THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS MET IN THE LONG ROOM, PARLIAMENT HOUSE, HOBART, ON MONDAY 19 JANUARY 2009.

BRIGHTON BYPASS PROJECT

CHAIR (Mr Harriss) - We will now proceed to hear your presentation on the Brighton bypass.

Mr CANTILLON - If it suits you, I was planning to give you a brief overview across the elements of the report. I will run through some graphical displays of the entire route.

As we said, it is a \$164 million investment and subject to the memorandum of understanding between the State and Australian governments and we are in the process of working through that the moment. The bypass is 9.5 kilometres long and is dual carriageway for its entire length, except for that connection at the Bagdad end. As we know, the Midland Highway is the major north-south transport corridor and a key link in the AusLink National Network and is a critical freight connection in that location. It also facilitates through the upgrade to the Tea Tree interchange improved access to the east coast.

The report outlined under section 1.6 a series of the objectives of the project. We have spent a lot of time in developing those objectives because we wanted to make sure that when we do go to contract we fully understand what we're asking for as part of that project. What we are seeking to build is a highway system that accommodates the growing freight task, which you have heard before, which is expected to double by 2022; supports the changed direction of trade from the south of Tasmania to the northern ports; provides a more consistent operating environment for passenger and freight vehicles that is a very key feature of this project, to have a uniform and safe environment through there controlling limited access; reduces freight travel times that conversely improve transport efficiencies for freight vehicles; reduces conflict between local and border State traffic; benefits economic industrial warehousing activities in the south and particularly access to the Brighton transport hub - we are trying to provide a seamless connection with the two interchanges to the north and the south; improves access to the development of the Bridgewater industrial estate area; reduces road trauma; and provides social benefits as well as in a broader context, opportunities for local industry and the public to learn more about the local heritage and environmental aspects. Each of those has a platform on which we have addressed our contracting and project development, which I will explain as we go through.

In terms of the history of the project, the report documented the options that were investigated in a long-term planning sense. When we were out on site, we spoke about some of rationale, why it was chosen at the northern end to bypass certain sections. It might have been subject to heritage aspects. In a long-term planning sense, which culminated in any particular route, there was a western bypass considered, there was an upgrade of the existing corridor, plus also a shorter western bypass. That development occurred over many, many years, leading to further value engineering, workshops et cetera, that took place. The report referred to a series of other reports that were written

through the period that culminated in the current corridor that we have at this point in time.

Just as an overview, in terms of crash history on the existing Midland Highway between 2002 and 2007 there were 59 crashes -

Mrs NAPIER - In that area?

Mr CANTILLON - On that section, yes - of which 20 involved rear-end and five involved head-on collisions. Fifteen involved injury, two were fatal and 14 crashes actually took place at the Tea Tree Road/Andrew Street intersection.

Mr GREEN - Pontville is a bad section too.

Mr CANTILLON - Yes, that is right. We spoke in the report about our resolution of safety problems. Travel time savings with this project are not as great as what you hope to achieve. There are only a few minutes involved, I think - two-and-half minutes -

Mr FOWLER - There is more in it for trucks.

Mr CANTILLON - Yes, there is more in it for trucks than for the average car. But the limited access provisions are what will provide the substantive safety benefits - the uniform travel environment - and also the key connections to the industrial estate.

In terms of the report, the way it was framed, it was also a document that meets the needs of both the State Government and the Australian Government, so the document itself is in a form that we normally submit to them for the purpose of demonstrating things such as strategic fit for the network, so you would have seen sections in there about how this project fits into the broader context of the AusLink network.

I will get Andrew and Brian to show the key features of the job in a moment, but just globally, in terms of design features, it is a standard construction for us. Obviously the hub is something a little more special - a component that is being delivered as part of the southern project. The pavement is a granular-type seal. Where there are high-stress areas there will be asphalt pavement - at the top of ramps and around terminals et cetera. Bridge structures are to contemporary design standards; drainage, one-in-100-year flood protection. We are also including intelligent transport system considerations as far as the project is concerned. What that is, I am not quite sure - I am going through a process of finding out at the moment, and a lot of people are contributing to that to make sure that is a showcase for Tasmania, whether it be ensuring that CCTV is put in place, providing somehow for the future, or something associated with the hub movements et cetera.

In terms of key time frames, there is a section under 2.4 of the report, which showed that we had done a lot of work in nine months to get where we are. We have put a project bid up to the Australian Government which they have approved \$10.5 million for at this point in time - for development planning and preliminary construction works - along the lines of what we saw on that site - and that would be the Transend-type power lines et cetera - and some earthworks. That is on an 80:20 basis at the moment but once the MOU is signed it would bounce up to 100 per cent funding at that point, so it is in the order of about \$12 million. We are going through a process of writing a second bid.

That is Mike's job; he is our bid writer. He wrote this one and he is writing a second bid in February, to be there by early March in time for the Australian Government Project Group's process. That bid is about accessing design and construction money associated with stage 2, which is from about July. That is when the serious -

Mrs NAPIER - So that would come out at budget time, would it?

Mr CANTILLON - Yes. It is essentially to get the groundwork there so that we have something tangible to work to. A lot of the field investigations have been done - heritage and environmental, surveys. Acquisitions are well under way and we expect to spend quite a bit of money this financial year on that. We hope to have all the land vested by about March.

Mr BEST - Who leads the negotiations on the land and with the private owners et cetera?

Mr CANTILLON - Generally the project managers do it. They work within a template approach that we have. We have what we call a 'manager, land assets' who looks after everything that is property-related. There is a framework approach that we take, so that would generally be within that. There is a whole series of acts and legislation that we have to work within.

In terms of the contracting, as you mentioned earlier, we tendered this on 10 January. Tenders close on 6 February and there will not be the award of a contract until we know we have approval from the parliamentary standing committee - or conversely that we have the MOU signed and 100 per cent funding, preferably both of them would be the desired situation given the scale of the project. In terms of the contracting strategy, it is different. It is unique and has a lot of success across Australia at the moment. Oueensland Main Roads have done 11 of these, what we call an 'early contractor involvement model'. South Australia has done one and they are going to do three; Western Australia has done a couple. They are all talking up how successful they have been in taking this particular approach. It is a relationship-type contracting; it's not alliance contracting. The difference is that you have a soft front end where you work together, collaborate, pat each other on the back and look at how well you're succeeding, but it's got a hard back end. It is a hard dollar back end, where you have to demonstrate value for money. The processes are bad if we can't do a deal through this stage 1, and there are plenty of checks and balances in there, we will just walk away and tender again on the open market. That is the intention, that's what we're telling management. There is a lot of tension created through the current procurement process to get a value-for-money outcome because that is the hardest thing to demonstrate.

Mrs NAPIER - Have you had good interest already?

Mr CANTILLON - Yes. We have a pre-tender meeting on Wednesday. Some months ago we did a pre-registration process for it, if and when it comes up. We had a list and from that list there were about 14 or 15 contractors. Obviously that list will shrink down to something a bit more workable. We're encouraging local industry participation. I don't think large contractors walk into another State with everything; they usually piggy-back off local industry participants, so we're expecting to see a number of joint ventures. If I had to call it I would like to think we'd have about seven or eight.

Mrs NAPIER - Different contractors?

Mr CANTILLON - Yes, different groups.

Mrs NAPIER - The southern section is worth about \$62 million -

Mr CANTILLON - No, in section 3.2.2 of the report on page 14 the northern section is worth about \$102 million.

Mrs NAPIER - I was not including the Brighton transport hub.

Mr CANTILLON - If you add \$164 million to the hub and take out the cool store, that adds up to about \$229 million.

Mr HALL - I had that question too. There was a bit of confusion there on page 14, but that clarifies it.

Mr CANTILLON - What that means is, the northern section is about \$102 million. Andrew was out there doing a refurbishment project at the same time as we spoke about this morning and Brian will be doing the Lyell inclusive in the southern section, which is estimated at about \$127 million. Mike's role, as we mentioned earlier, spans all those projects and consultation design management and key issues like that.

Mrs NAPIER - On the breakdown that you gave us of your P&S estimates, if you do not include that Brighton transport hub, it is about \$62 million.

Mr CANTILLON - Yes, \$62 million, that is right.

Mrs NAPIER - If I can interrupt a little there. The larger the sum you offer, the more likely you are to get interstate contractors coming in because of the size of the project. I guess you work pretty hard to try to make sure that Tasmanians get a reasonable opportunity to have a piece of the action. Your document says that you will not allow the contractor for the north to also be the contractor for the south. How are you going to manage that, to make sure you get a reasonable Tasmanian component to this?

Mr CANTILLON - Because this is a new form of contract and in Tasmania our organisation is used to doing what they call construct-only contracts or maybe design and construct, so we try different forms. This one is a little bit different and so, for the purposes of walking down that path, we get a very detailed procurement strategy. We use that as a discussion purpose for Treasury and Finance and Crown Law, for that matter, to look at ultimately getting their exemption to us undertaking the works as an ECI. So that took a number of months with a very successful outcome. That looked at how we could integrate local contractors into it. On one side of the spectrum, someone will say, if you aggregate it all into one single project, you will probably get a better price. Maybe or maybe not - I am not convinced. On the other side, it is a risk management strategy too, to the extent that they are different projects. The south is about the Bridgewater industrial stage, building a hub and the connections to the hub and things like that. You have to look at the noise issue. You are on fringe urban environment. Basically, as you pointed out, you are in a much more rural environment.

So it is about homogeneous sections of projects where you have like issues. So that means that when the team are working the through the project, they are working through similar issues and managing similar risks. Whereas, you do not have this broad spectrum of things in there. So there are rationales like that involved in the contract. We still think that the money we are spending will get sufficient industry take-up and this feedback that we are getting from the local industry but also through representations at the moment, is that some good local joint ventures are being set up and I think on Wednesday when we have the pre-tender meeting we will probably see that there is quite a number of them.

Mrs NAPIER - With the \$32 million worth of bridges in that northern section you could almost entertain doing it in the same way as the National Highway was done on north-west coast - cut it into sections - so that you could increase the likelihood that you could get more local operators there.

Mr CANTILLON - Yes, that is right. Also, I think the other observation worth reflecting on perhaps is that the roads program has grown. The total pool of money that is being spent on the roads industry at the moment is very large. Just in election commitments, I think it is over \$600 million between the State and Australian government funding contributions to it with rail and other projects in there. As you move up the scale in complexity and size, the way you procure is different as well. So there is plenty of work out there. There is the Kingston bypass, there is rail. We saw Van Ek working on the Jordan River when we were out there contracting. I think there is enough there to sustain the local industry.

In section 3.2.4 of the report there is a key emphasis with building into this a pecuniary strategy about managing risk and about making sure we get good price outcomes because if you can't demonstrate a good price outcome, why have we done it in the first place. There's a lot of attention to it and we have our best team here, they are a very motivated group that will be here for the life of the project.

You had a section in the report about a strategic figure. I mentioned earlier on that the reason that was in there - and it's a little bit different to the way you've seen the reports before that have come through the standing committee - is that it's a specific requirement of the Australian Government. We thought it was a benefit given the size, scale and complexity of the job to be able to demonstrate this connectivity with the AusLink network so that you saw what its work objectives were and how this fitted into it. Essentially the strategic objectives for the bypass in an AusLink sense are to facilitate the movement of goods and people between Hobart and the northern ports; improving safety, efficiency and the level of service; provide a seamless connection with the intermodal facilities; provide support for ongoing development and the connection of the Bridgewater industrial estate; and ensure sustainable and social environmental outcomes.

In terms of how we approach the approvals process, while on the one hand was it going to be a project that was subject to a level 2 planning approval - some other projects such as Westbury-Hagley were; we had specific environment protection notices issued - in this case we're not likely to as it is all done through local planning scheme jurisdictions. I think there are five on the bypass and one on the hub, correct me if I am wrong, across two municipalities. The southern midland ones and the far northern end, the Rifle Range

Road, is subject to a proclamation - just for the road alignment that we are going through at the moment.

The environmental assessment - a very comprehensive report. There is a whole swag of documentation, it is as thick as this, it sits outside of it, that's been done. The way we approached it, the environmental impact assessment was done as a single document representing the entire bypass and covered key things that we mentioned in 5.3 as agricultural land capability, flora and fauna, water courses, Aboriginal and European heritage, visual impacts, noise and vibration, air emissions from vehicles, and community and social impacts. There is perhaps a bit more information in there about what we tried to do, to explain the impacts of the job and the mitigation measures, and they are the sorts of things that are bound into the contract. When the guys go through the graphics, I might get them to refresh us as we go through as to where the hot spots are of the job.

Working through the report, in section 6 there is a whole swag of stuff on stakeholder engagement. That is a new approach that we have done, a lot more elaborate and a lot more contemporary, I suppose. We are using a consultation manager tool, it is a web-based tool where anyone can sit in any office and get a phone call and log an inquiry as to what it is. We've been logging those inquiries and it's been very successful. We've got a good handle on the issues. I have a list of the inquiries we've received to get an understanding of the sorts of issues that were raised and we have a sense of that. Most importantly, it allows us to manage those issues more proactively. We have a strategic consultation framework that goes across the hub as well as the Brighton bypass, and the way we actually decouple them is that they work within a global strategy, but below that they have their own action schedules in terms of specific things they need to do, which may relate to a particular stakeholder group, that we don't need to deal with on the bypass which might be dealt with by the hub later on. A lot of active engagement, web sites et cetera.

In social terms, landscaping and urban design are key factors of the job. We are keen to have an impact in some form. It is a very important precinct with many notable features, as you saw out there. We are keen to have a set strategy. We have a framework we are developing at the moment. We want to do more work with the contractor over the next few months while we are in that development phase and it is key emphasis to look at what we can do, consult with the community et cetera and have something they are all very proud of at the end of the day.

I suppose sustainability is part of that urban design, a sustainability framework is a goal to be kicked in both of those areas. Leading up to the latter section where we spoke about project challenges on page 44, this is really about keeping our eye on the money - the \$164 million and using it wisely. We think we have to the extent that we have done a lot of scope and cost alignment. That is a key feature. We look at what we want to do, what we think we need to do, how we respond to that and what that might cost. We ask what we can afford and we align to two together. This \$164 million estimate is a P90 and we have a great deal of confidence in that. Probably not the level of contingencies I suppose that you saw because it is a more bread and butter job. It does not have that range of unknowns, I suppose, that we saw on the Bridgewater refurbishment job.

But the key things are managing cost, making sure that we have the right design solutions that prove to be as much maintenance-free as we can and are visually attractive, engaging with the local community - that is what that exhibition centre is designed for - and making sure that we run a tight ship and get through the process as quickly and as collaboratively as we can with all of those.

Again, section 8, there was a section on economic development with reports done by GHD in conjunction with a very notable, recognised Australian economist, Robert Noakes. Section 8 dealt with various economic drivers and areas of it, culminating in section 9 which was the benefit-cost analysis, based on either a 4 per cent discount rate or a 7 per cent, of about 1.58 or in that order.

The further section system report - there is a number of documents there and we included a copy of the noise fact brochure which we put out into the community. One of the things we realised through the consultation is that noise is going to be issue as was people's understanding of what was being provided and people's expectations of our projects. So what we did to take the heat out of those, if you could put it that way, is that when we -

Mr GREEN - Where was that, again, sorry?

Mr CANTILLON - Appendix E. There is a noise brochure. We did it specifically for this job and the hub and it is basically to manage expectations and we found that it was quite well received and answered many of the queries at the time.

The DA process. Later on in there is a section on the stakeholder engagement - the modules that sit below the consultation strategy. They are active and Mike manages those and we will keep them going through the life of the project plus all the jobs in the area.

Lastly, the back end of the job is probably the most important bit - to see whether we can do it for the \$164 million. I hope we gave A3 size copies of that because mine is -

Mrs NAPIER - That is why I had my glasses on, I cannot read it.

Mr CANTILLON - I struggled, so I meant to get A3.

Mrs NAPIER - It is good detail though.

Mr CANTILLON - It is and there is a lot of detail in it and is in a form. If I can just say that there has been a lot of work done by the Australian Government at the moment setting up some best practice estimates and it has set about an improved approach. We have adopted that plus melding our own practices, which I think are very robust, and put the two together to put together a form that breaks it down into relevant detail and management contingency, and having some rationale for that contingency across the two jobs. Those sorts of dollars are what we look at every month.

If we have time, I was going to suggest that we quickly run through the graphics.

CHAIR - I do not know that the committee need it because of the extensive briefing we have had on site. We had a look at the plans as well. Am I reading it with the committee?

Mr HALL - You're reading it correctly.

CHAIR - We have had the documentation in front of us. We went through some large-scale plans on site. Is everybody okay?

Mr HALL - Yes.

Mr CANTILLON - Would you have time to see the visualisation?

Mrs NAPIER - I think we should see the visualisation.

CHAIR - The visualisation would be good.

Mr DAWS - Starting at the East Derwent Highway roundabout, this is the interchange where we were standing at the Cummings building.

Mrs NAPIER - That is my little T-junction.

Mr DAWS - Yes, that is the T-junction. That is going to be on the eastern side.

Mr BEST - There is an old farmhouse there.

Mr DAWS - The road which is at the bottom of the screen at the moment is the existing highway which will be turned into the local access road which goes off into the transport hub.

At this location here, we are going through the existing industrial estate. Where we deviate to the east, we are about 10 metres high.

Mr KING - That is the existing highway through there.

Mr DAWS - This is the Brighton interchange so people coming from Hobart to Brighton will take this exit to go into Brighton. It is also the northern interchange to go into the transport hub. There is a possible deviation to the railway line through here as well. We are going through some options at the moment with DIER's rail unit to look at the pros and cons of doing realignment now compared to in the future to see whether there are any advantages to the rail network.

This is about the limit of the southern project and now we are starting to look at the northern project.

Mr FOWLER - We head towards the more high-density residential area there on the left. We looked down on that where we were parked at Briggs Road, across the Jordan. We are coming up to the William Street and Rail Bridge, just going off the screen there, and the Jordan crossing - so quite a significant bridge there across the Jordan - into the area under Briggs Road there. It is a big road bridge with the realignment on your right, over the existing rail then up to the Tea Tree Road interchange, clearly showing the four

ramps - on and off ramps in all directions - and Tea Tree Road itself will be upgraded to three lanes to allow for sheltered right-turn lanes there for vehicles exiting Tea Tree Road.

North of Tea Tree Road, we have the new access to the golf club, just on your left there, a dual carriageway continuing up to the Strathallan Rivulet, so there is quite a major crossing there across a small waterway but it is very eroded through there.

We have a minor crossing so it is an unnamed creek there with just a culvert in it, but it is still a fairly major embankment. Then crossing Rifle Range Road, the road reverts to two lanes and then approaches the roundabout, back on the existing Midland Highway. The roundabout there is slightly offset. It is offset to the east. The area on the other side of the road has a heritage overlay in the Southern Midlands Council, so we kept away from that area as much as we could and slightly repositioned the roundabout off-centre, over to the east.

- Mr BEST This is such a significant project in the sense of the time that you're going to be out there, the amount of money and all those sorts of things. It is impressive that you have decided that you're going to have a presence there. I have a couple of questions that may lead to some other thoughts, particularly with the consultation that will be ongoing with the community. I note 750 000 cubic metres of soil will be moved and I think you're going to reclaim most of that. I think you have said that there will be an excess of 200 000 cubic metres. I imagine there may be some opportunities there with local council as to where that fill might go that is outside the scope of the job. I know and Bryan will probably vouch for this that with the bypass at either Penguin or Ulverstone there were some configurations entered into with Central Coast Council and the fill was used. It is a bit different because I think they were reclaiming some low-lying land. There are probably going to be a lot of opportunities there that will create goodwill for the community and also can be of economic and social benefit.
- **Mr DAWS** Regarding the numbers you quoted there, the 750 000 cubic metres and the 250 000 excess, that's just coming from the transport hub. The actual southern section of the bypass has 250 000 cubic metres of cut with 500 000 cubic metres of fill, so we are in deficit of 250 000 cubic metres. Between the southern bypass and the transport hub there will be a zero balance between the two projects.
- Mr CANTILLON And equally, the northern end will be pretty well balanced there as well.
- **Mr FOWLER** It is fairly well balanced, yes.
- **Mr DAWS** That was one of the advantages of making the split between the north and south project where we did so that we could utilise the full single contract on the transport hub and the southern section of the bypass and go backwards and forwards without trying to cross contract at the same time.
- **Mr HALL** I think Mrs Napier might have talked about the difference in transport time between once the project is completed and what now exists. Do you have a figure on that? It talks roughly about it in the submission but it doesn't give a specific time saving. Will there be a time saving?

- Mr FOWLER There will be a time saving. Our traffic modelling has shown that the average speed would not be 110 kph. Obviously some drivers, and trucks in particular, are limited to speeds less than 110 kph. At the moment we have speed limits down to 50 kph through Brighton itself. The time saving would depend on what sort of traffic you encountered as you went through Brighton, but it would be in the order of 2-3 minutes typically. If it were a truck, for example, having to decelerate early and taking longer to accelerate, it could well have a saving in excess of three minutes, which isn't a lot. The major reason for bypassing Brighton is to improve safety, so getting those heavy vehicles and all the traffic out of Brighton itself and also providing a safer environment without vehicles turning on and off. As you go along the bypass you will be free of accesses and side roads.
- **Mr HALL** How much longer in distance will it be? It will be 9.5 kilometres for the bypass how long is the existing route?
- **Mr FOWLER** I can't recall the number; I think it is around 2.5 kilometres.
- **Mr HALL** You will have to alter all the distance signs between Hobart and Launceston, won't you, to take account of this?
- Mr FOWLER I'm sure that has been considered.
- **Mr KING** I think everybody in Brighton, including yourselves, has to change their address. We are 64 Midland Highway.
- **Mr HALL** Is there a time frame for the section of the Midland Highway from Dysart bypassing Bagdad, the next phase?
- Mr CANTILLON In a global sense what we want to try to do is get through the planning side of this as quickly as we can so that we are investment-ready to access any moneys in the current MOU that might remain. I think the goal would be that we could even start development works on Bagdad within the life of the five-year MOU. That would be the ideal situation and it requires us to get through it as quickly as we can.
- **Mr HALL** Whilst it is not specific to this project, a bypass of Bagdad through rural areas, would you expect the same sort of cost per kilometre roughly, or you're not down that track far enough yet?
- **Mr CANTILLON** There are some global strategic estimates for Bagdad. I'd have to take that question on notice as to the magnitude.
- **Mr HALL** With the noise mitigation and we identified some of those European and Aboriginal heritage issues and 'Parkhome', the homestead there could you put on record how you're going to mitigate noise and vibration? There would be some old sandstone and heritage-type buildings there.
- **Mr DAWS** With the vibration, the bypass itself is more than 100 metres away from the homestead so we don't estimate there will be any vibrational impacts on the building. Particularly during construction that is something that is going to be part of the contract, to monitor, particularly when we go through and do the cut and fill operation. With the

noise, that homestead is a special case; it is in an industrial zoning and is currently owned by Boral that runs the quarry behind there. It is not used as a primary residence for people. There are occasions that a caretaker stays there at the moment but when we went through and did the noise assessment it was below the limit that was deemed required for noise mitigation.

- **Mr HALL** Does that quarry under the Brighton planning scheme have an attenuation zone around it at this stage?
- **Mr DAWS** I think there's a -1-kilometre buffer zone around the actual quarry itself where you can't have any more residential properties.
- **Mr HALL** You can't have any more, although there are properties existing. I noticed on the scale of the map that there were quite a lot of properties within a kilometre.
- **Mr DAWS** Yes. A lot of the properties you see there are now just commercial. There were a couple of properties, such as 'Parkhome', 'The Lodge' and a few more further to the north that were within the 1 kilometre zone before the buffer zone was put there. They are just in that special area that Brighton Council keeps an eye on.
- **Mr HALL** Regarding noise buffering, in terms of where the road goes close to the residential part of Brighton, how is that going to be accommodated?
- Mr DAWS We ran a noise model from East Derwent Highway right the way through to Pontville. Using the DIER standard and also basing it on best practice that they use on the mainland, we have adopted 63 decibels. That is our target, with up to 65 decibels being an acceptable limit. Once we'd gone through and run the initial model using 2022 traffic volumes that is 10 years after the highway will be completed we identified all those homes that were above the 63 decibel noise level. We then ran through a number of options using noise mounds and noise barriers located between the highway and the properties. Where we can we are trying to adopt noise mounds to try to reduce the impact of the highway when you look out from the actual houses themselves.
- **Mr HALL** Which is the most expensive to construct?
- **Mr DAWS** They're about the same. Noise mounds are just an earth embankment. We are going to have a lot of earth around so they are cheap but there is a lot more earth involved. The noise walls, depending on what type you go for, are in the order of a couple of hundred dollars a square metre. Noise walls probably work out about the same, if not a tiny bit more expensive.
- **Mr FOWLER** The mounds are typically slightly cheaper.
- **Mr CANTILLON** Visually I think there would be a preference from some of the community if we could incorporate as many mounds as we could rather than a structure through there but that is something that we are working through.
- **Mr DAWS** We went through and we identified all the properties where we had 63 decibels. We then went through and we nominated locations where we needed some type of sound device. After we went through and put in noise walls, there were only six properties

which were above 63 decibels in the whole corridor so we went through and put in the noise walls. Four of those properties were between 63 and 65 decibels, so they were within our acceptable limits, and there were two properties which were over 65 and we are going to go a process of discussing with the properties owners some type of architectural treatment to the house, such as double glazing or some other treatment to try to reduce the noise impact. But overall, once we had gone through and done all the noise walls it was a lot less than what we were expecting, mainly around the Tea Tree interchange and where the rail line down near William Street crosses. They were the key areas where we ended up putting up noise walls.

- Mrs NAPIER Because you allowed for \$3.5 million for sound attenuation?
- **Mr DAWS** Yes. Based on previous projects, such as Penguin and Ulverstone, we were taking a conservative estimate trying to allow for more noise walls.
- **Mrs NAPIER** So that is a bit over the top, probably, in terms of what you need?
- **Mr DAWS** Yes. So now that we are doing noise mounds rather than noise walls where we can, there may be some savings through there. But through the preliminary design we are going to detail the exact dimensions, heights et cetera a bit further so that we can refine the estimates.
- Mr HALL One of our submissions talked about the fact of four lanes versus two lanes in parts and I think the minister has been quoted as saying that you do not need a four-lane highway unless there are more than 10 000 vehicles per day. I think on the southern part of this up to Brighton there were more than the 10 000 and then after that they were fewer, weren't there? So you can explain the rationale. I am happy to have four lanes, personally. I think that is better. It is obviously a cost issue.
- **Mr DAWS** When we went through the prediction, 10 years out into the future, even up to the Tea Tree Road interchange from the East Derwent Highway, we were expecting up around the 10 000 vehicles. So we can justify the four lanes right the way up to Tea Tree on the basis that the minister is referring to. From Tea Tree onwards you can probably take this, Andrew.
- **Mr CANTILLON** Part of it is because the bridge is there and it is a stitch in time to duplicate them now as opposed to later on and then what is remaining is I suppose the cost of the dual in a sense. But at some point you are going to have a transition through there as well.
- Mr FOWLER During our cost and scope alignment process we tested that pretty thoroughly as to whether we needed to have a dual carriageway through there or whether a single carriageway would suffice. But we came across the issue of where was the ideal location to transition from four to two and with structures fairly uniformly located, there was no ideal place to narrow it down without having hard barriers that then create issues as well, so traffic merging and also hard, unforgiving barriers, and when it came down to it, there were some locations where we reasonably could transition down to two lanes if there was a definite need to but then the overall cost saving was not that great.

- **Mr CANTILLON** For the complexity involved it was far better to go a tad further up the road. It was a value engineering judgment. That was the response.
- **Mr HALL** The Aboriginal heritage issues I think you covered off pretty well. Regarding the fauna, I think there were some native grasses. Do you have to do any offsets with those at all if you plough them up or are they outside the EMPC act?
- **Mr DAWS** The grass investigations should have been finalised last week but we are still out there counting exactly -
- Mr GREEN He just wants you to bale it.

Laughter.

- Mr HALL No, there are plenty of weeds that need threatening out there.
- **Mr DAWS** I am planning to lodge our EMPC submission within the next week or so around the threatened grasses. In the next couple of weeks we will be sitting down looking at the northern and southern project as whole, trying to figure out where there are potential offsets for threatened grasses and some of the other threatened plants. There is also a threatened species permit that we have to go through as well.
- **Mr FOWLER** We are proposing to do some offsetting, but under the EPBC act they can't consider offsets when they are granting an approval because you are not, in effect, legally bound to continue on and implement those offsets. The offsets are something outside of the EPBC approval.
- **Mr GREEN** They'd be on the rifle range anyway, I imagine.
- **Mr FOWLER** There are certainly significant populations of threatened flora species on the rifle range but elsewhere as well and just throughout the general area. We find that typically on a lot of roadsides there are threatened species. They seem to like the maintenance regime that DIER uses, just slashing once a year and keeping stock off them; they thrive in those locations.
- Mr GREEN I thought the presentation at the site was really good. I think that the headquarters you're going to have on site, as Brenton indicated, will make a difference. I will ask a couple of questions on that in a moment. As was stated earlier, one of the big issues is the intersection via the roundabout north of Pontville going into two lanes. The explanation of that to the general public as to how you are going to build that section of the road that bypasses Bagdad and the heritage issues that you mentioned on the site with the house that is, that it is curving away from the existing line and swinging around I think we need to perhaps put that on the record from the point of view of allowing people to understand why we're going from four to two and how that is going to be worked through. The other aspect that I found interesting on site was the Jordan River sand dunes associated and close to why would we have to have the extra bridge? It needs to be explained. I think Mrs Napier asked some pointed questions on site that you have answered, but I think they need to be answered on the record as well.

From the point of view of the new headquarters out there, would you be able to tell the committee what the interface with the public will be, how you plan on running that on a day-to-day basis, how many people are going to be out there and what you plan on doing with the building into the future?

Mr CANTILLON - It is there for the long haul. We want a facility that we can run current and future projects out of, be an exhibition centre for it - that will be through the life of projects we are doing at the moment - Brighton, Lyell refurbishment and probably Tea Tree. It will carry on to Bagdad and the Bridgewater Bridge replacement, so conceivably it could be there for 10-15 years quite easily. It is in a good location, to the extent that when we do come to sell it, I don't think we'll lose any value on it. The personnel operating out there will be project based but it will also be our exhibition centre. I will get Mike to explain how that might operate.

Mr KING - Initially we'll set it up as a public contact area. There will be a small staff out there initially, about three of us, I think. Then, as the tender process evolves, Brian and Andrew will come out to Brighton full time, along with a number of other staff once the extension is built out the back. The exhibition area will house information on all our projects in the area, not just the bypass. It gives us the opportunity also with works being done in Tea Tree Road, Constitution Hill - although that will be well advanced by then - and Lyell Highway junction so that everybody can call in and discuss it. We will have a similar set-up to this so that we will have the drive-through visualisation. A drive-through, driving south to north, north to south, so that we can show people short sections within the area of their concerns.

We have not investigated the full use of the site yet but there will be things that we can do with school communities to get them involved, whether it be just to give them a background on road construction and road design. Also with the community we have to think of the OH&S issues involved in getting people on-site and showing them through it. But it opens up, I guess, a whole new area for us to engage the public because we are sitting on a main street, we are not part of a construction site. People usually see these compounds and never know what is going on because, even as the client, we would be within that compound under the contractor's control. But this now gives us the opportunity to set up an area where the public can talk to us. We have an 1800 number currently. We have e-mail addresses and we have a web site. But it gives them a place to call and to talk to one of us about the project.

Mr GREEN - How many people would be displaced by the existing corridor?

Mr CANTILLON - Not that many because within the zone 1 footprint is that long.

Mr KING - Classically, zone 1 is ours, I think, in the long term.

Mr DAWS - The only property that we are relocating is the property where we parked in the southern section where the buses are currently located. We are currently in acquisition process and we have been speaking to the landowners there since early last year about the process and what their rights are and what they are entitled to. So I think that is the only -

Mrs NAPIER - Are there any sticking points?

- **Mr FOWLER** The only others are the ones leasing the DIER-owned properties within the footprint at the moment.
- **Mr KING** In terms of consultation I think the reports that have come out, we have 45 pages of contact with stakeholders of which there are only three pages of direct contact from stakeholders to us. I would say that in general it is a very high, positive feedback on the project.
- **Mrs NAPIER** So you do not have any stakeholders with whom you are having some difficulties in terms of accessing land and so on? No Cooee garages or likewise?
- **Mr KING** We have spoken to landowners who have been there for a number of years and now they are going to have a highway going through the back of their property and who have known about it but they have said, 'Every time we have been told that it is 10 years away, so we thought it was still 10 years away.' We have spoken to them and they understand and accept the things that we will do in terms of noise concerns or things like that.
- Mr CANTILLON We know that there is a community that we are bypassing through Brighton, so one of the things we are doing at the moment is trying to settle the tourism directional signage scheme. Do it now, present it, talk to people in BP and the shop there and others as to what we are putting in and why be proactive and try to keep on the front foot. We have all our contract managers and work supervisors sitting out there as well.
- **Mr GREEN** With respect to the project overall, the hub, the southern section and the northern section are all contingent on one another, effectively, with the on and off ramps?
- **Mr CANTILLON** No, the hub was not part of the equation, the interchanges that we have in place are those that would be building for connectivity for the bypass in any case. It might be a little bit different at the northern connection with the hub with the roundabout it might be just like an L-shape where you shoot off from it rather than going to a roundabout. But generally they are in the right spot. They are the things that we tested through the plan.
- **Mrs NAPIER** For the record, could we go through the issue associated with the proximity to the rifle range? My initial suggestion was if we took it closer to the rifle range we could straighten it up and we wouldn't have a curve or two bridges.
- Mr FOWLER The rifle range, other than being Australian Government owned, is still in use and has been since before World War II, I believe. So it is still an active facility. It is Commonwealth heritage listed due to the flora species there, as well as European heritage due to the rifle range itself. It also has Aboriginal heritage aspects on there. Six months ago we tested the previous planning work, which was to avoid the rifle range. We looked at a couple of alignments, one that encroached slightly on the rifle range and one that encroached more significantly but provided a significantly better alignment for us. When we tested those we found that there were more environmental considerations. The impact on the waterway at the Bagdad rivulet was higher if we moved into the rifle

range, as well as then having to affect the way the army used their rifle range, the way they accessed it, dealing with the Commonwealth heritage listing and also EPBC requirements with getting approval to affect those threatened species. We did test that; it was something we looked at. We looked outside the square and thought, 'What if we didn't have this issue, would this be better for the project, to take a more direct route and go through the rifle range?' We found that it was more expensive and more environmentally damaging.

Mrs NAPIER - So it was actually more expensive?

Mr FOWLER - It was, yes.

Mrs NAPIER - I was quite comfortable with your explanation out there. It seems a reasonable explanation but I thought it was a good thing to get it on the record.

Mr FOWLER - What we found was that if we move the road to the east slightly on the eastern side of the Bagdad rivulet there's quite a long depression and there would have been a lot of fill, or even a longer bridge that had to be constructed to cover this long depression. That was the main issue we had.

Mrs NAPIER - It is still going to provide safe sight lines, I presume, even though we're dealing with a four-lane highway? I can't presume that, can I, because that's still to be decided?

Mr FOWLER - The curve is big enough to provide safe sight lines. The only time you generally get issues with sight lines are when you come to barriers and fixed structures that you find hard to move.

Mr GREEN - Like a bridge.

Mr FOWLER - Yes. In places we've had to widen the shoulder and slightly move the lanes apart to provide extra sight distance to look around bridge piers. An example of that is at Briggs Road where the road becomes slightly wider, so you have full sight distance because there will be a pier in the median of the road, which would normally block sight distance except for us widening the shoulder. So there are ways around that too.

Mr HALL - In regard to the hook that comes off the roundabout at Shene Road, I think, and is part of the actual bypass - we mentioned that the proposed Bagdad bypass will continue pretty well straight ahead in a northerly direction - the hook is approximately 1 kilometre or 800 metres or so -

Mr FOWLER - I think it's about 900 metres.

Mr HALL - Will that stay? It won't be removed?

Mr FOWLER - That will stay.

Mr HALL - As I recall, at Deloraine years ago it will built up and then removed. That bit of road, once the Bagdad bypass is eventually done, it will remain and provide, I presume, a northern exit or an off-ramp for people going into Bagdad? Is that the intention?

- **Mr FOWLER** It is for vehicles to head back down into Pontville or also to head up to Mangalore.
- **Mr HALL** Will people coming from Bagdad be able to access that from the new bypass using that hook as well?
- Mr FOWLER We've developed a concept that works for a future Bagdad bypass. It is based on a lot of assumptions at this stage, but just to be confident that that section of road that's linking into the Midland Highway can remain as part of a final interchange solution and it does. The concept we have at the moment for the Bagdad bypass is that there would be a loop, so vehicles heading south bypassing Bagdad would go up and over the bypass and go back to the same roundabout. So it would a different road. They would not use that proposed two-lane road, it would be a separate road.
- **Mr HALL** I see. Even within the confines of this project, that hook, if you like, that is not 110 kph is it?

Mr FOWLER - No, it is not.

Mr HALL - That is only an 80 kph area?

Mr FOWLER - Yes.

Mr HALL - As is the bottom part as well from -

Mr CANTILLON - From the roundabout transitioning area.

Mr HALL - Yes, okay.

Mr FOWLER - We need to start slowing vehicles down so that will be 80.

- Mrs NAPIER The only other comment I would make is that I am just fascinated that the expenditure on bitumen on this project is \$1 million out of \$100 million project. It seems like a very small proportion of actual cost of road surfacing.
- **Mr FOWLER** That is an indication of the difficulty in this project with excavation and cutting and filling and the large number of structures.
- **Mrs NAPIER** Presumably it will be a very low maintenance road because it is only a small proportion of actual road surface if you get your structure right?
- **Mr CANTILLON** That is one of our key challenges looking into every nook and cranny to make sure that the landscaping scheme is low maintenance et cetera.
- **CHAIR** I will make an overarching comment and then seek your response. When Jim Cox was the Minister for Roads, a few years a go, it was with much fanfare that he announced the reduction in speed limits through Brighton to 50 kph and then a 60 component rather than an 80 going out to north of Rifle Range Road. That was all done with the intent of enhancing the safety on that section of highway. I suppose I turn my mind to the cost-

benefit assessment of this project, \$164 million, extra distance, very little time saving in terms of transport, but haven't we addressed substantially the safety matters with regard to that section of road because of the reduction in speed limits which were announced a couple of years ago?

Mr CANTILLON - Probably not. It is certainly safer and it has brought the road toll down. But there is a high number of accesses along. You have disproportionate travel speeds between freight and local traffic. There is significant accident record that we have seen documented in the report and is basically providing a line or standard that would befit our own standards but those would integrate quite successfully into the AusLink network as well. So, whilst there has been some tangible movement made through addressing the existing network requirements, this is about building a long-term, sustainable infrastructure that meets the growing transport needs with a greater connection to the hub.

Mr FOWLER - If you are looking at travel times, one other consideration is the heavy vehicle traffic using the Tea Tree Road. So there is far improved access to the Tea Tree Road off the bypass road and going through Andrew Street and potentially trucks queuing right there on the Midland Highway in the commercial area of Brighton.

CHAIR - Yes, north bound in particular.

Mr IAN ADDISON WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR (Mr Harriss) - We have been provided with copies of your submission, Ian, and members of the committee have had that for a little time now. Would you like to speak to that, please? You may raise some issues that committee members might like to further investigate with DIER.

Mr ADDISON - I will also submit an additional paper - and these people will probably recognise it - I'm recycling DIER's public information.

CHAIR - Committee members already have that, thank you.

Mr ADDISON - But they don't have the amended version as prepared by me.

CHAIR - Okay, thank you.

Mr ADDISON - I just have the one copy of that, with a document that goes with it. I want to start by acknowledging, as I did in the submission, the efforts of DIER in relation to the public outreach, publicising of the project and giving us the chance to have a very close look at it - Brian and Andrew in particular, who I spoke to at one of the public forums. Phil also got in touch with me by phone when I contacted him regarding this submission, and I certainly appreciate that.

Re the Bridgewater Bridge, I think my one main concern has already been answered about ongoing rail access and improvements. I think members of the committee have already asked that. I think Phil Cantillon also mentioned that in terms of future options there are a lot of things that are open for consideration and that there is no urgency on that matter at the moment for future rail.

Re the Brighton bypass, I want to mention a couple of things. Firstly, I am looking at it from a multimodal perspective with a bit of a focus on rail. I have also mentioned in the submission about providing for pedestrian and cycling access between two of the major parts of Brighton, being the Brighton area itself and Bridgewater - they are the two main focus areas of commercial activity in that area - and the need for the project to make active provision for that. As I mention in my submission, I sent to DIER a submission on the combined projects and in that I mentioned that as one of the issues.

I think it is a pity that today's hearing is not about this part of the corridor in a multimodal sense, that we aren't talking about how the rail corridor might be improved and allowed for down the track and about pedestrians and cycling along the corridor.

It's difficult for me to know exactly what to add to what I've said before because I don't know how individual members of the committee have interpreted the comments and suggestions that I have made. So without the benefit of that knowledge, I will mention firstly the importance of the north-south rail connection, especially the link between the Brighton hub and the Bell Bay port and its increasing importance. I think that the standard of the rail route currently is poor, especially in the south of the State. Through the Brighton area it is typical of that poor section in the south of the State. When we had

a look at the simulated flyover it was interesting to compare the beautiful vertical and horizontal alignment of the bypass with the rail route. On those maps you can see where the rail route follows. You can't see the gradients on that type of map but on the 3-D simulation you could see the gradients in the track and it is really quite a circuitous route. On the map that I have presented to the committee I have dotted in where the current rail route is so it can seen a bit more clearly. But it does not compare well with what is planned for the highway. It is over a century apart, I think, in standard. Therefore, I am trying to stress the need to make provision now for a significantly improved route where you are going from a twenty-first century terminal and then out into a virtually nineteenth century rail route in providing that link to, say, Bell Bay in particular.

I, like everyone here, would love the journey on an improved highway as it is. I know we have people who travel that road regularly and would appreciate the benefits of a four-lane highway. I am not disputing that and how nice it would be. What I am saying is that it is a significant amount to spend and in doing so we should make allowances within that for other modes to be lifted to a high standard. People who would have looked at that and would think about the drive north or the drive south over the Midland Highway would be I think hoping that they are not going to encounter too much truck traffic especially on the mostly single-carriageway sections of the road. They may not appreciate how valuable the rail route will be in terms of keeping road freight traffic to a manageable level.

People in Launceston I think ought to appreciate that the route from the south through the city to Bell Bay is going to become an increasing issue for truck traffic and therefore being able to take a lot of that freight via the rail route past the city I think would be of enormous benefit. But you have to invest in the infrastructure and it has to be of a standard that is at least comparable to what we are attempting to provide for rail.

I realise it is a bit of a step to say that we should provide a little bit less road capacity at least in the initial to medium-term phases. Traditionally the idea has been to provide things way into the future and allow for growth et cetera. I am just challenging that concept to an extent. I know there are others who would also challenge that idea of providing capacity way above what is required in the medium term and that is something to reinforce what I have put in the submission.

As to the extra funding that might be needed to allocate a much-improved railway through this section, I have suggested from the roundabout at East Derwent Highway through to the area where the new highway will overpass the current rail route near Tea Tree Road which should be marked on the map. There is potential but it would cost to do that. I think it is fair to say that in terms of the road connections et cetera, we are probably sparing no expense to extending and investing in a really decent standard and it would be a pity if we could not find some money to ensure that the rail route and indeed cyclists and pedestrians were not well catered for within that funding.

I will probably wrap up by just going to the very last page of my submission, and this is perhaps something that Mr Best and Mr Green could relate to, perhaps especially Mr Green from the Burnie area. I have mentioned there that about decade ago and, in fact, going back probably even 10 years further than that, there was quite a bit of upgrade to the highway, just east of Burnie. It was done over a couple phases, probably about 10 to 15 years apart. In doing so, the rail needed to be moved more towards the sea and

provision was made to do that and it made for a better rail alignment in places, but interspersed with some sections of reasonable curves it had some really tight curves thrown in in the middle where at the time it was perhaps considered that it wasn't needed to move the rail track any further to cater for the road. What I'm saying there is had a bit more priority been given to the rail route - a much better rail route could have been put through at the time the road was being constructed, or the duplication was being done. I think now we have an opportunity - we were talking with the minister late last year about half a billion dollars being spent on the road between Dysart and Granton. When we're talking about that amount of investment I think it would be disappointing if in the short term we didn't make allowances for these other options and in the medium term actually putting them into effect. By that I am talking especially about the rail route but also the pedestrian and cycling allowances.

- **Mrs NAPIER** Can I get a clarifying point because we usually do have a debate about cycling and bicycles, whether we can put in a cycling lane that's safe? What is the protocol in relation to National Highway and cycling lanes?
- **Mr CANTILLON** Sometimes they are a combination of widened shoulders. In this particular situation on the Brighton bypass we are exploring a combination of using the local network through the township, supplemented by shared cycleways and joining the local connector runs so that there would be a continuous stream through Bridgewater and the East Derwent Highway.
- **Mr DAWS** We have a map and we can show you the routes.
- **Mr GREEN** The pathway that we passed on the right coming back from Pontville, I noticed that there was a park and dam and a pathway leading off. Does that connect right through?
- Mr FOWLER At the ford?
- Mr GREEN Yes.
- **Mr FOWLER** It doesn't go all the way through. I haven't walked that yet to see how far it goes, but I think it's just local.
- **Mr GREEN** I was looking on the overhead photo and it looked to go about two-thirds of the way down there for some reason. I don't know whether there is a feature down there or something or whether it is just part of a track that may be continued in the future.
- **Mr FOWLER** I think it's more just a leisure facility than anything, but I haven't walked it to see how far it goes. We haven't discussed with council what their future plans are with that.
- **Mr GREEN** I thought it might be a good pedestrian cycleway.
- **Mr CANTILLON** We are hoping to hold discussions with council on this and other matters.

- **Mr BEST** Mr Addison, in relation to the railway line you're talking about the alignment, is that right? You're saying that the alignment is probably not as efficient as it could be given that the highway is an efficient alignment?
- Mr ADDISON I'm saying that typically in southern Tasmania and in isolated places elsewhere you have curves of radii between about 100 and 250 metres. That is really tight and if we're talking about easing them out, as they have at the approaches to the new bridge at the Jordan River bridge and the rail bridge there, which is in the final phases of coming on stream, it has probably been eased out from 100 metres to perhaps between 200 and 250 metres. We're talking about easing the speed limit from 35 kph to perhaps 45 kph or maybe 50 kph. That helps but in terms of intermodal traffic where you want trains running along at a decent speed not quite highway speed, but certainly on the mainland they would be planning to run their intermodal trains at highway speed with curves of that type I would be hoping that you're looking for a minimum of 500-metre radii curves where you are talking about being able to maintain perhaps 70 kph or thereabouts, or perhaps even closer to about 900 metres where you might be able to run without having to slow down a freight train.
- **Mr BEST** Looking at your chart, I think you have put a thick line here and this is where you are suggesting the rail, as an option, runs alongside the highway. Am I understanding it correctly?
- Mr ADDISON Yes, that is it. I am not saying it should be built at this stage. What I am saying is we should be doing a lot now and make some investments to allow for this at a later time. On the front of that I have used a photo where you can see the location of the new bridge and I have marked in roughly the route of the new alignment across here for the new Jordan River rail bridge. I guess my concern is that they might be saying, 'We have put in a new bridge, albeit probably 30 years later than it should have been, but now we do not need to do any more. That is okay, that is a satisfactory standard'. I am saying that the bridge certainly will be of a satisfactory standard but the alignment down through there and what you have to do to get down there and back up again is the unsatisfactory part of it in the medium to long term and that is just one aspect of it.

Mr BEST - For rail?

- **Mr ADDISON** For rail. Just to add to that, I noticed since the public consultations that the road approaching now to the industrial precinct looks as though it is grade separated. So regarding the new road in through there, the new alignment of that curved road as it comes up, it seemed to be in the flyer that the simulation was that there is now grade separation here -
- Mr DAWS Yes, that is an error in the flyer which we are in the process of having fixed. We have had discussions with the chief traffic engineer and also the Rail Management Unit. When all the trains start to go into the transport hub we are only estimating to have a couple of train movements per day at the most down through this line, heading down to the paper mill at Boyer. So we are indicating that this would be a conventional level crossing but will also have some advanced warning.

Mr ADDISON - So it is as it stood at the time of the public display?

Mr DAWS - Yes.

Mr ADDISON - What I am saying is that in the longer term that crossing and the one down near the sports ground down to the left of the map, plus the curvature through there and the curvature as it approaches at the top, are pretty substandard. I am saying that I really think that allowance should be made for a better alignment in the medium to long term but the allowances need to be made now, I feel.

Mr DAWS - It is something that we are looking into. That line is for the current rail alignment which takes you out through here. It is not shown but that is where the rail is going to go into the transport hub. We are looking at potentially realigning the section of this rail through here. At the moment this section has a maximum 2.5 per cent grade for the trains and the radius of the curve through there is about 100 to 200 metres which is very tight for a train and the problem is that with the train coming up the 2.5 per cent grade, when they start to turn corners they use up to 25 per cent of the power to go around the bends. So we are looking at the option of increasing that radius of the curve through there but the Rail Management Unit at the moment is looking at a wider view of the rail network because if we increase that curve here and they say 20 seconds for a train but we do not improve the sections further up and they are a lot worse, the money that we spend here may be better spent improving the network somewhere else. There are options which we are going through at the make sure that all those considerations are taken into account. It was obvious if we built the highway through there now it would be difficult to come back.

Mr ADDISON - That's just one of many curves like that.

Mrs NAPIER - Are there any other sections of the road improvement that would prevent the realignment of rail, as is being suggested by Mr Addison, should the funding be available?

Mr CANTILLON - I did some number crunching, Ian, and there is \$136 million of State and Federal Government money committed for upgrades to Tasmania's rail network. That's excluding the \$78 million rail rescue package. They have submitted a series of strategic project bids to the Commonwealth Government for a number of different jobs. As part of that work, there is one particular project called the main line upgrades. The key thing is to make sure that we're using the money in the right locations, where we can get the most value. It might look at face value that it is worthy to do something here perhaps but by comparison in the global scheme of things when we look at the entire network length, you are probably going to get greater value and impact on the money in spending it in other locations. We have asked that question. The work is ongoing, it is still happening at the moment, but we don't anticipate at this stage any rail impacts on the bypass project as we have identified based on the feedback that we've got on the other sites that they're investigating. You're right, in a global transport sense you do look at it between the two and we did look at it at the time but this is a bypass project as well and, as Mr Addison said, there is a further cost overlay to do rail works. It's not as if you're getting the two for the same price. It does cost you more and you can do some work here but in the global scheme of things, if you want to get best value out of the money, should it be spent here or further up the road, what we are hearing is that it is probably further up the road. Those justifications and rationales are the ones that we have to put before the Australian Government.

- **Mrs NAPIER** You're saying that any of the new road sections being built don't interfere with potential realignments? Has that work been done?
- Mr CANTILLON If we were going to do some rail works at this site in addition to the roadworks, we might change the height of the road at certain locations over certain lengths and try to optimise the earthworks footprint between the two but again that is an additional cost; it's not part of the bypass project scope. Even if we did that, is this really a site at the end of the day in the global context where people want to spend their money? What we're hearing is that there are other sites that are going to come up trumps. This could be a site but it's right down the order; it's further afield.
- Mr ADDISON I think it's fair to say that the worst sections are on the approaches to Rhyndaston further up. As I have put in my submission, \$20 million or thereabouts was allocated for improvements there and two other sites further north. I also put in my submission that of the 90 kilometres from Bridgewater to Anthill Ponds at least 60 kilometres are of this kind of very difficult standard and that in the longer term the investment should be looked at for making those improvements. If \$164 million was spent on the southern rail network you would have a very good connection between Brighton and Anthill Ponds but we're comparing different things.
- **Mrs NAPIER** And that's certainly listed in the material we were provided with about the Rhyndaston rail improvement.
- Mr ADDISON Yes, but I am not saying that at this stage we should be investing big money in putting in the rail connection here, I am saying that we need to identify a much higher standard of alignment where we are talking about this AusLink thing. The Tasmanian corridor strategy is to 2030 and we should be thinking what can be provided around that time and what we do now. Just as we are saying that it is better now to take the four lanes a bit further because it will give us benefits down the track, I think it is just as valid to say we should be, where we can, perhaps doing a bit of extra earthworks and maybe allowing for a grade separation at Briggs Road where the highway goes under and allocate for a rail under there as well. Identifying a corridor and making sure your connecting roads are built to avoid that those are the points I am trying to make, not necessarily to build these things right at the moment as part of this.
- **Mrs NAPIER** I accept that one. I have a question on that same issue the issue of cyclists and pedestrians?
- Mr DAWS At the moment, the existing highway comes around here, along this white line and continues straight through here. There is currently a bus stop on either side of the road for people to get off and on at the industrial estate. In the only risk area we will provide some type of pedestrian overpass so people can cross the road without having to try to run across the highway. We are also looking at options for having some type of bus route and, because buses will no longer be able to stop on the highway, providing bus stops through the link road through the industrial estate. So the buses come off and go around through Brighton, so we can provide a bit more connectivity through the industrial estate for pedestrians. As part of that we are looking at having a footpath down along this road through here. From the connection onto the access road to the properties on the western side of the highway here we are looking at having a combined

pedestrian-cycling pathway. From here it runs right along down, crosses over the current alignment to the highway down through here and joins up with the old highway going down to Bridgewater.

From this point, heading north, we are looking at having a cycleway from here running along the access road and where the new highway deviates from the existing highway, have some type of cycleway from here down around, over the railway line and up through Brighton.

At this point through here we are looking at not having the cycleway as part of a shoulder. We want to try to maintain that separation between a cycle path and cyclists riding on the highway itself. This is still concept stage so we are still working out the details of the exact location.

Mr GREEN - There will be a link though?

Mr DAWS - There will be that link because we have identified that there are people who do come from Brighton and Crooked Billet Creek is the crunch - we somehow need to get them across Crooked Billet Creek. We thought about the option of having a cycleway around the back but that adds an extra two kilometres or so to the route and people would not use that.

Mrs NAPIER - They are not going to do that, they will take a short cut.

Mr DAWS - No. The existing highway through here, the current bridge that we have over the railway line, just to the north of that, where we construct the new rail into the transport hub, we are cutting the road through there, so we cannot physically get cyclists along the existing highway which is why we are looking at having something down along the bypass through here.

CHAIR - At the top of the batter?

Mr DAWS - We are not sure whether it is going to be at the top or the bottom of the batter. Those details are still being finalised at the moment. But this is the approximate location that we are looking to have some type of connection here which will link the Brighton community and the Bridgewater area

Mrs NAPIER - So there will be designated tracks?

Mr DAWS - There will be a designated area. So, a cycleway linked in with a pedestrian overpass through here so people can come down, cross the highway and reach the highway through this location through here. Because they are so constrained by the properties on either side of the road, there will be a concrete Jersey barrier through the centre of the highway, so there will be no option for people to get there and try to cross the road. If people want to catch a bus out to the industrial estate, there will be bus stops and a walkway for them to cross over.

Mrs NAPIER - Presumably the discussions with the council continue about the rest of the distance to Pontville?

- **Mr DAWS** Yes, particularly through the signage.
- Mrs NAPIER I think it's a fair point that Mr Addison raises.
- **CHAIR** Are there any further questions to DIER following Mr Addison's submission and representation to the committee?
- **Mr BEST** No, I guess just the comment that I think it has been noted that there will be a cycle link, from what I gather, that needs to be worked through with the council and that there is consideration about the alignment of rail, as to what is the best way of doing that.
- Mr CANTILLON Probably the way I would express it is that regarding the cycle lane we have a vision there and we see strong cooperation from council. We need to have a champion there and come to some agreed arrangement about that. We think there is mileage to be had there and we advocate that. Obviously with the rail issue we have looked it and considered the issues that Mr Addison has raised. It is a work in progress really. Does this site stack up with going somewhere else? What we are hearing is probably not, in a global context, but it is a test that you have to apply in the transport sense on the project.
- **Mr BEST** With an alignment of rail, surely that would have to be cheaper than an alignment of a four-lane highway? It's a matter of whether you have the money or not in the project, isn't it? It doesn't matter if its' cheap if you don't have the money in the project. Do you know roughly what the different in cost might be?
- **Mr FOWLER** Per kilometre for rail it is in the order of \$2 million, I think.
- **Mr DAWS** I think, depending on the alignment, they quoted between \$1 million and \$2 million per kilometre, depending on whether it is straight or flat.
- **Mr CANTILLON** When we did to Chasm Creek it was \$2.3 million a carriageway kilometre, but that was a very complex drive and you went 4 metres out to sea. This has some large overlays and bridgeworks and stuff like that. We have not done the maths. We have looked at it from a different approach.
- **Mr BEST** The deal is done and I think there was some talk about a memorandum of agreement to be signed. Are you able to negotiate any more regarding the rail or is this what the deal is and that's it?
- Mr CANTILLON In terms of the scope itself, what we have here is \$164 million and we have to submit an estimate and a bid that has 90 per cent probability that we can do it for that amount of money. Obviously if there are savings that we can realise then maybe there are opportunities, but we are too early at this stage to say there. There are other jobs in the program but they are for other rail jobs or other planning jobs, the Bridgewater Bridge refurbishment et cetera. We haven't even signed the MOU yet, so they're things that you would keep in the back of your mind.
- **CHAIR** Thank you all for your presentations to the committee today and for the site visit this morning.

THE WITNESSES WITHDREW.