impacted by Northern Link traffic.	**B.4.4 / 3**

		BCC must develop and incident management system to manage any planned or unplanned incident or event that has an impact on the normal traffic flow of traffic on the Northern Link or on the surrounding road network. The system must be structured to integrate with others incident management and control systems utilised by Brisbane City Council and Main Roads (including the systems at the Brisbane Metropolitan Transport Management Centre) to manage the road network. The identification of incidents will be developed through a comprehensive risk and evaluation process. Operational and Incident Management and Control Systems will need to be programmed in consultation with stakeholders. All systems will be subject of an interface agreement between the Northern Link Tunnel proponent, Brisbane City Council and Main Roads. Together these documents will provide detailed operational protocols that describe how the Northern Link tunnel operators would interact and cooperate to operate the road network safely and efficiently. BCC must acknowledge in operating plan that Main Roads retains the right to restrict traffic to and form the tunnel should there be significant road/safety/queuing/congestion issues on Milton Road and or the Centenary Motorway. If Main Roads considers, in its absolute discretion, that the operating plan would have one or more of the adverse effects described in this condition, Main Roads may, by notice in writing to Brisbane City Council, require Brisbane City Council to amend the operating plan as specified and Brisbane City Council must amend the operating plan accordingly. Brisbane City Council must act consistently with the operating plan.	
49	4.4 (p. 50)	Has the option of the Brisbane Metropolitan Traffic Management Centre hosting the Northern Link tunnel control centre been considered? Main Roads requests confirmation of this and if it was considered and ruled out, explanation as to why it was ruled out.	**B.4.4 / 2**
50	4.4 (p. 50)	At the very least, the tunnel control centre needs to integrate with the Brisbane Metropolitan Traffic Management Centre. Main Roads request that tunnel control centre provide traffic incident and traveller information to the Brisbane Metropolitan Traffic Management Centre under an interface agreement between the Northern Link tunnel proponent, BCC and Main Roads.	**B.4.4 / 2**
51	4.4.1 (p. 51)	Electronic tolling, vehicle classification. The toll road vehicle classification regime must be consistent with the other toll roads such as North South Bypass Tunnel and Airport Link	**B.4.4 / 1**
52	4.6.2 (p. 60)	Operation of road tunnel ventilation stacks is proposed to be included as an Environmentally Relevant Activity under the revised Environmental Protection Regulation. Main Roads requests that Brisbane City Council revise EIS to include road tunnel ventilation stack within the scope of the Environmentally Relevant Activities requiring development approval.	**B.4.6 / 4**
53	5	Chapter 5 appears not to contain an analysis of the road network sensitivity and operational vulnerability due to incidents (vehicle breakdowns in the tunnel, flooding of the tunnel, equipment failure, closure of the tunnel). Suggests that sensitivity analysis and system reliability measures should articulate the necessary performance required and design criteria e.g. internal build outs, run out lengths at merges, limited shoulder widths, heavy vehicle usage etc.	**B.5.6 / 50**
54	5	In relation to an analysis of the road network sensitivity and operational vulnerability due to incidents - What penalty regime would be instigated against the PPP Co in the case of asset/system withdrawal? Requests a sensitivity analysis and system reliability measures to articulate the necessary performance required and the design criteria, including the penalty	**B.4.4 / 2**

		regime in the case of asset/system withdrawal.	
55	5.1.1 (p. 5)	The Brisbane Statistical Division is an area used for examination of traffic and transport issues in the Brisbane context and yet there is no modelling of Logan Motorway traffic, principally for freight purposes. Requests that Brisbane City Council include an analysis of the freight task for the Logan Motorway and its impacts on Northern Link.	**B.5.1 / 1**
56	5.1.2 (p. 5)	Forecasting of traffic demand modelling has been carried out for the year of opening 2014; however Chapter 4 describes commissioning as June 2013. Requests clarification date of commissioning/opening. Consistency between text and modelling is required to support validity of conclusions.	**B.4.3 / 1** **B.5.1 / 3**
57	5.1.2 (p. 8)	Suncorp Stadium does not feature in the detailed analysis. Is Suncorp Stadium a substantial peak hour trip generator within the Study Area and within the context of Northern Link? With no substantial parking facilities it is only relevant for PT usage and even then for event only use. Main Roads request that BCC confirm/advise the relevance of Suncorp Stadium events to the traffic modelling used, given that events at the Stadium do not generally coincide with peak hour traffic flows.	**B.5.4 / 7**
58	5.2.1 (p. 8)	The description of the State Strategic Road Network overlooks the function of the Logan Motorway, particularly as a priority freight route from the west to the Australia TradeCoast. Main Roads sees the Logan Motorway as a 'competitor' route to the Northern Link for these journeys, depending on freight toll pricing regime. Whilst the Brisbane Urban Corridor is the AusLink route, it is not the high quality freight corridor that is the Logan Motorway. Main Roads request BCC to provide further modelling on the impact of the Logan Motorway on the Northern Link. Specifically, advise if Northern Link would achieve freight outcomes as presently described if the analysis is broadened to include the Logan Motorway.	**B.5.1 / 1**
59	5.2.1	Main Roads considers the terminology used to describe Kelvin Grove Road (i.e. 'regional arterial') incorrect. Main Roads suggest that Kelvin Grove Road be described as a 'city distributor' and request that road classifications be reviewed for purposes of traffic modelling.	**B.5.2 / 1**
60	5.2.1 (p. 12)	The total number of freight vehicles using Frederick Street, MacGregor Terrace, Jubilee Terrace, etc is quite low. It is wrong to state that "These roads have significant freight function" (EIS page 5-12). Main Roads request that BCC revise their assumptions and traffic analysis of these roads.	**B.5.2 / 1**
61	5.2.1 (p. 13)	The SEQ Regional Freight Network Strategy (2007-2012) does not assign Milton Road as a freight route, yet in the EIS Milton Road is stated that Milton Road "...is designated as a secondary freight route in the Brisbane City Council future freight hierarchy". Furthermore, Map 20 of the Draft South East Queensland Regional Plan (2009-2031) identifies the Centenary Motorway as a priority two freight route, of a lower order than the Brisbane Urban Corridor and the Logan Motorway. Main Roads request that BCC documentation should reflect that the Logan Motorway is the preferential freight route between the Australia TradeCoast/north and the Western Corridor	**B.5.2 / 1**
62	5.2.3 (p. 23)	The analysis of users on Coronation Drive indicates a low proportion of travel to the Airport/Australia TradeCoast North travel. One presumes that this would be even lower when faced with the prospect of tolls. This is not consistent with previous statements on Northern Link's freight role to the Australia TradeCoast. Main Roads requests clarification of commercial vehicle usage of Northern Link,	**B.5.2 / 3**

		particularly during off peak travel periods.	
63	5.2.3 (p. 23) Tab 5-6	Clarify whether the figures contained within table 5-6 are observed or modelled. If modelled, then where is the model validation?	**B.5.2 / 4**
64	5.2.7	The EIS ToR requires this section to provide a description of the existing cycle and pedestrian network. Similar to the list of off-road cycle facilities, the EIS should also include the extent of frequently used on-road facilities within the catchment area and desire lines of cyclists. For example cyclists in the suburbs of Indooroopilly, Chelmer, Graceville, Sherwood and Corinda use the on road network to link in with the Bicentennial Bikeway. No mention is made of Mt Coot-tha as a cycling destination. Mt Coot-tha is a popular destination and is used by a range of cyclists. It is also likely to host an annual mass cycle challenge (which attracted 1600 participants in its inaugural event). Main Roads request that the on-road network (and main desire lines) relevant to the project area are listed and that the impacts on these be described. Also described what route cyclists use and how the project might impact on these.	**B.5.6 / 44**
65	5.2.7	List of key pedestrian crossings (EIS page 5-36) appears limited, particularly at the northern end. Clarification required that the list is representative in relation to project impacts. Appears to be limited analysis of current and future pedestrian and desire lines where there are no existing facilities (e.g. Crossovers, roundabouts and mid-block) particularly in the areas of the portal entries/exits e.g. Dean Street, Miskin Street and Sylvan Road. Clarification required as to how the project would impact upon pedestrians at currently un-signalised intersections and mid block crossings (e.g. Dean Street, Miskin Street and Sylvan Road. To which intersection is dot point 4 relating to?	**B.5.6 / 45**
66	5.2.9	The tolling system needs to be interoperable with other toll roads in Australia Recommended EIS condition: "BCC must use its best endeavours to ensure that the tolling system for the project is fully interoperable with other Queensland and Australian toll roads for both electronic tolling and casual users".	**B.4.4 / 1**
67	5.3.4 (p. 47)	Road capacity and Level of Service (Figure 5-25) Existing (2007) AM Peak Period LoS indicates LoS = A for Western Freeway, which seems optimistic. Request clarification that LoS in the Brisbane City Council traffic model for the Western Freeway during the AM Peak Period is correct.	**B.5.3 / 1**
68	5.16 (pp. 50-51)	There is no data for the Mt Coot-tha Road Roundabout to the west of the Toowong Cemetery. Request that Table 5.16 (EIS page 5-50 and 5-51) be modified to include this.	**B.5.3 / 2**
69	5.4 (p. 60)	The Northern Link traffic modelling should incorporate the effects of cumulative tolls for destination centres not just the toll for the Northern Link project, i.e. the cumulative toll for the Airport Link and Northern Link between the ATC and Toowong would be more than $16 for commercial vehicles each way. Requests confirmation if modelling was undertaken to assess the effect of cumulative tolls on Northern Link patronage.	**B.5.4 / 11**
70	5.4.1 (p. 63)	Text regarding the validation of the model does not contain sufficient information to give Main Roads the necessary confidence in the Northern Link traffic model. The LoS described in Figures 5-25 and 5-26 do not match Main Roads' views. Requests information on the validation checks and sensitivity tests so that the Main Roads is better able to assess the validity of the modelling.	**B.5.4 / 1**

71	5.4.1 (p. 61)	Induced demand is significant when there is a substantial change in the accessibility (to urban activities) being proposed. Given that Northern Link is located in inner city Brisbane; such modelling cannot be justified without local data. Confirmation required as to what local data was used in validating assumptions about induced travel demand.	**B.5.4 / 13**
72	5.4.4	Identifies the April 2008 Hale Street Link project, analysis should be on the basis of the July 2008 (current) Hale Street Link Project. Requests EIS traffic forecasting to be revised.	**B.5.4 / 9**
73	5.4.4	Modelling is on the basis that the Coronation tidal flow, which as been removed by Brisbane City Council. Has the road system capacity decreased as a result of the tidal flow system? Requests EIS traffic forecasting to be revised.	**B.5.4 / 9**
74	5.4.5	EIS compares tolls for CLEM7 as 'commercial vehicles', and Hale Street Link as 'heavy vehicles', comparison needs to be clarified to ensure consistency. Requests that BCC clarify to the comparison being drawn, or to compare all classes, including light commercial vehicles.	**B.5.4 / 11**
75	5.4.6 (p. 24)	What are the modelled volumes on Northern Link with and without induced demand? Reference to Table 5-24.	**B.5.4 / 13**
76	5.5.2	Clarification needed on assumptions regarding the Centenary Motorway. Throughout the document variously refers to GP lanes, T2 lanes and HOT lanes.	**B.5.4 / 10**
77	5.2.3 (p. 27) Tab 5-27	BCC has predicted significant peak hour delays on Coronation Drive in the Hale Street traffic assessment. Does this Northern Link assessment use the latest Hale Street Link proposed and include those delays?	**B.5.4 / 9**
78	5.2.4 (p. 29) Tab 5-29	Table 5-29. Milton Road and Frederick Street. How can it be that the intersection performance is better in 2026 than in 2014, as it is generally indicated by the max 'DoS' and 'LoS' values?	**B.5.5 / 2**
79	5.6 (p. 86)	Requests that an assessment is provided on diverges and merges on the Western Freeway near the tunnel portal ramps and the ramps at Moggill Road. This is required so that Main Roads is assured that they would work safely and efficiently and that impacts have been addressed.	**B.5.6 / 5**
80	5.6.2 (p. 89)	The EIS states that Northern Link would "allow the potential for bus priority measures to be reinstated on Coronation Drive". This raises two issues: 1. There seems to be some doubt about whether bus priority is to be reinstated on Coronation Drive. 2. Why are these measures not being considered for Milton Road, where LoS for general traffic would be expected to improve due to Northern Link? Requests that the EIS be altered to be more definite about transit measures on Coronation Drive. Has BCC ruled out using some of the 'capacity gap' between current and forecast LoS on Milton Road for bus priority or transit measures?	**B.5.6 / 3**
81	5.6.2 (p. 94)	The discussion does not indicate the impact of the Kelvin Grove ramp (to the CBD) on the performance of Kelvin Grove Road inbound and in particular the impact on public transport. Requests the impacts on Kelvin Grove Road traffic, including public transport, must be articulated.	**B.5.6 /4**
82	5.6.2	Since an objective of Northern Link is to remove heavy vehicles from the existing surface road network, traffic modelling needs to split up 'commercial vehicles' into larger vehicles seeking Australia TradeCoast and the north and smaller commercial vehicles serving the CBD. Main Roads is concerned that Milton Road may continue to be	**B.5.1 / 1** **B.5.2 / 3**

		used by 'through route' freight traffic, particularly during off peak periods. Requests information as to what volume of light commercial vehicles and heavy commercial vehicles are forecast to use Northern Link, Logan Motorway, Milton Road and Kessels Road.	
83	5.6.3 (p. 94)	The EIS is silent on the impact (including freight movement/distribution) of Northern Link on the Logan Motorway and the Brisbane Urban Corridor. What amount of traffic reduction, if any, would occur on these roads as a result of Northern Link?	**B.5.1 / 1**
84	5.6.3 (p. 95)	The Inner City Bypass flows are predicted by the Northern Link to reach 143,000 vehicles per day on a 6 lane road with a LoS A. The Inner City Bypass link may have this capacity, but would the ramps/interchanges/intersections along the ICB actually be able to cope with the forecast peak hour demand? Confirmation required that forecast Inner City Bypass 'link' volume capacity takes into account limitations introduced by ramps/interchanges/intersections. A forecast LoS fort the Inner City Bypass is unrealistic.	**B.5.6 / 6**
85	5.6.3 (p. 95)	What if the Centenary Motorway is not widened to 6 lanes over the 12.5 km section between the Ipswich Motorway and Toowong? What mitigation measures does Northern Link trigger for the motorway and its interchanges under these circumstances? Requests that modelling be undertaken on the assumption that the Centenary Motorway is not widened to 6 lanes over 12.5 km section between the Ipswich Motorway and Toowong by 2016. Does not Kelvin Grove Road require upgrading with the CBD access ramps included?	**B.5.6 / 7** **B.5.6 / 4**
86	5.6.3 (p. 96)	What is the reason for growth in the average weekday traffic from 2007 to 2014 and 2026 with the Northern Link option? Is it population, trip attraction etc. Main Roads considers the figures to be high and requests clarification of the assumption in relation to forecast traffic growth.	**B.5.6 / 8**
87	5.6.3 Tab 5-34 5.6.4 Tab 5-36	The primary objective of the Northern Link is to improve operation of the overall major road network, which requires, interface improvements of the adjoining existing roads at the physical interfaces and further afield. What measures have been included within the Northern Link project to mitigate impacts at the Moggill Road interchange? What is the reduction in LoS and spare capacity at the Moggill Road interchange? What measures have been included within the Northern Link project to mitigate impacts along the Centenary Motorway to the south of Moggill Road? What is the reduction in LoS and spare capacity at other interchanges south of Moggill Road due to Northern Link? Are any managed motorways initiatives being employed as part of the Northern Link project to mitigate the traffic impact, e.g. variable speed limits, transit queue jump, hard shoulder running, ramp metering? What is being done as part of the Northern Link project to mitigate these huge impacts?	**B.5.6 / 9**
88	5.6.4 (p. 100) Tab 5-35)	Between 2007 and 2014, the EIS has forecast an increase in traffic without Northern Link from 12,000vpd to 28,000vpd, which seems unrealistic. Confirmation required as to what lead to this high forecast increase. Did traffic counts taken in 2008 validate this high forecast?	**B.5.6 / 8**

89	5.6.5 (p. 107) Tab 5-37	Upon completion of Northern Link, traffic levels on Milton Road are forecast to be 10-20% higher in 2014 than they were in 2007. Surely a key outcome of Northern Link is that the 'people would get their streets back', but this appears not to be the case. Requests that BCC consider measures for Milton Road to decrease total traffic levels below existing.	**B.5.6 / 20**
90	5.6.7 (p. 114)	It is not clear what the impact is for the merge on the Western Freeway between Northern Link portals and Milton Road outbound traffic is. Is there sufficient capacity to cater for both volumes?	**B.5.6 / 5**
91	5.6.7 (p. 114)	Recommended EIS Condition: "That BCC demonstrate, to the satisfaction of the State, safe and efficient merge and diverge arrangements on the Centenary Motorway to and from the Northern Link portals and to and from Milton Road."	**B.5.6 / 5**
92	5.6.7	The LoS for the on ramp to the Western Freeway from Moggill Road declines with Northern Link and this is not satisfactory to the State. Requests that BCC consider improvements to the Western Freeway/Moggill Road interchange as part of the Northern Link project.	**B.5.6 / 26**
93	5.6.7 Tab 5-41	Without Northern Link, the model has forecast the Mt Coot-tha Road roundabout would go from LoS A in 2007 to LoS E in 2014. This seems entirely unrealistic and explanation and reasoning for this is requested.	**B.5.5 / 2**
94	5.6.7 Tab 5-41	Table 5-41. Information in the table is limited and adds little value when taken out of full context, i.e., the DoS and LoS values do no appear to correspond (DoS 0.80 and LoS B, DoS 0.36 and LoS C). Request table is reviewed to include 'fuller picture rather than selective representations'.	**B.5.6 / 27**
95	5.6.7 (p. 115)	Kelvin Grove off-ramp impacts have Northern Link been described in terms of the impact on the extent of queuing back into the tunnel. What about impacts on Kelvin Grove Road inbound traffic?	**B.5.6 / 21**
96	5.6.8 (p. 120) Tab 5-420	Table 5-42 is titled 'Airport Link'.	**Statement**
97	5.6.9 (p. 129)	The recommended Local Area Traffic Management measures for local traffic increases in the Toowong precinct north of Milton Road should be implemented through the commissioning of Northern Link and not some other (currently unfunded) independent program.	**B.5.6 / 18**
98	5.6.11 (p. 128)	How does Northern Link affect public transport patronage volumes, especially when considering the Kelvin Grove Road CBD connection, which may encourage commuter driving?	**B.5.6 / 36**
99	5.6.11 (p. 128)	This section is silent on bus priority measures, notably the reallocation of road space on Coronation Drive and Milton Road given reduced traffic volumes resulting from the introduction of Northern Link. Any enhancements to the public transport network are limited to those already planned by BCC and Translink Transit Authority and should really be treated as 'business as usual' rather than enhancements. Requests the inclusion of analysis on the projects ability to afford any opportunity for improved frequency of existing services or any new public transport services.	**B.5.6 / 35**
100	5.6.12	Regarding Western Freeway Bikeway and Main Roads Cycle and Pedestrian Bridge. Requested that BCC review and clarify how the level of service is to be maintained for cyclists during the (lengthy) construction phase once the pedestrian overbridge is	**B.5.7 / 6**

		decommissioned.	
101	5.6.12 (p. 134)	This section describes mechanisms to maintain existing pedestrian and cycling movements. No opportunities for enhanced pedestrian and cycling connectivity have been identified other than through reduced traffic congestion or improved movement of traffic on key regional radial roads in the corridor. Additional on-road cycle routes are cited as options to improve pedestrian and cycling connectivity but specific instances are not detailed. For such a major project, the lack of improvements to active transport is disappointing. Brisbane City Council must identify and describe specific improvements for enhanced pedestrian and cycling connectivity that would be derived from Northern Link.	**B.5.6 / 44**
102	5.6.12	Active transport is proportionally higher in this area than the Metropolitan Region (19% compared to 12%). Northern Link is a major transport project and therefore should provide positive benefits for active transport on the surface roads in the catchment area as part of the project. The importance of walking and cycling in the inner west is acknowledged by Brisbane City Council in Travel Behaviour and Trends (Section 5.4.3). The EIS states that there should be improvements for pedestrian and cyclists via reduced traffic and nominates some specific roads. Within the EIS, the approach used is to 'maintain' existing functions. The EIS identifies a number of options to improve pedestrian and cycling connectivity (page 5-135). Surely the project should be actively improving cycling and pedestrian facilities through improved infrastructure and connectivity? Main Roads suggests including positive cycling and pedestrian activities as part of the project. For example, enhancements could be made to the pedestrian and cycle crossovers on Miskin and Dean Streets. Main Roads request confirmation that the same or better level of service currently available to cyclists would be provided. Main Roads requests confirmation that this improvement would be for the whole project area and not just specific areas. If there are areas where LoS is decreases, these should be listed.	**B.5.6 / 44**
103	5.6.12	Regarding Western Freeway Connection: page 5-134 first and second paragraphs: Both these provisions would reduce pedestrian /cycle activity. For some western approach users it would take up to 4 times longer to cross while for the eastern approach users it would be doubled. This does not encourage usage. Pedestrian journey time analysis from several locations in the vicinity of the Milton Road/ Croydon Street/Morley Street intersection, e.g. bus stops to/from the Cat and Fiddle shopping precinct would be beneficial in assessing the negative impact of the project on pedestrians.	**B.5.6 / 39**
104	5.6.12	Regarding Western Freeway Connection: p5-134, 3rd paragraph: With regard to pedestrian crossings, it does not state whether the current LoS would be maintained (waiting time and total journey distances). There is concern that the LoS provided to pedestrians would suffer under the Northern Link project. Confirm if crossing waiting time would increase and by how much. For example, maximum, average and minimum crossing times should be provided. Comparisons with existing values should also be made.	**B.5.6 / 39**

105	5.6.12	Regarding Western Freeway Connection: No mention is made of the impact on on-road cyclists who currently use the Western Freeway/Centenary Motorway. Main Roads has an agreement in place with Bicycle Queensland the department allows cyclists to use the road. Sports cyclists (often group riders) and higher speed commuter riders are the predominant on-road users. Explain how the project would impact on these users and what measures are to be taken to ensure a continued or better level of service for on-road cyclists using the Centenary Motorway.	**B.5.6 / 47**
106	5.6.12	Explain how the project would impact upon cyclists who currently use the Mt Coot-tha Road roundabout to access Mt-Coot-tha.	**B.5.6 / 49**
107	5.6.13	EIS makes no comment mention of a review of speed limits necessary to address the speed limit interfaces or road safety issues at the merge, diverge and weaving areas to the north of Moggill Road interchange. Main Roads requests confirmation as to whether a road safety audit has been carried out, with specific findings to be reported regarding speed limit issues and merge/diverge/weaving matters on the Western Freeway.	**B.5.6 / 51**
108	5.7	Constructability of Northern Link under traffic conditions needs to be a primary Project objective, with the operation of the major road network, community and business needs to be maintained during the long construction period. Suggests learnings from NSBT and Hale Street link are incorporated into traffic management plan.	**B.4.3 / 16**
109	5.7.2	The proposed left in/left out access arrangements for the Western Freeway worksite are unacceptable to Main Roads due to road safety and congestion impacts. Main Roads requests that this access/egress arrangement be removed. Access/egress to the worksite should not be from the motorway. The vehicles exiting the worksite would have little acceleration and sight distance before entering the motorway and intersection. This could create safety and operational issues due to large speed differential between the vehicles. Suggests that access/egress could be achieved via Mt Coot-tha Road, provided mitigation of impacts on the Mt Coot-tha Road roundabout are implemented.	**B.5.7 / 1**
110	5.7	Northern Link would require the complete reconstruction of the new cycle/pedestrian bridge ramps and possibly within a year of this facility being open. The Northern Link project would also require a new section of the Western Freeway Bikeway to be built, Main Roads require that the same LoS be maintained for cyclists and pedestrians using these two facilities during the construction phase. There are no other suitable options for pedestrians or cyclists. Main Roads preference is for the new section of the Western Freeway bikeway to be constructed prior to closing the section to be replaced.	**B.5.7 / 6**
111	7.3.2	Additional erosion and sediment control measures would provide benefit during construction.	**B.6.2 / 1**
112	7.3.2	The peak discharges calculated for the Catchment 4 is lower than the Rational Method and this could affect the existing conditions. There is no reason given for this difference in the report, clarification is requested.	**B.7.3 / 2**

113	7.3.2	The HEC-RAS model results show that 1 in 100 AEP flooding would not overtop Frederick Street. However, the flood level immediately upstream of the Milton Road roundabout would be approximately 15.3 m AHD and overtop the roundabout by 300 mm.	**B.7.3 / 2**
114	7.6.1	The mitigation works in the EIS to cope with flooding during construction should be designed in accordance with Main Roads Drainage Design Manual (DMR 2002) and Queensland Urban Drainage Design Manual (DNRW, 2007).	**B.7.3 / 2**
115	8.1.2 Tab 8-1	There are some sensitive places that are not included in Table 8-1. Main Roads suggests amendments to Table 8-1 to include the following: • Christian Brethren Assemblies - 50 Miskin Street Toowong. • St Johns Toowong, Corner of Exmouth and Oxford Streets, Toowong. • St Mary's Home - corner of Ivy and Mount Street, Toowong. • Toowong Primary School - St Osyth Street Toowong (there is also a State School facility in Quinn Street that is retained by State Government). • Anzac Park (next to BCC Bus Depot).	**B.8.1 / 4**
116	8 Tab 8-3	Regarding Table 8-3, Main Roads does not consider the table to provide a comprehensive picture of air quality in the 'Brisbane Area'. Main Roads recommends including Springwood monitoring station to complete the 'Brisbane Area' representation.	**B.8.1 / 3**
117	8.1.3 (p. 7)	"Mt Coot-tha Quarry Dust Monitoring" paragraph on page 8-7 is out of context. Suggest moving to next page of the EIS and use as the introduction to the Mt Coot-tha air quality discussion.	**N/A**
118	9	Laeq dBA is not a standard term suggest $L_{Aeq(1\ hour)}$. Parameters expressed as LA10 then later as LA10. Needs consistency.	**N/A**
119	9.1	Noise measurements were taken when there was an abnormally high level of trucks carting fill along the Western Freeway and Milton Road. Confirm whether the abnormally high level of trucks has been corrected for purposes of the noise assessment.	**B.9.1 / 1**
120	9.2	Incorrect noise terminology used on 5th line, 'explaining' should read 'expressing'. Also, throughout the document, 'sound pressure level' should be changed to 'sound level'.	**N/A**
121	9.2.1 (p. 10)	Why is numbering 4, 5 and 6 used and not 1, 2 and 3	**N/A**
122	9.2.2 Tab 9-7	Table 9-7, last column is not from AS/NZS2107:2000. Source required.	**B.9.2 / 7**
123	9.2.3 Tab 9-9	Table 9-9, values for Workshop appear incorrect.	**B.9.2 / 7**
124	9.2.3 Tab 9-10	The text should indicate that a crest factor of 1.4 has been applied to values in Table 9-9.	**B.9.2 / 7**
125	9.3.1 Tab 9-15	Table 9-15, third row plant type is missing.	**B.9.2 / 7**
126	9.3.1 Tab 9-16	Table 9-16, values from Row 2 are missing.	**B.9.2 / 7**
127	9.3.1 Tab 9-17	Table 9-17, comment indicates that vibration velocity is assumed proportional to the face area. However the data suggests velocity has been assumed proportional to the area.	**N/A**

128	p. 9-21	Reference at bottom of page. Distance should have exponent or superscript.	**N/A**
129	9.3.2	First line, page 9-23. Insert 'Individual' before plant items as assessment is not for cumulative effects. Suggest a cumulative assessment be included.	**B.9.3 / 9**
130	9.3.2 Tab 9-19	Table 9-19. Why is the sound power level corrected by 4dBA? Describe the superscript '1' inferior acoustic enclosure?	**B.9.3 / 9**
131	9.3.2	Page 9-28. Section Kelvin Grove Worksites. Not sure exactly where it is referred to in the text.	**N/A**
132	9	Environmental Management Plan not mentioned. Suggest reference to EMP.	**N/A**
133	9	Possibility of scheduling noisy works in holiday periods/non-school hours/weekends could be included. Include dot point in EIS if appropriate. EIS condition required for working hours restriction (relating to noise and to traffic impacts)	**B.9.3 / 2**
134	9.3.5	Typo 5mm/s – could confuse (page 9-45 line 2)	**N/A**
135	9.3.5	$L_{pA,LF}$ parameter from Ecoaccess Guideline appears without explanation, which could lead to confusion.	**N/A**
136	9.3.6	Not clear why $L_{A10(12\ hour)}$ parameter is relevant. Explain, or use $L_{A10(18\ hour)}$.	**B.9.3 / 11**
137	9.4.1	Category R3. Is the exceedance 'by 0 dBA' correct? Should this be > 5 dBA? Confirm correct exceedance from Brisbane City Council Noise Guideline.	**N/A**
138	9.5	Concawe presumably predicts portal noise as a planar source in terms of L_{Aeq} and not L_{A10}. CoRTN predicts road traffic noise from a line source i.t.o L_{A10}. What method is used to combine the two contributory noise sources to establish noise level at a noise sensitive receptor? Brisbane City Council to state what method of prediction was used.	**B.9.5 / 6**
139	9.5.3	Reduction of 3 dBA for OGA should be clarified. Reduction varies over the life of the treatment. Noise Code recommends average value of 2 dBA. Provide explanation and expand.	**B.9.5 / 7**
140	9	In some cases 40 dBA L_{Aeq} is used for sleeping areas near major roads and in other cases 45 dBA. EIS is inconsistent in this regard. Select appropriate noise criteria and be consistent.	**B.9.2 / 8**
141	10.2.5 (p. 28)	Mitigation measures in this table do not include a reference to Clearing Requirements under the Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006-2016 (the Koala Plan). To avoid there being injury to koalas, the Nature Conservation (Koala) Conservation Plan 2006 contains statutory provisions that specify how any clearing of koala habitat trees is to be carried out within Koala Districts A and B, i.e., the South East Queensland Bioregion, and when and where koala spotters must be present. These statutory provisions are effective from 2 October 2006. Appropriate reference to clearing requirements is needed. Koalas cannot be moved manually. They must be allowed to move on their own accord and sequential clearing must be carried out in conjunction with a fauna spotter catcher when within "Koala District A" (SE Queensland) as stipulated under the Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006-2016.	**B.10.2 / 3**
142	10.2.8 (p. 31)	Two significant wildlife corridors have been identified to the west of the project area. However, the Western Freeway acts as a barrier within one of these major corridors. Has it been considered that fauna mortality could be reduced by the installation of fauna exclusion fencing along the boundaries of the Western Freeway within the Northern Link project area?	**B.10.2 / 2**

		The possibility of installing fauna exclusion fencing should be included / considered within the Wildlife Corridor mitigation measures section.	
143	10.2.9 (p. 31)	Aquatic fauna such as turtles, fish and aquatic invertebrates have been identified as part of the field survey and the mitigation measures need to reflect this. Include mitigation measures during construction for identified aquatic species within Anzac Park.	**B.10.2 / 4**
144	11.1.4 Tab 11-1	Fourth dot point under heading Regional Planning Framework – reference to the superseded "Integrated Regional Cycle Network for SEQ". Replace with SEQ Principal Cycle Network Plan	**Table B-1**
145	11.1.4 Tab 11-2	List of relevant Regional Policies derived from Table 11-1 is incomplete. Add "Economic Development". Reason - efficient transport systems/infrastructure are essential to achieve economic development.	**Table B-1**
146	11.1.4 Tab 11-2	The relationship of the Project with the SEQRP Desired Regional Outcomes (DROs) for Sustainability and Natural Environment is not described in the discussion in column 2 as it is for Urban Development and Integrated Transport. Amend EIS to include comments on the way in which the project relates to Sustainability and Natural Environment DROs.	**Table B-1**
147	11.1.4 Tab 11-2	Fourth paragraph under Regional Activity Centres. The focus of the centres efficiency argument is narrow around road network outcomes. Suggest amend to: "As major trip generators, these Centres need to be serviced by efficient transport networks to allow them to develop and operate to their desired potential."	**Table B-1**
148	11.1.4 Tab 11-2	With a large forecast traffic increase on Jephson Street (connected option) due to Northern Link, it appears that the local traffic congestion (resulting from the connected option) would compromise the SEQRP objective of Toowong developing as a major regional activity centre (Map 9 of SEQRP). EIS to articulate the (likely negative) impact of the Northern Link connected option on the Toowong commercial precinct and SEQRP objective for this area.	**B.11.1 / 3**
149	11.1.4 Tab 11-2	Third paragraph. Under Integrated Transport. Seeks to relate Northern Link to SEQRP objective of achieving quality orbital road systems within the Greater Brisbane area to support connectivity of urban centres and bypass major road congestion points. Northern Link connects to the Inner City Bypass. Clarity around Northern Link function required in text – is it connecting urban areas or is it an orbital road? Is it a true orbital link or just a bypass of Milton? Need to be clear about its function.	**B.11.1 / 2**
150	11.1.4	First sentence. - South East Queensland Infrastructure Plan and Program – minor change. Amend to "….(SEQIPP), which was most recently updated in June 2008".	**Table B-1**
151	11.1.4	2nd sentence. - Integrated Regional Transport Plan for South East Queensland – amend for accuracy. Replace with: "There is a legislative requirement to prepare a regional transport plan under the Transport Planning and Coordination Act 1994. The Integrated Regional Transport Plan 1997 is currently under review. A new Integrated Regional Transport Plan will support the SEQRP and coordinate investments across all sectors of the transport system."	**Table B-1**

152	11.1.5	Third paragraph. Desired Environmental Outcomes and Strategies. "Access and mobility" DEO in Brisbane City Plan 2000. Given the nature of the Project, the EIS needs to respond to this DEO which promotes a "compact urban structure and less reliance on private motor vehicles…". Specifically respond to the points on ways to achieve this DEO beyond what is currently stated at page 11-25 of the draft EIS.	**B.11.1 / 4**
153	11.1.5	Strategic Plan. The statement – "Of particular reference to Northern Link, the Movement System reference in the Strategic Plan acknowledges that Brisbane's transport infrastructure has become outdated due to changes in travel patterns and the continued dispersal of activity." This statement does not make any sense. What is meant by "outdated" – surely you mean that demand is beyond the capacity of existing infrastructure? What is meant by "continued dispersal of activity"? Should state that travel distances are increasing as the metropolitan area expands. Clarification is required of comments in the second paragraph under 'Strategic Plan'.	**B.11.1 / 5**
154	11.1.5	Strategic Plan. "The absence of a northern connecting motorway from the Ipswich Motorway to the Gateway Motorway is readily apparent." This is a subjective statement not based on the findings of any publicly released transport planning study. Suggest delete this statement or reflect the role of the Inner Orbital as the planned primary motorway from the west to the north.	**B.11.1 / 5**
155	11.2.2	City West, first and second paragraphs. Refers to reduction of traffic on Milton Road, Countess Street, Petrie Terrace and some other local roads due to the Project. This seems improbable - the Kelvin Grove Northern Link portal is likely to increase traffic to the CBD through Countess Street and Petrie Terrace.	**B.11.2 / 1**
156	11.2.2 Tab 11-5	Sustainability regional policy. The statements here are fairly subjective and some belong against other policies, for example, "The Project would contribute to sustainability through improving accessibility to activities and services at both local and regional level". How would the project contribute to achieving less private vehicle trips? This is more a measure of sustainability. Dot points 2,3 & 4 belong against the Integrated transport policy.	**B.11.2 / 4**
157	11.2.2	Integrated Regional Transport Plan for South East Queensland. This is an incorrect statement about the status of Integrated Regional Transport Plan 1997. Delete first sentence - the Integrated Regional Transport Plan has not been replaced by SEQRP. While the Integrated Regional Transport Plan is ageing, it is still policy which is standalone to the SEQRP.	**Table B-1**
158	11.2.2	Regional Cycle Strategies. Incorrect reference to network plan. Amend heading to: "Regional Cycle Strategies – Cycle South East and the SEQ Principal Cycle Network Plan."	**Table B-1**
159	11.2.2	Western Brisbane Transport Network Investigation. Reference this study to its origin as a recommendation of the Integrated Regional Transport Plan 1997. This section should appear immediately after the sections on the Integrated Regional Transport Plan and Transport 2007 as WBTNI originated from the Integrated Regional Transport Plan. Need to clarify the link to this project – through WBTNI – to Integrated Regional Transport Plan and Transport 2007.	**Table B-1**
160	11.2.3	Brisbane Long Term Infrastructure Plan 2007. If Northern Link facilitates the creation of a western suburbs freight corridor to the city and ATC, it would run through significant	**B.11.1 / 6**

		residential areas particularly along the Centenary Highway. It is hard to see how BLTIP's goal of protecting residential amenity would be achieved by promoting this as a freight route. Furthermore, the untolled Milton Road is forecast to continue to carry a high proportion of the freight movements to and from the motorway (when compared to Northern Link). Clarify how residential areas in western Brisbane would be protected from freight movement. If text is not valid or misleading, then it should be deleted from EIS.	
161	11.4.1	Land Use Impacts – Western Connection. Land Acquisitions and Land Use Implications. Minor correction. Amend to: "The worksite and construction areas would be licensed by Council to the Public-Private Partnership Company (PPP Co) for the duration of construction."	**Table B-1**
162	11.4.4	Land Use Impacts – Northern Connection. Incorrect statement about the nature of Main Roads interest in land on which the ventilation fan station and outlet are proposed to be constructed at Victoria Park. Main Roads is the trustee of this reserved land, not the owner. Therefore the process of making the land available requires revocation of part of the reserve by the Department of Natural Resources & Water, an easement in gross, or a trustee lease issued by Main Roads subject to Ministerial consent under the Land Act 1994. Consent should be able to be obtained for a trustee lease because the purpose of the reserve is Departmental & Official (Transport & Developmental) purposes and the facility is required for transport purposes.	**Table B-1**
163	13.2.1	Demographic Profile – Population. The study area's estimated residential population of 57,291 people in 2006 is inconsistent with the figure given in Technical Report No. 13 (59,897). Check consistency of statistics and correct as required.	**B.13.2 / 3**
164	13.2.3	Community values – Accessibility & Connectivity "In particular, increased traffic congestion on Milton Road and Coronation Drive has resulted in delays to peak period bus travel and commuter traffic…" This point requires expansion. Highlight in the EIS that removal of bus priority lanes in Coronation Drive has also contributed to bus delays and the overall congestion problem in this corridor. In addition, discuss impact on bus travel and commuter traffic of the removal by BCC of the tidal flow system.	**B.13.2 / 5**
165	13.2.3	Community values – Community cohesion. "Levels of community cohesion in the study corridor are generally likely to be healthy, but are expected to vary across the study corridor." No data appear to have been provided to support this (subjective) statement.	**B.13.2 / 4**
166	13.3.2	Overall Social Benefits of the Project: "The Project represents the closure of a significant missing link in Brisbane's arterial road network, and would result in a net social benefit to the city. Without the Project, traffic congestion in the study corridor would continue to increase, with further loss of local amenity, increased travel times, and increased rat running in local streets…" These statements pre-suppose that the solution to the problems is to construct a new road, not a public transport solution, or a combination of other measures. Where is the data to support the stated conclusions?	**B.2.1 / 1** **B.13.3 / 18**
167	13.3.3	Impacts by Location – Western Connection. "During construction, there would be temporary disruption to the bikeway adjacent to the Western Freeway in Anzac Park. However, access along the bikeway would be maintained, minimising impacts on pedestrians and cyclists in this area…." No reference is made to the removal of access to the cycle overbridge and how the level of service would be maintained during construction.	**B.13.3 / 4**

		Main Roads is concerned that any impacts to the bikeway be minimal and that alternative routing arrangements be put in place to minimise disruption to cyclists and pedestrians. Refer to Chapter 4.1 above. Discuss impacts on LoS at overbridge. Define 'temporary disruption' period.	
168	13.3.3	Impacts by Location – Western Connection. Western Connection – Operational Impacts. "The existing pedestrian and cycleway along the southern side of the Western Freeway would be realigned to make way for the tunnel and ramp adjoining Anzac Park. This would allow direct connectivity to the new pedestrian / cycle overbridge, currently under construction (by the Department of Main Roads) from Anzac Park across the Western Freeway to Mt Coot-tha Road." Main Roads is concerned that the LoS be maintained for cyclists as there are no alternative options at the moment. Impact to be mitigated by ensuring LoS is maintained for cyclists. This includes consideration of safety, accessibility and journey times.	**B.4.3 / 16**
169	13.3.4	Impacts by Location – Toowong. The text needs a concluding summary statement summarising the significant social impacts on this particular locality of resumptions, works, etc.	**Comment (refer In Brief for Summary)**
170	13.3.6	Impacts by Location – Inner City Bypass Connection. "However, while functionally part of the park, the land on which the ventilation structures are proposed to be built is owned by QDMR and is not within the cadastral boundary of Victoria Park." Incorrect reference to land ownership. The land on which the ventilation structures are proposed to be built is owned by the Department of Natural Resources & Water and Department of Main Roads is trustee under the Land Act 1994. The land is a reserve for Departmental & Official (Transport & Development) purposes.	**B.13.3 / 12**
171	13.4.1	Design Development – objectives. Should include an objective "Ensuring the design of the road network (major road and connections) is of a high standard, safe and efficient."	**B.13.4 / 1**
172	14.4.2 Fig 14.2	Figure 14.2 Site Analysis plan Northern & Kelvin Grove Road Connection. What are items 5 to 9 shown on the map? Include labels for items 5 to 9 in the legend.	**B14.1 / 1**
173	14.5.8 Tab 14-1	Table 14-1 Potential Impacts – Western Connection. Construction Related Works – Accessibility, Permeability and Connectivity "There would be some interface impacts with the pedestrian/cycle bridge over the Western Freeway (currently under construction). This connection may be temporarily interrupted during construction of cut and cover portals near the roundabout. Surface changes during the different phases of construction would temporarily impact on the existing pedestrian and cycle route to and from Mt Coot-tha. This route would remain open but in a changed environment." How is this to be managed and minimised? There are no alternative options for cyclists. Impact to be mitigated by ensuring LoS is maintained for cyclists. This includes consideration of safety, accessibility and journey times. Define 'temporary disruption' period.	**B.14.7 / 2**
174	14.5.9 Tab 14-2	Table 14-2 Potential Impacts: Toowong Connection Surface Road Changes – Accessibility, Permeability and Connectivity "The introduction of a cul-de sac would impact on connectivity for motorists at Valentine Street, but not for pedestrians or cyclists." Main Roads supports this closure. Suggest add that the closure of the intersection of Valentine Street and Frederick Street would improve the safety and efficiency of	**B.14.7 / 2**

		Frederick Street, a State-controlled road.	
175	14.5.10 Tab 14-3	Table 14-3 Potential Impacts: Northern Connection. Ventilation Outlet (VO) – Predominant Land Uses and Variety. "The VO would be located within Brisbane City Council owned Victoria Park Golf Course..." This is an incorrect reference to land ownership. Amend this statement to "The VO would be located within a Reserve for Departmental & Official (Transport & Development) purposes which is used as part of the Brisbane City Council operated Victoria Park Golf Course. The subject land is owned by the Department of Natural Resources & Water, with the Department of Main Roads as trustee."	**Table B - 1**
176	14.6.1	Western Connection. Proposed mitigation measures during construction and impact on State-controlled roads Centenary Highway and Frederick Street Main Roads would need to be consulted, review and give approval prior to the construction of any works. Amend to include a statement that prior approval of the Department of Main Roads would be obtained before carrying out any works on the State-controlled road reserve and that Main Roads would be consulted in relation to Visual Mitigation, Vegetation Management and Pedestrian and Cycle plans.	**B.14.6 / 2**
177	14.8.4	Clarification required as to the intent of the "visual perception" view as distinct from the "integrated" view. Are the landscape treatments shown in the "visual perception" view proposed mitigation works? For example, there are what appear to be pine trees planted on the Frederick Street roundabout, which is not within the project scope and is therefore a misleading representation. Amend EIS to represent reality. If such planting is envisaged then, for safety and efficiency reasons, Main Roads would need to be consulted further about any proposals for placement of rows of hoop pines (or similar large trees) within the Toowong roundabout (TC1), alongside the carriageway of Frederick Street (TC2) and elsewhere shown in the State-controlled road corridors.	**B.14.8 / 3**
178	15	There are indications that various inputs and assumptions need to be checked for consistency and accuracy, and a number of the parameters used seem at odds with the most recently published data (see below). A greater level of understanding would also be gained from an explanation or rationale as to why certain values have been utilised. Consideration of the recent changes in world economic conditions also need to be given due consideration as there would be significant impacts for the project. Broadly speaking, a review by BCC of the technical documentation and modelling in relation the economic environment chapter would be recommended. As noted in a number of locations below, there are a several inconsistencies and anomalies between the report and various source documents, some of which introduces doubt into the robustness of the economic analysis behind the project.	**B.15.7 / 1** **B.15.3 / 1**
179	15.3	There have been significant changes in the economic environment as a result of the current global financial crisis that need to be considered. The figure for Queensland economic growth (GSP) needs to be checked as it does not match in the State budget papers.	**B.15.3 / 1**
180	15.5.1	Given the significant change in the world economic climate, these figures appear to be based on an optimistic peak demand. There is potential for a significant change in the conditions present in the local real estate market where even volumetric resumptions would have a significant impact on attracting potential home buyers.	**B.15.3 / 1** **B.15.5 / 3**

181	15.7.2	The sensitivity testing for the discount rate should be changed, or an additional sensitivity added, for consistency with the rate used by Infrastructure Australia.	**B.15.7 / 1**
182	15.7.4	Inputs and assumptions presented in Table 15-3 vary from those in the DMR / Austroads endorsed values for Urban Travel Time 2007. The basis for many of the assumptions in Table 15-3 would benefit from clarification, e.g., the basis for choice of the traffic annualisation assumptions.	**B.15.7 / 1**
183	15.7.4	It appears the CBA adopts $2008 for CAPEX, $2007 for RUC parameters and $2002 for accident values.	**B.15.7 / 1**
184	15.7.4	There is no explanation on how a split between private and business light vehicles was determined.	**B.15.7 / 1**
185	15.7.4	Whilst it is most likely that the asset would have a $0 accounting residual value, even after the concession period the asset would have a terminal value.	**B.15.7 / 1**
186	15.7.4	Traffic volume sensitivities. World-wide experience has indicated that optimism bias (optimistic traffic modelling) has frequently been a factor in PPP traffic forecasts. Sensitivity testing of the financials to 'underachievement' of the forecast traffic volumes should have been reported in the EIS.	**B.15.7 / 1**
187	15.7.5	Table 15.6 Externality unit cost - urban. The values for heavy vehicles do not match published material in the Update of RUC Unit Values to June 2007.	**B.15.7 / 3**
188	TP 15 5.2	Dot point at the top of page 45 Reference to tunnel carrying Northern Link 6% commercial vehicles is vague, should this reference be heavy freight vehicles or does it include light commercial vehicles also?	**B.15.7 / 1**
189	TP 15 5.3.2	Table 10 Project Case Cash Flow. The variance between the P10, P50 and P90. A total of 4% above or below the project case appears low given, for example, recent past performance in cost estimation of transport infrastructure in SEQ and that the level of yearly construction cost has been increasing at approximately 15 - 20% per year.	**B.15.7 / 10**
190	TP 15 6.3	Page 62: Clarification is needed as to what is meant by "(exclusive of expenditure on other transport via tolls)".	**B.15.9 / 2**
191	TP 15 6.3	Why is the impact of the toll removed in Section 6.3.5 when reporting Queensland real household consumption?	**B.15.9 / 2**
192	TP 15 6.3	There is a need for some clarification as to the difference between *Queensland real consumption* and *Queensland real household consumption* as in it current format it appears that real consumption is first said to be negative $1.5 million then later stated as positive $1.5 million.	**B.15.9 / 2**
193	TP 15 7	This section needs to be reworked as it may not be valid to say that the project is being proposed at a time unprecedented growth. Especially now that one of the major economies that Queensland exports to is officially in recession and the others are facing the prospect of lower growth, if any. These changed conditions are going to have a significant impact on business and individuals, economic growth, employment levels and the level of traffic generation.	**B.15.3 / 1**
194		duplication of sub issue 115	**N/A**
195	19.2.6	Training and awareness on Northern Link should not only be undertaken by on-site staff, but by visitors to the site as well. Environmental awareness for visitors should also be covered in the site-specific safety induction.	**B.19.7 / 2**
196	19.6.4	This document makes reference to the "Soil Erosion and Sediment	**B.19.7 / 1**

		Control, Engineers Guidelines for Queensland". It should be noted that there are new guidelines being released. These guidelines are the Best Practice Erosion & Sediment Control, International Erosion Control Association (Australasia). These are to be released in late 2008. These guidelines include management measures to meet the updated Environmental Protection Policy (Water) requirements. The EPP (Water) requirements will be effective from early 2009. It is recommended that text refer to the "Best Practice Erosion & Sediment Control, International Erosion Control Association (Australasia)".	
197	19.6.4	The "Interim Guidelines and Technical Notes for Road Traffic Noise Amelioration (1991)" were superseded in 2000 by the Road Traffic Noise Code of Practice. That edition has now been superseded by the October 2007 version. The reference should be to the Main Roads Road Traffic Noise Management: Code of Practice (Oct 2007)	**B.19.7 / 3**
198		Duplication of Sub issue 141	**N/A**
199	19.8	The 'Performance Criteria' does not include criteria for groundwater quality. Insert a groundwater quality performance criterion.	**B.19.8 / 1**
200	19.8	Mitigation Measures for Storm Water of Northern Link identifies the management of stormwater for the tunnel operation. The management of stormwater runoff from roads has not been addressed for areas outside the tunnel, e.g., entry/exit ramps. Refer to Chapter 7.5.6 Mitigation Measures – surface Water: Operational Phase. This section also includes 'Operational Surface Water Quality Monitoring Program'. This should be inserted into the 'Monitoring' row of the EMP, Element 4.	**B.19.8 / 2**
201	20.2	"BCC and Queensland Transport could also coordinate the staged upgrade of the Bicentennial Cycleway with Project-specific mitigation measures to maximise the benefits for people wanting to walk or cycle to work." Clarification is required on this issue, since this perhaps should be addressed in the Northern Link project. What are the Project-specific mitigation measures and has the Northern Link team (MIPO) spoken to Brisbane City Council and QT? The statement requires clarification as to the nature of Project-specific works intended.	**B.20.2 / 1**
202	20.3.1	Urban Outcomes: "The experience with many transport infrastructure projects has seen the urban form change dramatically and quickly as the private sector responds to improved accessibility by opening up new development fronts, or increasing the intensity with which land is used within transportation corridors." It is important that all the freed up capacity in the surface road network not be soaked up through increased density developments that still have a car orientation. It is stated elsewhere that through a modelled reduction in surface traffic, one of the expected benefits by Brisbane City Council is the opportunity for better public transport, active transport and improved public realm. Provide more detail about the benefits of increased land use intensity expected to be realised due to the Northern Link Project.	**B.20.3 / 1**
203	20.3.1	Urban Outcomes: "Northern Link would link the Western Corridor with the Australia TradeCoast, and also link the economic activity centres of the Brisbane CBD, Toowong and Indooroopilly to the motorway network." As Milton Road and Coronation Drive would be freed up for local traffic, Toowong and Indooroopilly would have better linkages with the Brisbane CBD. Northern Link's primary function should be facilitating trips between major regional attractors – not lower	**B.20.3 / 1**

		order centres like Toowong and Indooroopilly. BCC to clarify function of Northern Link and its function in a regional sense and how it contributes to achieving the outcomes of the SEQRP.	
204	20.3.5	Stimulate Economic Development. "The commercial precincts in Milton, Indooroopilly and Toowong would benefit from congestion relief and from enhanced accessibility to the motorway network, especially for Toowong and Indooroopilly." Enhancing accessibility to the motorway network for Toowong and Indooroopilly should not be promoted as a driver for this project. These centres need to be developed to capitalise on PT and active transport linkages due to their proximity to the CBD. The centres would benefit from freed up road space on the local road network. Suggest delete the remainder of the sentence after "relief".	**B.20.3 / 2**
205	20.3.5	Stimulate Economic Development. "Northern Link would facilitate enhancement of public transport services, particularly on Coronation Drive, which would support heightened economic activity in the designated major centres and specialist centres within and adjacent to the study corridor." How? An explanation is required.	**B.20.3 / 2**
206	20.3.5	Third sentence, fourth paragraph - 20.3.5 Stimulate Economic Development. "To avoid the costs, or limited gains of speculative economic activity, development needs to be planned and managed. Value in property and economic activity could then be harnessed for enduring benefits. An integrated planning approach is required to capture the short to medium term benefits that would flow from these network improvements." Not clear what point is being made here. Needs re-writing.	**B.20.3 / 2**
207	20.4.1	Implementing Urban Regeneration. Regarding program initiatives for urban regeneration by government for example, City West master plan- "While the government programs are presently operating, the intention is for their delivery in the study corridor to be integrated and coordinated, in order to optimise the potential for community benefit, and to optimise the benefits from each of the programs." It is not clear what government programs are referred to in this section, apart from a reference to the City West project. Needs rewriting to improve clarity.	**B.20.4 / 1**
208	20.5.3	Kelvin Grove Mitigations. Proposed mitigation activities involving upgraded pedestrian and cycling links from Kelvin Grove Road to Lower Clifton Terrace and links to other cycleways. These proposed mitigation strategies are supported as they would assist in reducing the need for local private vehicle trips.	**B.20.5 / 6**
209	21.1	Definition of cumulative impact requires modification – the cumulative impact is the combined effect of this project and other developments. Suggest amend to “Cumulative impacts are normally associated with the compounding and synergistic interactions on the environment arising from a proposed project and other developments, occurring in the same area of over similar timeframes to the project being assessed."	**B.21.1 / 1**
210	21.2.8	The potential splitting of the community in the Toowong precinct particularly in the vicinity of Milton Road and Croydon Street has not been addressed. A widened Milton Road and Croydon Street to cater for the tunnel connections in the Toowong precinct virtually splits the community, and residents north of Milton Road in the Toowong precinct would find it difficult to walk or cycle to the Toowong activity centre or use active transport to access essential services, e.g., Toowong State School. This is contrary to the state	**B.21.2 / 3**

		government's desire to increase the use of active transport. Options for dedicated pedestrian and cycle connections need to be the subject of a more detailed analysis at EIS stage to ensure that the NL project does not severe the community as drastically as currently shown.	
211	21.2.9	Economic cumulative impacts don't seem to mention impact or contribution NL makes to the freight task. Reference is made to increasing air travel and air freight derived from the ATC but no overall freight component to improved economic outcome afforded by NL. More information on the economic analysis of NL's contribution to improved freight distribution needs to be articulated given it one of the projects primary objective. What percentage of freight is forecast to use NL during the 20 hours of lowest traffic demand, i.e., during off-peak periods, compared to Milton Road?	**B.21.2 / 4**
212	21.3	This section should not just focus on cumulative construction impacts (i.e. spoil transport) but the cumulative impacts on road network performance as a result of construction and operation of NL. The NL traffic model would be useful start to develop a picture into the performance of the road network across Brisbane given all the scheduled construction projects. Potential impacts could be described both temporally and spatially. The EIS should recommend that BCC, the State and other relevant agencies convene to develop and coordinate planned incident response resources at key locations within the network and the relevant times to help manage traffic in and around the various construction projects. BCC needs to begin to describe potential impacts on road network performance within the study area as a result of construction of NL. Reiterate the major conclusions from Chapter 5 in terms of the effect of NL on road network performance once commissioned.	**B.21.3 / 4**
213	21.3.3	Most significant project overlap is identified to occur from November 2009 to March 2010. No mitigation or management is identified.	**B.21.3 / 2**
214	21.4.1	Understood the ultimate configuration for the Centenary Motorway at the northern end is 8 lanes – this refers to 6 lanes. BCC to review, correct and use consistent assumptions about such key design/model inputs.	**B.21.4 / 4**
215	21.4.1	Assumes that use of Centenary Motorway by NL haulage would be finished prior to the start of substantial construction activities on this project. If the Centenary Motorway / Northern Link Interface Project proceeds, this won't be correct and needs to be factored in. BCC develop alternative haulage plans in consultation with DMR should Centenary Motorway Northern Link Interface proceed.	**B.21.3 / 1**
216	21.4.3	BCC's East West link: assumes that Centenary Motorway would be 3 general purpose lanes in each direction. This is inconsistent with all other assumptions made in the EIS, i.e., 2GP + T2 or 2GP + HOV. BCC to review, correct and use consistent assumptions about such key design/model inputs.	**B.21.4 / 4**
217	21.4.3	Key findings…..":the preliminary testing of cumulative effects indicates minimal change to the local streets and city distributors in the Inner West with the combination of Northern Link and the WBTNI projects'. There are forecast NL projects impacts of up to 52% on surface roads and therefore this statement appears unrealistic without detailed WBTNI planning being available. Suggest delete the sentence. The first sentence refers to further	**B.21.4 / 1**

		analysis required when WBTNI outcomes are known.	
218	22.5	When discussing employment growth for CBD and ATC, there is a need to specify whether the employment figures given are growth figures or actual employment numbers. The text is not clear.	**B.22.5 / 1**
219	22.5	Jobs and Investment are the same thing. Need to clarify the meaning and state that this amount of investment would lead to this many jobs. They are not mutually exclusive or additive. Reword.	**B.22.5 / 1**
220	22.5	Some comment here on absolute jobs and population growth in the region is appropriate given that these are the key drivers of NL project. (After all, this is the focus and home of much regional population growth).	**B.22.5 / 1**
221	22.5	BCC may have the causation wrong. People predominantly don't move to the Western Corridor to be unemployed. Jobs bring people (not the other way around). Reword.	**B.22.5 / 1**
222	22.5	At a discount rate of around 4 per cent, economic benefits are effectively 0 after 20-25 year. Even quicker at higher discount rates.	**B.22.5 / 1**
223	22.5	Quoting undiscounted benefits remain problematic.	**B.22.5 / 1**
224	22.5	Have negative amenity values been considered in the underlying analysis? There are likely to be long term effects on property prices, effects/possible unsightliness of ventilation towers and the flow-on effects of changed traffic flows on nearby roads.	**B.22.5 / 1**
225	22.5	The financial assessment has been undertaken over a 45-year period. As the forecasting period gets longer, it becomes harder to provide an accurate estimate of future cash flows. Quoting undiscounted benefits remain problematic. Perhaps in this case a terminal value approach can be used when forecasting past a certain time. (This would involve using a simple annuity to estimate terminal values.	**B.22.5 / 1**
226	22.5 Tab 22-2	Regarding Table 22-2, more explanation of how figures and conclusions were reached in the BCA would be useful.	**B.22.5 / 1**
227	22.5	The Western Corridor, supported by the SEQ Regional Plan as the focus for much of the regional population growth, already…' Reword this sentence – a bit ambiguous?	**B.22.5 / 1**
228	22.8	Recommendation 1(ii) needs to be more specific as to nature of the potential or predicted impacts. Amend (ii) to "detailed design embracing an innovative approach in seeking to resolve, to the extent feasible, the potential or predicted construction and social impacts of the reference project, particularly with regards the configuration of the local connections at Toowong and Kelvin Grove;"	**B.22.8 / 1**
229	22.8	Regarding Recommendation 1(ii): Detailed design stages should, to the extent feasible, resolve potential impacts of the reference project, particularly those adverse impacts for local communities residing in close proximity to the proposed Toowong and Kelvin Grove connections. Emphasis should be on innovation to address adverse impacts on local communities, not just about configuration of local connections to meet the NL project scope.	**B.22.8 / 1**
230	22.8	Regard to Recommendation 1iv. BCC must consider more than just the location of the connections but the design and impact of the connections.	**N/A**
231	22.8	With regard to Recommendation 2, all necessary approvals and permits must be obtained for the project. Responsibility for approvals to be clarified by BCC.	**B.22.8 / 2**
232	22.8	Rather than imply that the CG provide all necessary approvals and permits under City Plan, IPA, SDWPO, TIA and EPA etc. BCC	**B.22.8 / 2**

		should provide for all necessary approvals and permits required under these pieces of legislation. It is recommended that Council proceed with obtaining all necessary approvals and permits under City Plan 2000, etc.	
233	22.8	BCC should bear full responsibility for coordination the delivery of NL at the same time as other projects, in consultation with the State. BCC are adding this project to the mix and should propose inter-project methodology for State consideration. Recommended EIS condition: "BCC must develop a project management plan in consultation with stakeholders including DMR and QT and any contractor responsible for nearby projects which analyses project impacts and shows how those impacts would be mitigated and managed and arrangements for inter-project co-ordination".	**B.22.8 / 3**
234	22.8	Emphasis here should be on the State and BCC working together to manage road network impacts (through appropriate traffic management/incident management measures) associated with construction and delivery of NL in conjunction with other major infrastructure projects in the metropolitan area either underway or planned to be underway at the same time. State agency representation includes Main Roads, QT, QPS, and Emergency Services as a minimum. Measures to be adopted should be described both temporally and spatially. BCC to propose an initial range of measures as a basis for consultation with the State, with final measures to be signed-off by all agencies.	**B.22.8 / 3**
235	EIS-CS-01	BCC has proposed in the EIS that a worksite to the north of the Western Freeway would be accessed via a left in / left out arrangement from the motorway. On the basis of road safety and congestion impacts that this could have, such an arrangement is unacceptable to Main Roads. Access/egress should not be from/to the motorway. The vehicles exiting the motorway work site would have little acceleration and sight distance before entering the motorway and intersection. This could create safety and operational issues due to the large speed differential between vehicles. BCC to delete access/egress from/to the Centenary Motorway to any worksites.	**B.4.3 / 3**
236	EIS-CS-02	The vehicles exiting the Toowong work site have little acceleration and sight distance before entering Frederick Street and Milton Road. This can create safety and operational issues due to the large speed difference between vehicles. BCC to review alternative site plans that would provide greater acceleration length and sight distance for vehicles entering the roadways as well as any additional provisions planned for reducing risk and negative operational impacts.	**B.4.3 / 4**
237	EIS-CS-02	Is it proposed that the all construction vehicles would turn left out of the Toowong worksite onto Frederick Street, with no exit onto Milton Road? Is the right turn out of the work site onto Milton Road to be a permitted movement, as it would be an unsafe manoeuvre? BCC to provide greater detail of construction traffic turning/exiting arrangements from the Toowong work site. BCC to provide details of construction traffic/haulage routes.	**B.4.3 / 4**
238	EIS-TM-01 EIS-TM-02 EIS-TM-04	Based on the construction stages provided, it would appear that the northern approach at the intersection (roundabout) with the Western Motorway is losing significant capacity in Stages 1, 2, and 4. Furthermore, queue storage area is significantly reduced in Stage 1.	**B.4.3 / 9**

		Provide analysis of design, build-out, and design year conditions of all stages as proof of adequate traffic maintenance. Propose mitigation options as necessary. Provide turning movement counts, design vehicle swept paths, upstream effects of queue lengths, and expected construction zone related capacity loss with the analyses.	
239	EIS-TM-01 EIS-TM-02 EIS-TM-03 EIS-TM-04	The roundabout proposed in all stages (EIS-TM-0, EIS-TM-02, EIS-TM-03, EIS-TM-04) could produce a relatively high number of collisions at the western departure between southbound right-turning and westbound right-turning vehicles. BCC to review the roundabout design with special attention to the lane designations and number of circulating lanes. Consider one circulating lane on the western side and guiding vehicles on the southeast approach to the inside lane.	**B.4.3 / 9**
240	EIS-TM-02 EIS-TM-04	In Stages 2 and 4, (EIS-TM-02, EIS-TM-04), vehicles travelling through on Mount Coot-tha Road have a broad straight path and could cause collisions by not seeing the roundabout and crashing with circulating vehicles during lower volume periods. BCC to review the roundabout design with special attention to the approach angles.	**B.4.3 / 9**
241	EIS-TM-03	The road marking shown for the northern approach during Stage 3 (EIS-TM-03) guides through motorists using Mount Coot-tha Road through the roundabout as opposed to the continuous slip lane. In addition, the lane markings shown for the south-eastern approach appear to guide vehicles onto the Western Motorway. The motorists are most likely turning right, as vehicles accessing the Western Motorway are expected to use the continuous slip lane provided. BCC to review the road markings and correct so that motorists are guided through the intersection appropriately.	**B.4.3 / 10**
242	EIS-TM-04	The road marking shown in Stage 4 (EIS-TM-04) has inappropriately placed solid road marking around the south-eastern and northern departures. BCC to review the road marking plan of Stage 3 and adjust so that motorists are guided through the intersection appropriately.	**B.4.3 / 10**
243	EIS-TM-04	The Stage 4 plans (EIS-TM-04) features a below-grade construction zone in the centre island of the roundabout which is a high-severity hazard. BCC to provide discussion on how this hazard would be protected and what measures would be in place to stop vehicles from entering the centre island. Be sure to include site access and maintenance of sight distance for all vehicles.	**B.4.3 / 11**
244	EIS-TM-04	Note 3 on the Stage 4 plan (EIS-TM-04) states that the existing roundabout scenario would be reinstated after construction works were completed. BCC to provide recommended design alternatives and corresponding analysis for the reconstruction of the existing intersection.	**B.4.3 / 12**
245	EIS-TM-05	The grade of the Northern Link at the Toowong Connection (EIS-TM-05) appears to have a grade of > 5%. This is relatively high for this type of facility. Some examples of related safety and operational issues are sight-distance, stopping distance, and vehicle speed. Air pollution would also be greater with such a steep grade. BCC to provide discussion regarding provisions for reducing risk and negative operational impacts.	**B.4.2 / 6**
246	EIS-TM-05	The plans (EIS-TM-05) indicate that the circulating lanes on the eastern side of the roundabout would be closed. This would create significant adverse safety and operational effects to the surrounding road network.	**B.4.3 / 13**

		BCC to provide clarification and any necessary analysis demonstrating adequate safe and efficient maintenance of traffic at the Frederick Street / Milton Road intersection.	
247	EIS-TM-05 EIS-TM-06	The plans (EIS-TM-05, EIS-TM-06) indicate that the right-turn from Milton Road onto Sylvan Road would no longer be possible. The eastbound right turn storage at the Milton/Croydon intersection appears to be relatively short compared to Stage 3. This could cause eastbound congestion on Milton Road back through to the motorway. BCC to provide queue analysis at the Milton/Croydon intersection. Include discussion regarding provisions for preventing queue spillback into the Toowong roundabout.	**B.4.3 / 14**
248	EIS-TM-05 EIS-TM-06 EIS-TM-07	The location of the bus stop on westbound Milton Road requires 2 merges. This would provide unsafe and inefficient operation. BCC to review plans (EIS-TM-05, EIS-TM-06, EIS-TM-07) in conjunction with existing, build-out, and design year traffic volumes with local transit agencies. BCC to provide results and discussion.	**B.4.3 / 15**
249	EIS-TM-06	The plan EIS-TM-06 does not adequately show how the temporary eastern departure from the Frederick Street roundabout ties into the circulating carriageway of the existing roundabout – detail significantly lacking. In addition, concerned that there may not have been traffic analysis to support a poorly detailed proposal. BCC to provide additional detail to demonstrate how the departure would connect to the existing roundabout.	**B.4.3 / 13**
250	EIS-TM-06	The adjacent overpass structure construction and horizontal alignment of the eastern approach during Stage 2 (EIS-TM-06) could create sight distance issues for approaching and departing vehicles. This could lead to an increase in rear-end collisions as drivers approach queues. BCC to review the horizontal alignments and provide discussion and necessary analysis demonstrating adequate sight distance for approaching and departing vehicles on the eastern approach during Stage 2.	**B.4.3 / 13**
251	EIS-TM-07	The right turn storage for the eastbound approach at the Milton/Croydon intersection extends almost completely to the Frederick Street roundabout (EIS-TM-07). Is this an indication that queues are expected to be that long and they could possibly spill into the roundabout and therefore cause queuing on Frederick Street and the motorway? BCC to provide queue analysis of the Milton/Croydon intersection and discuss possible mitigations to ensure that queues do not block the Frederick Street roundabout in the design year.	**B.4.3 / 14**
252	Planning Layout 1 of 11	The eastbound diverge to the tunnel drops a lane from off the Western Freeway (Planning Layout 1/11). This is contrary to government policy for no funnelling into tolled facility. The westbound merge lanes layout is poor and would undoubtedly lead to operational problems. Merging the two westbound lanes from the tunnel into the two westbound lanes from Milton Road would appear unlikely to be a workable solution. What design standards does this meet? Main Roads wishes to see demonstration of safe and efficient merge and diverge arrangements on the Centenary Motorway. In addition, Main Roads requires it be an EIS condition that we are permitted to restrict traffic to and from the tunnel should there be road safety/queuing/congestion issues on Milton Road or the Centenary Motorway Redesign the eastbound diverge and westbound merge arrangements.	**B.4.2 / 4**
253	Planning Layout	Right turn lane into Corydon Street (Planning Layout 4/11) is very long and goes back to Fredrick Street. Is this an indication that	**B.4.2 / 7**

	4 of 11	queues are expected to be that long and that they could possibly spill onto the roundabout and therefore cause queuing on Frederick Street and the motorway? This could be a safety issue. BCC to review if there is a need for a double right turn at Croydon Street instead of the single.	

Submission No.		**150 (Environmental Protection Agency)**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		The EIS does not adequately define the scale and scope of Environmentally Relevant Activities (ERAs) required for the project. It will be difficult for the EPA to develop recommended conditions for these ERAs without this information. Details such as the scale and nature of the proposed work, predicted impacts on land, air, water and acoustical environmental values and proposed mitigation measures for these impacts are required.	**B.4.6 / 2** **B.19.6 / 1**
2		The Environmental Protection Regulation 2008 (the 2008 Regulation) takes effect on the 1 January 2009 and replaces the Environmental Protection Regulation 1998. The 2008 Regulation contains changes to the definitions of ERAs including the ERA number. The proponent is to note the following ERAs may apply to the project: • 8 - Chemical storage. • 63 - Sewerage treatment. • 64 - Water treatment.	**B.4.6 / 3** **B.19.6 / 1**
3		All places likely to be affected are identified in the EIS and the actions proposed are outlined. Condition reports are to be carried out on all places prior to the commencement of the works. They will then be monitored for vibration during tunnelling under the place. Settlement will be monitored during and after completion of the works. The development application [Queensland Heritage Act] that precedes the works must detail the above actions and copies of any reports prepared should be supplied to the EPA.	**B.4.6 / 5** **B.12.2 / 2**
4		Cultural Heritage: During development, should damage occur to existing building fabric and/or other significant elements or artefacts, such incidents must immediately be reported to the EPA confirming details of the incident. The incident report must include (but is not limited to) the following information: 1. Location and name of registered place. 2. Permit number and condition number incident report being made under. 3. Details of incident, including time and cause of incident and damage report. 4. Details of measures that were in place at the time to protect against such incident and why these did not prevent damage. 5. Details of proposed measures to reinstate, remediate or rectify damage. 6. Name and contact details of person making report.	**B.4.6 / 5**
5	9.3.5	The EIS identifies Toowong Cemetery and St Brigid's Church and Convent as the places most likely to be affected by relatively high vibration levels. Toowong Cemetery: As many of the monuments are not well founded, the condition survey should identify where physical support may be required prior to the tunnelling operations - the	**B.12.2 / 2** **B.12.2 / 5**

		type of support proposed should be discussed with the EPA. A further survey at the completion of the works will determine remedial works required. The necessity for remedial works in the cemetery will provide an opportunity for consideration of long term conservation and interpretation needs of the cemetery. St Brigid's Church and Convent: Some sections of the church are currently being re-pointed and this will mask pre-existing cracks in the brickwork. The condition survey should take note of earlier condition reports that many have recorded defects which may indicate weak points in the brickwork which should be monitored.	
6	6	Assessment of contaminated land matters have been satisfactorily addressed in the EIS.	**N/A**
7	9	The noise and vibration sections of the EIS are comprehensive and have been dealt with in a highly professional manner. In general the bases put forward for calculating acceptable noise and vibration limits are considered to be appropriate. It should be noted that the Environmental Protection (Noise) Policy 2008 does not contain planning levels for noise from public roads.	**B.9.2 / 6**
8	9.3.1	In Table 9-16 on p. 9-20, the distance values have not been entered.	**B.9.2 / 7**
9	9.3	In several sections of the EIS it is stated that decisions will be made after certain actions have been completed or monitoring is carried out. It is suggested that appropriate information on these actions be inserted in the Supplementary Report. Examples: • Chapter 9. Noise and Vibration 9.3.2 Work Sites: on pp. 9-25 to 9-31and 9-33 to 9-41, predicted noise levels during construction are shown to exceed external noise goals by considerable amounts. • Technical Report No. 9B, Section 7. Ventilation Noise from Ventilation Stations: on p. 59, it is stated that the noise predictions should be reviewed and refined once the fan and system design has progressed. • Section 9. Noise and Vibration 9.3.5 Tunnelling between Portals: on pp. 9-42 to 9-47, predicted vibration levels exceed acceptable values to protect against annoyance. It is noted (p. 9-46) that recommended low-frequency noise limits will be exceeded during tunnelling in close proximity to all receiver types.	**B.9.3 / 10**
10	8.3.1	The Environmental Protection (Air) Policy 2008 came into force on the 1 January 2009. The major change in the updated policy is the adoption of the National Environmental Protection Measure for Ambient Air Quality (NEPM) standards. For the air quality guidelines associated with the project; particles as 24-hour average PM_{10} has been reduced from 150 to 50µg/m^3 and nitrogen dioxide one hour average reduced from 0.16 to 0.12 ppm. Also the NEPM advisory standards for $PM_{2.5}$ have been added. The NEPM air quality standards and goals have been proposed in the EIS.	**B.8.1 / 2**
11	8.3.1	EIS Chapter 8 Air Quality and Greenhouse Gases, Technical Report 7 - Air Quality Impact Assessment: Brisbane Northern Link Project refers to the WHO annual goal of 25 µg/m^3 in the assessment. The WHO goal is in fact 20 µg/m^3 not 25 µg/m^3. EIS Chapter 8 page 27, Section Particulates “The regional dispersion modelling results …..” should read “The regional monitoring results …..”	**B.8.1 / 2**
12	8	The overall conclusion that the tunnel project is unlikely to lead to significant changes in ambient air quality in future years is a reasonable conclusion to draw from the modelling output, and appears to be a realistic assessment of the situation.	**N/A**

13	8	Technical Report 7A Construction Air Quality uses the old EPP (Air) PM_{10} guideline of 150 µg/m^3 as the construction air quality goal not to be exceeded for 24-hour averaged PM_{10}. This may need to be revised in light of the new EPP (Air) guideline of 25 µg/m^3.	**B.8.1 / 2**
14	8	Confirmation of modelling predictions is an important mitigation measure and provision should be made for emission testing of the stack vents.	**B.8.3 / 3**
15	8	For the in-tunnel air quality, automated control systems will regulate the overall airflow to maintain the in-tunnel air quality within limits. Traffic management options are also proposed to ensure motorists within the tunnel are not subjected to extended periods of exposure, however no details are given.	**B.8.4 / 2**

Submission No.		**192 (Queensland Transport)**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		Should the proponent enter into agreement with the State to implement widening of the Western Freeway between Moggill Road and Toowong Roundabout, neither the project nor any such upgrade should negatively impact on bus throughput along the Moggill Road corridor.	**B.22.8 / 4**
2		The project should not preclude upgrades of the Centenary Highway between Moggill Road and Ipswich Motorway at Darra (including allowance for bus priority if required in the future) nor the Inner City Bypass at Herston/ Kelvin Grove as a consequence of the proposed project.	**B.22.8 / 4**
3		Maintenance of connectivity and capacity for effective public transport services in the vicinity of the project throughout the construction and operation of the project.	**B.22.8 / 4**
4		Maintenance of cycle and pedestrian connectivity on both principle regional cycle network and local connections throughout the construction and operation of the project.	**B.22.8 / 4**
5		The proponent to provide all cycle and pedestrian facilities in conformance with relevant standards and guidelines.	**B.22.8 / 4**
6		Bus priority measures should not be precluded on Moggill Road, Milton Road and Coronation Drive. In this regard the proponent's cooperation with the state should be sought to capture potential public transport benefits resulting from the project.	**B.22.8 / 4**
7		The Northern Link must not, in any way, preclude, limit or impede the potential future provision of the "Inner Orbital" project from Toowong to Everton Park.	**B.22.8 / 4**
8		No encroachment on the Queensland Rail corridor alongside the Inner City Bypass.	**B.22.8 / 4**
9		No funding input to be required from the State Government.	**B.22.8 / 4**
10	[4.6]	Under the Environmental Protection Regulation 2008, a new ERA is included, ERA 51 - operating a road tunnel ventilation stack. This means the project will require an annual operating licence at an annual cost of $7,200 (based on an aggregate environmental risk score of 36 and $200 fee unit).	**B.4.6 / 4**
11	[2.1.4]	Consideration of the EIS must recognise and respond to the context within which the project is proposed, being a period of economic turmoil and at a time where imperatives for more sustainable transport and land use will be required to dramatically reduce greenhouse gas emissions and play a part in reducing the severity of climate change and its impacts.	**B.2.4 / 1**
12	[2.3]	There is no explanation of how the proposed development would	**B.2.5 / 2**

		provide opportunities for improvement in public transport services except for claims of "reclaiming" surface street capacity resulting from easing of traffic congestion on Coronation Drive and Milton Road. There are no proposals for establishing and maintaining bus priority on those corridors. Experience elsewhere (Bowen Bridge Road, Breakfast Creek Road and Ann Street after opening of the Inner City Bypass) would suggest that any "freeing up" is at best, temporary.	
13	[2.3]	Without the EIS having done a full comparative economic assessment with the alternatives considered, it is not possible to determine whether the project would deliver comparable value for money in comparison with, for instance, an alternative optimising public transport.	**B.2.5 / 10** **B.15.7 / 5**
14	[2.3]	The objective relating to the timing of delivery by 2013 appears to be a purely internal objective and is not a meaningful objective.	**B.2.3 / 5**
15	[2.5]	The EIS did not assess alternative scenarios in sufficient detail to illustrate meaningful comparison with the proposed development. There was no evidence that these alternatives were assessed for their traffic and transport performance outcomes or for their economic implications including in the associated technical papers. The EIS does not provide a cost-effect analysis or cost-benefit analysis or any kind of quantitative comparative analysis for the potential alternatives. The qualitative comparison does not provide a basis as to which alternative is the most effective or efficient approach to achieve the performance criteria - especially in reducing travel demand, cost and environmental impacts.	**B.2.5 / 11**
16	[2.5.2]	The scenario optimising public transport did not examine enhanced passenger rail capacity or frequencies (as envisaged by the Inner City Rail studies) to enhance the capacity to move people through this corridor or to complement the recently enhanced rail station and suggested busway station at Indooroopilly.	**B.2.5 / 3**
17	[2.5.4]	The Draft Regional Plan 2009-2031 does not identify the Project as either a priority one or priority two freight route which suggests that the Project objective of cross-city movement of freight is not a high priority.	**B.2.3 / 1**
18	[4.3.17]	Construction impacts on traffic and public and active transport. It is imperative that the project proactively provides for public and active transport enhancements prior to and during construction to sufficiently offset any disruption to normal transport operations and capacity, and to accommodate growth in those trips otherwise potentially affected by the project. This is not adequately reflected in the traffic management plan provisions.	**B.4.3 / 16**
19	[4.2.2]	Cross Sections. Within the tunnels, the 1.0 m and 0.5 m shoulders do not provide adequate verge to accommodate any vehicle suffering a crash or breakdown. Such an incident will effectively block the thorough lane, creating dangerous weaving and queuing within the tunnel and making access by rescue vehicles very difficult, especially at peak times.	**B.4.2 / 2**
20	[4.2.5]	The existing cycle and pedestrian route along the Western Freeway, and the new overpass currently under construction, should remain open and operating and be maintained for the duration of the project. The project must incorporate the Toowong Cycle and Pedestrian Overpass into its design (the Department of Main Roads advised of plans at an early stage). The project should consider opportunities to enhance cycle network links from the Western Freeway to the CBD.	**B.4.1 / 2**
21		The cycle and pedestrian networks illustrated do not conform to applicable standards. • All paths currently identified as Principle Cycle Network Plan corridors (e.g.: Western Freeway) need to be a	**B.4.2 / 1**

		minimum of 4.0 m wide. • The opportunity to have a 10.0 m corridor suitable for development as a veloway at a future time. • Underpasses should be free of bends in the path close to entrances, with a path width of 8.0 m, and sloped abutments to assist in providing significant visibility in relation to CPTED issues. • Footpath width along Kelvin Grove Road needs to be a minimum of 3.0 m wide. • Ideal verge width is in excess of 5.0 m. (3.75m verges do not conform to current code requirements). • Where possible, the nominal longitudinal grade of the cycle lane (e.g.: along the Western Freeway) should not exceed 5.0% and should be located/ aligned with consideration for future widening and extension beyond the scope of the initially-proposed works.	
22	[21.3.9]	Competition for construction industry resources. The EIS does not address the implications of the project's requirements on construction industry capacity in the region. The project may have flow on effects to the government's ability to deliver on the SEQ Infrastructure Plan and Program, both by way of further escalating construction costs and through straining capacity of industry and its suppliers to deliver other priority projects.	**B.21.3 / 3**
23	[5]	The traffic and transport modelling based on the Brisbane Strategic Transport Model (BSTM) is not adequately equipped to address the complexities of the project, or to assess the likely performance of the project in comparison with other scenarios required by the terms of reference. • The 4-step model assumes travel demand as a given and is ill-equipped to address issues such as "induced" demand. • Such a strategic model is not well suited to dealing with intersection constraints, weaving and merging effects associated with ramps or other potential interruptions to uniform flow conditions. • No link was established between demographics and mode choice. • The public transport module has no ability to respond to public transport capacity. • Public transport growth assumptions were constrained. • The BSTM is understood to assume a constant proportion of 'active' transport. • The model was unable to adequately compare the proposed development with public transport optimisation or surface road optimisation scenarios as required by the terms of reference.	**B.5.4 / 4**
24	[5]	A review of traffic modelling is required, including supplementary dynamic modelling as necessary, to adequately reflect impacts on the network beyond the portals, particularly the Centenary Highway and the ICB as a result of the cumulative effects of projects in the area. This review of modelling must also address the factors that might attract traffic onto this "least-distance" east/west connection from the established freight priority routes (Ipswich Road, Brisbane Urban Corridor and the Logan Motorway/Gateway systems).	**B.5.1 / 4**
25	[5.4]	The assertion in S2.6.1 of the EIS that the ..."rate of discovery of crude oil has generally increased throughout the 20th century..." is wrong and misleading. Rather, data from the most authoritative	**B.2.6 / 1**

		sources around the globe conclude that global oil discovery peaked about 1960 and that the rate of discovery has generally declined ever since. The BSTM is only able to partially address implications of peak oil and indirectly through reflection of higher fuel prices in operating costs (although this does not appear to have been modelled for this project). The model is unable to reflect land use changes which might be influenced by changes in energy price and availability. No consideration has been given to the prospect of motor fuel shortages or the prioritisation of distribution to essential services which is likely to result for oil supply depletion.	
26	[5.4]	The EIS assumes that dependence on private vehicle travel will continue to predominate and that distance travelled by private vehicle will continue to increase. However, latest statistics for Queensland indicate that total kilometres travelled private passenger vehicles have been reducing since 2005 (especially in Brisbane City). The implications of this phenomenon should be investigated, especially in testing the sensitivity of the cost-benefit assessment and business case models.	**B.5.4 / 8**
27	[5.4]	The assumption in the Northern Link assessment [in the absence of any other advice] is that the WBTNI options 3, 6 and 15 would be tolled at a rate of 50 cents (2008 value) per kilometre. Northern Link was treated as tolled at $3.93 in 2008 value. The biggest difference between modelled outcomes of the two projects is that the Northern Link assessment determined an approximate 12% reduction in Northern Link traffic while the WBTNI (Inner Orbital) forecast a reduction of approximately 40% in Northern Link volumes. It is noted that WBTNI's model was not a toll model, but an estimate of the impact a tolled Inner Orbital was made by assuming about 35% of trips would choose not to pay the toll.	**B.21.4 / 1**
28	[5.6.11]	Northern Link claims to enable the Western Bus Corridor project to be developed. However, whilst the EIS claims reduced bus travel times on Milton and Coronation Drive, it does not identify how this will be achieved.	**B.5.6 / 35**
29	[5.4.6]	The calculation of induced traffic generated by the project seems to be severely understated, given that strategic models do not have a strong record of accurately predicting 'induced'" traffic, and anecdotal evidence that suggests 'freed-up' space will be quickly filled.	**B.5.4 / 13**
30	[5.6.4]	The ability of the Inner City Bypass to operate satisfactorily with the combined loadings of Clem 7, Hale Street Bridge and the Airport Link in addition to Northern Link and the existing orbital role it plays cannot be satisfactorily tested through the strategic model used. It will be necessary to test its operation by a detailed dynamic model, taking into account the combined complexity better reflecting the conditions likely to be imposed.	**B.5.6 / 14**
31	[5.6.4]	The project will place substantial burdens on Kelvin Grove Road and Countess Street, compromising their ability to serve connections between the Newmarket/ Samford Road catchment and the CBD. The EIS does not adequately address the implications on this part of the network, especially the Normanby underpass and Countess Street, which already regularly experience congestion and have little potential for augmentation. Further traffic impact on this area is likely to impact on the Normanby bus station and it is not clear how bus priority on Kelvin Grove Road can be achieved or maintained.	**B.5.6 / 4**
32	[5.6.5]	The project will place substantial burdens on the western end of Milton Road and on Croydon Street, compromising their ability to serve connections from the south and west. The EIS does not adequately address the consequent movement patterns or the	**B.5.6 / 20**

		effect that any traffic management measures might have on local bus service patterns.	
33	[5.6.11]	Freed-up' road space on Milton Road and Coronation Drive might only be marginal as users will tolerate a certain level of congestion before choosing to pay a toll. In order to ensure an improved operating environment for buses, specific provision for bus priority in western corridor is likely to be required. The EIS does not address this issue, but instead assumes the space will continue to be available to the ongoing benefit of bus operations.	**B.5.6 / 35**
34	[8.2]	Clarification of construction methods is required for each of the worksites so that the emissions of air pollutants can be estimated from the construction activities, the effect of the mitigation measures to be used and the resultant impacts on air quality and adjacent landholders.	**B.8.2 / 1**
35	[8.6]	Revised greenhouse gas emissions should be included based on detailed construction methodologies. Additional mitigation measures should be considered such as the use of recycled materials and offsetting those emissions which cannot be avoided with using one or more of the offset markets available.	**B.8.6 / 3**
36	[8.2]	Site workers' private vehicles have the potential to impact on air quality adjacent to worksites. The proponent should consider providing a shuttle service to and from the worksite for each shift from nearby transport hubs to minimise the number of private vehicles to be accommodated.	**B.8.2 / 2**
37	[8.2]	The relevant standards are ADR 30/01 for smoke emissions and ADRs 70/01 and 80/00, 80/02, 80/03 for other pollutants depending on the model year for the vehicle and whether the standards apply to the vehicle. The proponent should identify the means of testing compliance with these standards. The proponent could investigate whether the vehicles can be subject to regular testing at appropriate intervals at the BCC vehicle emissions testing facility.	**B.8.2 / 1**
38	[8.2] [19]	Real-time monitoring for PM_{10} and PM2.5 was established in 2007 at Toowong and Kelvin Grove to provide a baseline for comparing air quality impacts. However, only dust deposition gauges are proposed to be used in residential areas which would make comparison with PM_{10} and PM2.5 not possible. Also, in the draft environmental management plan, total suspended particulate monitoring and PM_{10} monitoring is proposed in worksite areas in addition to dust deposition. Inconsistencies with dust measurement between the different sites need to be clarified.	**B.8.2 / 3**
39	[8.2] [19]	Additionally, the quality control officer could regularly observe whether worksite activities were generating any dust with potential to move off the site and require direct management intervention. Interest residents could also volunteer to assist the construction team to keep a journal of times when dust or diesel emissions were unacceptable and activities and emissions could be matched with journal entries and appropriate action taken as soon as possible.	**B.8.2 / 3**
40	[8.5]	Although the model has predicted very little change to ambient air quality, reportage of the air quality experienced by people living near to the M5 East Tunnel, particularly in relation to PM and odour has been widespread. Trials are scheduled to treat tunnel air to remove particulates. Some discussion might be included on the relevance of the M5 East Tunnel air quality and the problems experienced, to expected air quality arising in the vicinity of Northern Link.	**B.8.5 / 1**
41	[8.3]	Some discussion should be included about the reliability of the model's predictive ability and the sources of error, such as the traffic data and vehicle emission factors and variability in the meteorology.	**B.8.1 / 3**

42	[8.4]	The analysis of in-tunnel air quality seems very brief and without supporting information. No estimates are given for the time of day, at various distances into the tunnel or at different expected congestion levels. Some discussion of the recommendations made in Air Quality In and Around Traffic Tunnels (National Health and Medical Research Council, 2008) and their relevance to the project would seem appropriate in a supplementary document.	**B.8.4 / 3**
43	[8.4]	Despite the lack of relevant standards for PM_{10} and ultrafine particle number concentration with which to design the tunnel to, some discussion should be included on what the levels are estimated to be over time and how these will be kept as low as practical.	**B.8.1 / 2**
44	[8.4]	The EIS has only given a brief explanation of the in-tunnel air quality using only one type of ventilation system; that is a longitudinal system. Other systems are available such as transverse system. Some discussion could be included about the in-tunnel air quality that could be achieved using different ventilation systems.	**B.4.4 / 4**
45	[8.6]	Greenhouse Gas Emissions. The project does not account for the emissions associated with the very large quantities of construction material inputs required, particularly concrete, steel and bitumen. Queensland Transport contends that the emissions generated in producing those construction material inputs should be counted as being generated as a direct consequence of the project. Inclusion of an emissions management plan to address embodied energy and greenhouse gas emissions (for instance from the inputs of products such as concrete and steel which have a high greenhouse impact in their manufacture.	**B.8.6 / 3**
46	[11.1]	The EIS states in Ch 21 .2.7 that "the numerous transport projects (including Northern Link)...are likely to make a significant contribution to shifts in land use across the region...likely to further promote and encourage regional development, in particular along the corridors to the west, north and south of Brisbane City." This is not consistent with the intent of the SEQ Regional Plan to "protect the region from urban sprawl, focusing on urban growth..." through "more compact forms of development."	**B.21.2 / 2**
47	[11]	Transport and Land Use Integration. In general, the EIS has not sufficiently investigated improvements to public transport, or adequately addressed issues associated with pedestrian and cyclist safety, severance to pedestrian and cyclist linkages or reduced connectivity to attractors such as schools, hospitals, businesses and existing public transport routes influenced by the project.	**B.2.5 / 2**
48		The Project severely reduces local connectivity and severs communities: • The EIS has not addressed connectivity between Kelvin Grove and Normanby Bus Station (DIP Table). • The north bound bus stop on Kelvin Grove Road near Kelvin Grove Urban Village would be unsafe (4.4.2/26). • The intersection of Kelvin Grove Road and Northern Link is complicated for pedestrian and cyclist routes (4.4.2/16). • Connections are closed to Upper Clifton Terrace and Lower Clifton Terrace, reducing permeability (cul-de-sacs are not desirable)(4.4.2/17). • The combined effect of changed traffic arrangements on Victoria Street and closures of other streets mean that local trips will be forced to circumnavigate the megablock between Prospect Terrace and the Normanby intersection, increasing the length of local trips (4.4.2/19).	**B.4.2 / 19** **B.4.2 / 20** **B.4.2 / 15** **B.13.2 / 2** **B.13.3 / 5** **B.13.3 / 13**

		• It is essential that the pedestrian overpass to Brisbane Grammar playing fields is not compromised and remains open at all times (4.4.3/16). • The land bridge (near Brisbane Grammar School) over the Inner City Bypass and the rail corridor would need to be extended to accommodate the project (4.4.2/18). • The park at Toowong is reduced by approximately half its area. The remaining portion will have little amenity and likely not be an attractive asset for the community. There appears to be no offsetting enhancements proposed.	
49	[11]	The project encroaches into Brisbane Grammar School playing fields. These fields are of critical dimensions. It is unlikely that the school has surplus area to relocate the fields or accommodate a loss of functionality of fields affected.	**B.13.3 / 17**
50	[11]	Amenity issues associated with construction sites being established in urban communities and the conveyor for spoil through the Mt Coot-the Botanic Gardens have not been fully addressed.	**B.14.5 / 3** **B.14.5 / 5**
51	[4]	The plans show an increase in the number of lanes on Milton Road. If it is argued that one of the major benefits of the project is to reduce traffic on Milton Road, why is further expansion necessary?	**B.4.2 / 7**
52	[4]	The expansion of the roundabout near the Botanic Gardens will require the existing cycleway to be relocated. There are concerns regarding the functionality and safety of the cycleway in an amended configuration.	**B.2.5 / 8**
53	[4]	There is also concern regarding apparent encroachment on the cemetery.	**B.12.2 / 2**
54	[11]	Table 11-5 states that the western end of the project traverses Brisbane Forest Park and Botanic Gardens which are mapped as Koala Sustainability Areas in maps of gazetted koala habitat areas. Queensland Transport states that these areas are not mapped as Koala Sustainability Areas.	**B.10.2 / 3**
55	[11]	The context of the Milton Brewery Protection Bill 2008 has not been addressed.	**B.12.1 / 1**
56	[21]	This chapter does not adequately address the cumulative impacts of Northern Link and the combination of the other currently-planned projects on the receiving environment.	**B.21.1 / 2**

Submission No.		**208 (Department of Emergency Services)**	
Issue No.	**EIS Reference**	**Issue Summary**	**Response**
1		To help ensure that the fire and life safety design of the project will meet the QFRS requirements, QFRS seeks that developers / engineers undertake the following: 1. Early and continual consultation with DES/QFRS on the planning and design development process for the fire and life safety design of the project, including the establishment of a 'Fire and Life Safety Committee' or similar to facilitate the input of key stakeholders. 2. Ensure suitable independent third party/peer review of the fire and life safety aspects of the design in accordance with QFRS's Community Safety Guideline "Third Party/Peer Review of the Fire and Life Safety Design or Major Infrastructure Projects (Issue 1, December 2006)". 3. Obtain DES/QFRS endorsement of the fire and life safety	**B.19.8 / 3**

		design of the project including testing prior to the operation of the tunnel.	
2		QFRS has concerns with respect to the potential for the transport of dangerous goods through the tunnel. Placard marked dangerous goods vehicles will be prohibited from using the tunnel but vehicles such as diesel tankers will not be prohibited. A major fire involving a fully loaded diesel tanker or the like could be beyond the capabilities of the fire safety measures currently proposed for the tunnel. QFRS is unclear how placard marked dangerous goods vehicles will be prevented from entering the tunnel.	**B.16.2 / 1**
3		QFRS is unclear whether it has similar roles and responsibilities to those listed in Schedule 3 of the Coordinator-General's Change Report on the Airport Link Project, July 2008 - Appendix 1, Condition 12 - Hazard and Risk (construction) and Condition 22 - Hazard and Risk (operation).	**B.16.3 / 2**