THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS TASMANIA

HUON HIGHWAY/SUMMERLEAS ROAD INTERSECTION UPGRADE

A SUBMISSION

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BY

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INTRODUCTION

Improving the junction has been on the agenda of local and state governments for some years but this intersection has had a lower priority than other road improvements in the state. There have been many incidents at the intersection, especially involving vehicles. The community supports the need for an upgrade.

Without doubt, this junction is in need of improvement. The current junction exhibits failures in original design. Over time there has been an increase in traffic movements at the junction. Poor habits and bad decisions by drivers have contributed to the reputation of the intersection.

I support the government's commitment to improving the safety of the junction for all motor traffic, pedestrians and cyclists using the intersection.

Government today is a complex, sophisticated and high-cost activity. It employs thousands of people and provides essential services: from hospitals, schools and emergency services to parks, roads, justice, financial management and a plethora of statutory instruments that help to provide a civilised society.

In the context of the huge task government has in managing the vast array of services and systems, in my opinion, we should all be assured that every dollar of public money is spent wisely and in the best interests of the whole community.

I make this submission to draw the attention of the Parliamentary Standing Committee on Public Works (the Committee) to the huge cost attached of the proposal when there are, in my opinion, lower cost options that are just as effective as the proposal being presented to the Committee.

I believe the Committee needs the assurance that the project, at its estimated cost, is the most effective and efficient solution that is, 'the expedience of carrying out the works'.

I believe we all have a right to know the results of the 'business case' that has been prepared for the proposal. Such documentation would provide the Committee with information about the effectiveness and efficiency – the cost to government (the public purse) -- and the benefits to business, the community, and all those gaining from a safer road junction. In the absence of such data, the public and the Committee have to imagine

these costs/benefits¹ without the essential framework to verify the efficacy of the proposal.

My submission to the Committee is based on many years of travelling through the junction and the tiny amount of information made available by the Department of State Growth (DSG) on its web-site. I have been unable to attend a public meeting where the proposal was presented to the community as part of the 'consultative process'. I have had to make some assumptions based on the slender information otherwise made public. The DSG web-site conveys very little information to the public and accessible from a personal computer, making it less than ideal for anyone wishing to make a fully developed submission.

¹ See the Grattan Institute report 'Roads to riches: better transport investment', April 2016 p51 for descriptions of cost benefit analyses and related economic evaluations.

THE DESIGN PARAMETERS

I believe a design solution should reflect the design requirements. I have had to speculate that the requirements may have included some or all of the following:

- detailed examination of incidents at the junction including the likely causes in order to identify the failings of the design and/or drivers, pedestrians and cyclists
- the volume of traffic throughout the daily, weekly and monthly cycles in the year
- the desire-lines of traffic patterns: through traffic and turning vehicles
- current traffic movements set against estimated future traffic trends
- meeting the challenge of mixing slow and fast-moving traffic
- current Highway traffic speed range (both legal and exceeding speed limits)
- speeds of traffic on the secondary road
- the potential for nearby residential, educational, leisure, commercial and other developments that could influence the design criteria
- the levels of safety that should be reasonably provided for vehicles using the junction
- the levels of safety that should be reasonably provided for pedestrians
- the levels of safety that should be reasonably provided for cyclists
- the levels of safety that should be reasonably met for the identified mix of vehicles, pedestrians and cyclists
- the reasonably level of safety for horses and their riders
- the range of traffic calming measures that might be essential, available or suitable
- speed restrictions and absolute limits that would be reasonable to establish for optional design solutions
- at-grade or grade-separation for vehicular traffic arrangements
- area of land subsumed to items such as road pavements, table drains, batters etc
- cost parameters including definitions and analyses of options
- estimated duration of construction and the effects on traffic movements
- anticipated life required from the improvements
- estimated costs of maintenance of the acquired asset at 10 year intervals for the estimated life of the proposal, and

• the cost effectiveness of options².

WHAT CORE ISSUES NEED CONSIDERATION

I am concerned that members of the Committee understand that if the proposal is the preferred option, the design solution must be seen to be supporting essential investment and not promoting unnecessary expenditure that could be used elsewhere in government³.

I expect that core options for the junction re-design would be a design that optimises the design parameters and costs measured against the risks to be managed.

I have travelled through this junction almost daily between Kingston and Sandfly since the Highway was constructed until about 2004 and intermittently since then. I am therefore familiar with traffic activity in the area.

The main concerns about the junction seem to be safety and speed, two interrelated factors, closely coupled to the current inadequate design solution. Whilst often in conflict, safety and speed are not mutually exclusive. They do however, engender a dynamic that can often lead to serious incidents. The current junction is unable to safely manage the risks associated with:

- slow and fast moving traffic manoeuvring at an intersection;
- especially the mix of through and turning traffic; and
- pedestrians (often attempting to cross several lanes of traffic).

If the speed of faster-moving traffic is reduced (and by more than mere speed limit signs), it would make the intersection safer for traffic manoeuvres. Pedestrian safety however, may require a different solution.

Speed limits have been introduced on the north-bound Highway traffic in an attempt to reduce speed at the intersection. But most drivers travelling down from Leslie Vale, on

² Briefly, cost/benefit analysis is widely used to assess whether a proposal will deliver benefits to the community that exceed its costs over time. It will compare similar projects or options available. Cost/benefit analysis attempt to identify all the benefits and all the costs of a project to the state/nation.

³ The recent Gratton Institute report, 'Roads to Riches', April 2016, examines road infrastructure spending. Whilst there are many projects around Australia that stand up to rigorous examination of the costs and benefits, too many failed to meet even low levels of acceptability. Regrettably, the East Tamar Highway is one such road. It is salutary reading for anyone involved with infrastructure planning, approval and delivery. Fortunately, Tasmania has recently established Infrastructure Tasmania to mirror similar examining bodies at commonwealth and state levels. It is hoped this initiative will ensure future road infrastructure projects are designed and delivered within a vigorous cost/benefit process.

their way to work or heading home, are already exceeding the posted limit (100km/h) on the main descent. And it is a descent! Most vehicles should be under braking to stay below the speed limit. [Observe the number of vehicles descending that display brake-lights: too few.] The sight of the 80km/h limit sign and the almost simultaneous merging of the two north-bound lanes, invites the faster drivers to overtake even *at the last minute* in order to 'get ahead'. Thus, the merging of slower and faster vehicles (often exceeding the speed limit) has begun the race approaching the junction.

From my experience, only the heavily laden trucks descending in low gears, seem to obey the speed limits.

South-bound traffic has similar intentions: quickly getting to work or home. For too many drivers once clear of the junction, *the mere sight* of the de-restriction sign ahead is a 'green light' to speed up to or higher than the limit *before passing the sign*.

That DSG has introduced lower speed limits on the Highway is commendable, but because accidents still occurred, it cannot use the erection of a couple of speed limit signs as a shield. DSG and Tasmania Police know that speed limit signs are regularly ignored: this junction is one such site. But no other action seems to have been taken by DSG.

The issue therefore seems to become one of speed-control rather than allowing free-rein to fast moving traffic and even inviting higher speeds with a grade separation solution.

Of interest would be the analysis of incidents at the junction showing the range and frequency of such events, for example:

- travelling south on the Highway and turning right;
- travelling north on the Highway and turning right;
- turning right onto the Highway to travel southwards;
- turning right onto the Highway to travel northwards;
- traffic on Summerleas Road crossing the Highway;
- light/vehicle and heavy vehicle involvement;
- pedestrians involved in incidents by vehicle types; and
- others.

The final design solution should incorporate appropriate standards of safety for vehicular, pedal cycles and pedestrian traffic at a reasonable capital and maintenance costs over the defined life of the junction. However, no design solution however expensive can be 'idiot proof' even using grade separation. Perhaps more rigorous scrutiny of drivers should be a

target and reduce the cost and complexity of infrastructure design solutions.

TWO OPTIONS THAT PROVIDE SAFETY AT A SENSIBLE COST

I nominate two options for consideration in lieu of the grade separation design proposal:

- 1. Install traffic lights to provide control of movements of through and turning vehicles in collaboration with enhanced speed-control devices on the Highway. Include a measure of pedestrian 'on-demand' traffic-light control or pedestrian underpass(es).
- 2. Establish a 'roundabout design' together with measures to lower speeds of vehicles in the area to improve vehicular safety; and provide ground level and or pedestrian underpasses to meet pedestrian safety requirements.

I'm sure that the Huon Highway volumes are minuscule compared to the Bass or Midland Highway. Yet an instance of a roundabout serving a highway and two lower-volume/speed roads is at Breadalbane on the Midland Highway. No one could argue that the Summerleas Junction would carry more traffic than at Breadalbane. A little further north however, you can encounter a vast grade separation interchange near Prospect, consuming and sterilising hectares of land. But shortly after the descent into Launceston, two sets of traffic lights, *one hundred metres apart*, are located at Howick and Wellington Streets, both junctions surely busier than Summerleas.

1 A TRAFFIC-LIGHT CONTROLLED JUNCTION

This Option requires that traffic may have to become stationary at some stage on its passage through the junction. This is not significant when comparing this Highway to the north-of-Hobart connector, the Brooker, which carries far denser values of traffic (including heavy vehicles) than the Huon Highway and which uses traffic lights at several junctions. The default setting for lights would be in favour of the Highway.

This option would incorporate the following measures:

- it would provide a design solution at grade, thus avoiding very the high-cost of an elevated road/bridge and deep-cut (6.00+ metres) solution;
- it would also avoid related very long slip/climbing/merging lanes from the 6.0 metre cut to the existing Highway at grade, especially for traffic turning off Summerleas Road and heading southwards and the one for northbound vehicles needing to turn right onto Summerleas Road;
- it would include lower speed limits and longer turn-right lanes on the Highway. Highway right-turns would be controlled by 'on demand' detectors as would all traffic

movements on Summerleas Road;

- pedestrian and cyclist safety could be provided by underpasses⁴ (under Summerleas Road and the Highway) monitored by CCTV cameras. Alternatively, pedestrian controlled lights (PCL) can be included as an initial measure and underpasses retrofitted if required;
- the level of illumination for overnight traffic would need to be increased (not mentioned in the proposed design);
- provision for bus pick-up and drop-off bays would be required on the Highway and the Kingston-side of Summerleas Road that are closer to the junction than on the presented design. They would better serve school bus and public transport users;
- slip lanes would be included for vehicles turning left off the Highway, with the normal 'give way' requirements as at any turn-left under traffic light control. But these lanes could be shorter in length, thus noticeably reducing both capital and maintenance costs. The south-bound slip lane could be longer than the north-bound one because of higher traffic demands;
- 'red-light' and speed cameras⁵ would be installed to monitor compliance. The backpocket nerve is a strong speed control device, especially when coupled with fines reported in local newspapers. Rumble strips should be incorporated to alert drivers to the need to reduce speed;
- drivers should not expect an uninterrupted through-way between Hobart and Huonville. There is no justification for such a level of over-design;
- progressive speed-reduction signs will be required for north-bound vehicles on the Highway, so that traffic speed should not be an impediment to safely stop vehicles travelling down from Leslie Vale;
- as currently constructed, the north and south-bound lanes of the Highway would be retained as single lanes for through traffic with turn-right lanes and slip lanes onto both sections of Summerleas Road. If sustainable through evidence, the Highway could have two lanes in each direction; but that solution could result in almost 'drag racing' take-offs from the lights⁶;
- this option would require the cost of speed reduction signage, and of a traffic-light installation. None of those costs is prohibitively expensive and all contribute to a design solution that the junction requires. The total cost would be considerably less than the proposed design solution;
- the cost-effectiveness of this option relies on road construction on grade, thus much cheaper than elevated/sunken road structures. The capital and maintenance costs

⁴ Foot-traffic underpasses would use the normal pre-cast-concrete 'culvert' style of construction.

⁵ The fixed camera at the top of the Southern Outlet descent to Davey Street has generated a rare obedience for staying within the speed limit. A couple more would not go amiss!

⁶ Notice this on the Brooker at the Risdon Road lights for northbound vehicles, as an example.

of traffic signals is not insignificant but nonetheless provides for safety of all users at an affordable price.

This design offers responsible levels of safety to all types of traffic. The only detractor is that Highway traffic will not have absolute priority to maintain its 100km/h or 80km/h status, a tiny price to pay. After all, the Huon Highway is not the Hume and should be treated like a secondary or tertiary level highway that it is. Over-expenditure risks inviting the deserved criticism made about the East Tamar highway.

2 A ROUNDABOUT DESIGN

This option also provides a design solution at grade, thus avoiding the very the high-cost elevated road/bridge deep-cut design solution. It would consume less land than the proposed solution.

A roundabout design is included at the eastern end of Algona Road, Kingston. This does cause minor delays to traffic at *at morning and afternoon peak times* when high densities of traffic exists, on both the bypass and Channel Highway but not sufficient to warrant changes to speed the flow of traffic. Approach-road speeds are 80 and 60km/h. A similar state is unlikely to occur at the Huon Highway/Summerleas Road junction because of the much lower volumes of traffic.

This design option has very similar features to the previous option:

- it would provide a design solution at grade, thus avoiding very the high-cost of an elevated road/bridge and/or deep-cut solution and the long slip lane with steep grades;
- it would include a lower speed limit than currently exists;
- pedestrian and cyclist safety could be provided by four underpasses (two each under Summerleas Road and the Highway) monitored by CCTV cameras;
- the level of illumination for overnight traffic would be increased;
- provision for bus pick-up and drop-off bays would be required on the Highway and the Kingston-side of Summerleas Road;
- slip lanes could be included for south-bound vehicles turning left off the Highway into Summerleas Road, with 'give way' requirements;
- the design could allow for bus pull-ins close to the roundabout because no vehicles

would be travelling fast;

- 'red-light' and speed cameras would be installed to monitor compliance. The backpocket nerve is a strong speed control device, especially when coupled with fines reported in local newspapers and on 'the web'. Drivers should not expect an uninterrupted through-way between Hobart and Huonville. Progressive speed reduction signs will be required for vehicles on the Highway. Traffic speed should not be an impediment to safely for vehicles travelling down from Leslie Vale;
- as currently constructed, the north and south-bound lanes of the Highway would be retained as single lanes for through traffic;
- this option would require about the same level of road design as the previous option, an increase in cost of speed reduction and normal roundabout signage. None of those costs is prohibitively expensive and all contribute to a design solution that the junction requires;
- this design would have a greatly reduced demand on land usage for its design and construction;
- the cost-effectiveness of this option relies on road construction on grade. The capital and maintenance costs of the junction are considerably less than the proposed design proposal but nonetheless provides for safety of all users. The total cost would be considerably less than the proposed design solution; and
- this design also offers responsible levels of safety to all types of traffic. The only
 detractor is that Highway traffic will not have absolute priority to maintain its
 100km/h or 80km/h status, a tiny price to pay. Over-expenditure risks inviting the
 deserved criticism made about the East Tamar highway.

COMMENTS ON THE PROPOSED DESIGN

GRADE SEPARATION

The design of the grade separation (with Summerleas passing beneath the Highway) is a *high-cost solution* to a much *lower-cost problem*.

The challenge is to optimise the cost/benefit of the *solution* to solve the *problem*.

I understand that the DSG, as part of its consultative process with 'the community', has had the proposed design fully supported. It claims that in its experience, the majority of the community are generally only focused on the outcomes of the project. Consequently, the information on the website was designed to align with this expectation. This suggests that the local community will accept the best on offer, hardly a measure for an objective cost/benefit analysis.

Similarly, claiming the Highway is a heavy vehicle route sees another shift of the benefits, this time to the haulage industry, at the expense of the public purse. Except for the HBMI trucks and an occasional jinker using the Huon Highway, the Channel Highway can also claim to be a heavy vehicle route. Sandfly Road is a key link between the two Highways and carries a number of heavy vehicles, including HBMI, jinkers, supermarket supplier articulated trucks and others to service The Channel and the southern parts of Kingston.

The major issue is I believe, vehicles turning right off the Highway and vehicles turning right onto the Highway especially those from the Kingston side of Summerleas Road.

If the DSG claims that its grade separation proposal is the only realistic option to deliver expected safety outcomes, then it should publicly justify all aspects of its design through an analytical business case and thorough cost/benefit analysis because of the **huge** community cost involved.

The proposed design is, in my opinion, an example of over-design, over-engineering and a rapaciously expensive solution to a problem; it also beggars belief that DSG could discard lower-cost options. Any claims about such issues as 'difficult topography' to dismiss a roundabout solution sounds banal when I imagine the 'topography' that will be encountered with the excavations at the site of the proposed design – **excavations that will be more than six metres below the existing Highway level**⁷ together with extensive slip and climbing lanes on and off the Highway also involving about six metres of excavation at their deepest points.

There are claims about the 'significant level of traffic generated from Summerleas Road' as being a second reason to justify a grade separation design. That would be amusing if it wasn't so untruthful on any comparative analysis basis. The volume of traffic from Summerleas Road onto the Highway is surely no greater than that from almost any junction on any major road in the Kingborough and greater Hobart area in an 80/60 km/h mixed zone.

The bulk of users of the upgraded Summerleas/Huon Highway junction will serve the following:

- a part of an existing small subdivision where some residents on the Kingston side of the Highway are near to the Huon Highway as a route to Hobart;
- for a large proportion of residents in the sub-division heading to Hobart, the

⁷ In order to achieve the 5.2 metres of clearance below the bridge structure.

Channel Highway via the slip lane onto the Kingston bypass is the shorter, faster and smarter route to take;

- a very small number of movements on Summerleas Road needing to drive across the Highway;
- a high school;
- a sports centre;
- a hotel/restaurant;
- a small riding school/activity area; and
- a lawn cemetery.

MERGING AND TURNING TRAFFIC

The grade separation does obviously separate two roads that have dis-similar speed characteristics. But these two 'differs' have to join when the slower road traffic eventually merges with the faster moving traffic of the highway. This occurs at the two merging points on the Highway. Unless speed restrictions on Highway traffic are included and policed then there will still be the potential for conflict. Courteous merging is not exactly an easily managed manoeuvre for too many drivers.

This is obvious for the case where vehicles turning left off Summerleas Road to travel towards Huonville. Vehicles will have to climb a long, steep grade and match their speed to that of through traffic, which could be 100km/h, there being no reference in the proposal to a speed limit in the area of the 'junction'. What the design does not show is that this 'merging lane' *will have to climb much more steeply than the Highway* (**six metres** of grade more than the Highway) before the merge-point at grade on the Highway, about a kilometre from the junction, in order to mitigate an otherwise *steep climb for any heavy rigid, articulated or close-coupled trailer rig.* This climbing lane and the north-bound slip lane will be probably the longest and most costly in Tasmania.

The north-bound climbing-merging lane will have less height to climb to reach grade of the Highway. But drivers will need to merge quickly: first, climbing out of the cutting onto the Highway. They must merge, then merge again as the two lanes reduce to a single lane, all in the space of 100 metres at 80 or 100km/h. *That part of the design looks like an 'unsafe' zone.*

Another matter relating to deep cuts and the batters shown on the design is that there may be the need for some to be structures to support the Highway where the cuts are deepest. The banks of the cuttings will be high, steep and likely to need artificially stabilising because of their height and the risks of landslip onto the exit and entry ramps.

The length and depth of the four 'lanes' from the roundabout below the bridge to where they join the Highway suggest that their total cost per kilometre per vehicle could be similar to or greater than that of the East Tamar Highway. If so, the target for 'safety' will have a very high price for the community. The indicative private property driveway realignments could be optimistic especially for those close to the junction when considering the more than six metres of cut for the 'roundabout' below the bridge. On the Fern Tree side of Summerleas Road the grade will be a steep rise and even then, the first and second properties will need their drives to fall more than three metres in order to meet the Road; the next two, more than a metre of fall.

In total, there are four give way points in this design; and there is *still* a roundabout. I trust that DSG is satisfied that none of these points will be prone to incidents otherwise a large proportion of *our* \$21,000,000 will have been wasted.

PUBLIC TRANSPORT AND BUS STOPS

Public transport routes should permit the pick-up and alighting passengers close to their desired targets. Locating two bus stops at **one thousand two hundred metres away from the junction** might be conveniently located for the existing sub-divisions' pedestrian lane-ways with the current underpass under the Highway, but it looks awfully like a solution ignoring the problem. The stops are remote from the junction area and could be intimidating for children and young women waiting in such remote locations, especially at night and in inclement weather.

If the bus stops are provided as shown, will other vehicular parking be provided? If not, will 'informal' parking be tolerated? If not, then adjacent suburban streets will be disturbed by vehicles parking close to the underpass and bus stop locations. Just examine where the underpass route leads and connects: quiet suburban streets and a cul-de-sac.

Someone picking up a passenger from the northbound bus stop but wanting to travel south, is going to have to travel north to the nearest roundabout or collect their passenger from the suburban street serving the underpass. Hardly a good solution for the passenger, driver and residents.

VEHICLE ROADSIDE PARKING

The vehicles that currently park near the junction provide some evidence of the value of parking close to the junction. Drivers and/or passengers catch buses or take lifts to their destinations. In addition, there are the 'invisible' vehicles: for example, the vehicle that normally picks up or drops off passengers on its way south on the Highway – a parent of school-age children or the 'tradies' picking up co-workers – that need this to occur closer than **one thousand two hundred metres** from the junction? And where will the young co-workers leave their vehicles? In the adjacent cul-de-sac or on the sub-division street? Pedestrians' safety is not solved by separating them by **one thousand two hundred**

metres from their target point.8

AN ADDITIONAL CLIMBING LANE

The introduction of a second 'climbing lane' on the Kingston side of the junction seems to lack logic. My reading of the traffic lanes is that they are intended to allow a 100km/h traffic flow southwards. **How can the construction of a second climbing lane be adding to the safety of the junction?** It is a corollary of the grade separation and the desire for climbing lanes to be a norm. It invites an increase in speed to the posted limit or higher. DSG should know that the Highway south of Lesley Vale has varying numbers of lanes in both directions, from one lane each way to a two-lane, concrete-barrier separated section; it seems DSG is using the junction as a stalking horse for the proposal to include a climbing lane. In my opinion, it should be considered separately. *It is not a safety issue for the junction itself.*

I am sure that the second lane will benefit many motorists Monday to Friday on their race home to the south, or shortly, to turn left into Summerleas Road, but there will be a vast swathe of tarmac idle for most of its life.

FLEXIBLE SAFETY BARRIERS

Of interest is the perceived need to introduce **kilometres** of flexible safety barriers, although what they and their extent has to do with the public's concern about safety of the Summerleas junction evades me. Once again, DSG may be taking the opportunity to 'upgrade' a large slice of the Highway; or that the barriers are needed because of the number of 'incidents' on these extended sections of the Highway; or that DSG will not introduce speed limiting devices; or an admission that idiot-proofing is its default position about safety. This is not engineering a solution for the safety at the junction. So why is it in the Junction design?

Far from being a simple design, the engineering and inclusion of extraneous items becomes more complex the longer it is studied. It is not satisfactory to show an outline design that purveys less than the most obvious of information and expect detailed scrutiny of the solution and the problems it is supposed to overcome.

⁸ Imagine the case of a parent from say the Cades picking up their child from the south-bound bus stop. Whichever side of the Highway the child waits, the driver will have to travel down to the roundabout beyond the Kingston Bypass and back up to the junction in order to get onto the road leading to the Cades. Has this issue been really thought about or is it inconvenient to engineering principles?

PUBLIC FOOTPATH

The footpath on the south side of Summerleas Road and the roundabout seems to be a token to pedestrians. Its strategic importance does not look convincing.

SUMMARY

The proposed design is a most expensive solution. Furthermore, it:

- has no public and published cost/benefit analysis to support its selection;
- has no public and published business case to support its selection;
- provides no details about the core issues leading to the design other than 'safety';
- fails to meet certain objectives;
- creates unforeseen consequences;
- includes items unrelated to the safety issues of the junction;
- assumes Highway traffic should have an almost unrestricted route, without speed restrictions, for at least the length of the diagram provided on public display, as if that is a public good;
- ignores public transport and the effects on passengers and other pedestrian matters (except for inserting a couple of short lengths of 'footpaths');
- includes road traffic engineering measures not related to the upgrading of the junction (a climbing lane and kilometres of flexible safety barriers);
- offers a design solution without evidence that it solves the problems I have identified; and
- establishes a precedent for a similar design solution to be provided at the junction of the Huon Highway with Sandfly Road, which has very similar risk and accident characteristics as the Summerleas Road junction. *Stand by for another \$21,000,000 solution.*

END NOTE

Perhaps most regrettably is that having raised expectations of Kingston and Huon councillors, state and commonwealth politicians and members of the community that have taken an interest in the issue, they are unlikely going to accept anything other than the presented design. That is a sad indictment of the proposal process: having been shown a 'Rolls Royce', (when a 'BMW' or a 'Mercedes' would have been suitable) they supported the biggest and best because it's 'free' and the more you can get for 'nothing', the better the offer must be.

References:

- 'Roads to Riches: better transport investment' by Marion Terrill, transport researcher with the Grattan Institute, April 2016.
- The Melbourne Age, Editorial, April 4 2016.
- Ibid page 1 article by Clay Lucas, about wasteful spending on road infrastructure in Australia.
- Letters to the Hobart Mercury (2)