2005 (No.)



PARLIAMENT OF TASMANIA

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

West Tamar Highway, Supply River Bridges Upgrade

 $Presented\ to\ His\ Excellency\ the\ Governor\ pursuant\ to\ the\ provisions\ of\ the\ Public\ Works\ Committee\ Act\ 1914.$

MEMBERS OF THE COMMITTEE

Legislative Council

Mr *Harriss* (Chairman) Mr *Hall* House of Assembly

Mr Best Mrs Napier Mr Sturges

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INTRODUCTION

To His Excellency the Honourable William John Ellis Cox, Companion of the Order of Australia, Reserve Forces Decoration, Efficiency Decoration, Governor in and over the State of Tasmania and its Dependencies in the Commonwealth of Australia.

MAY IT PLEASE YOUR EXCELLENCY

The Committee has investigated the following proposal: -

West Tamar Highway, Supply River Bridges Upgrade

and now has the honour to present the Report to Your Excellency in accordance with the *Public Works Committee Act* 1914.

BACKGROUND

The 1.4 km long section of West Tamar Highway between Everest Road and Rookery Road is located between Exeter and Beaconsfield. The road is of moderate strategic importance and carries 4000 vehicles per day, 10 percent of which are commercial.

The section of road comprises an elevated, narrow causeway across a flood plain, with wider sections to the north and south where the road is in cut/fill. A crest to the south restricts visibility distance. There are four culverts and a bridge over the floodplain. The structures are approaching the end of their design life and are undersized and of restricted width. Regular flooding occurs at an estimated frequency of between one and five years. The last incidence of flooding was in September 2005.

A planning report was prepared for the Department of Infrastructure, Energy and Resources (DIER) in 2004 that considered three options and developed a budget for improving this section of road.

Following this, further options were developed (II in all) and a concept design was adopted, before progressing to establishing the preliminary design and estimating costs. This was followed by preparation of tender documentation.

THE EXISTING SITUATION

The Road

Where the existing elevated road crosses the flood plain, it has a narrow sealed pavement varying between 6.1m and 6.4m wide, with 0.5m unsealed shoulders.

At the culvert and structures, the kerb width is 6.7m while at the main Supply River Bridge structures, the kerb width is 8.0m.

Traffic Conditions

Traffic Characteristic Value
Traffic Flow (two way) 3700
Percentage trucks 11.3%

Traffic growth rate 5.2% per annum

Accidents

A review of traffic accident details from DIER's Road Safety Branch data base indicates that there have been 11 recorded accidents at this section of road between January 2000 and October 2004:

- Two accidents involved trucks;
- Four accidents involved cars leaving the road;
- Three accidents involved wet or foggy conditions;
- Four accidents involved were on the curve;
- One accident involved rolling a station wagon; and
- No injuries were recorded.

The Road Side

The abutting land is rural and used for grazing. It is in nine titles divided amongst six owners. Most of the land is cleared, with a few trees growing along the roadside, on the banks of the Supply River and scattered in the paddocks. The West Tamar Highway is typically bordered by agricultural land, beyond which are wooded hills.

The land is zoned rural under the West Tamar Council Planning Scheme. Roadworks under this Planning Scheme do not require planning approval.

No sites of Aboriginal cultural heritage value have been identified in the project area.

A field assessment of flora and fauna was undertaken for the floodway section of the works. It was concluded that the road realignment would be unlikely to have significant impacts on threatened fauna or flora. However, a springtime flora survey was recommended. This was to be undertaken in October 2005 as a supplement to the previous study. The current investigation will extend the study area to include the full road-works extent, including the Rookery Road junction and the vertical curve improvement.

There is an Aurora line comprising nine poles on the western side of the road which will require relocation prior to construction.

There is a Telstra trunk cable located on the western side of the road well adjacent to the existing boundary fence. The cable will require relocation prior to road-works.

The West Tamar water supply trunk main is clear of the road-works.

PROJECT OBJECTIVES

The project aims to improve serviceability and safety for road users by widening the road and improving the visibility distance at one location to the south of the floodway. It is hoped that a reduction in the incidence of flooding over the road will be achieved through a combination of raising the level of the road and increasing the capacity of the culverts. As well as the above, some general improvements to the existing Rookery Road Junction will be included in the project.

PROJECT JUSTIFICATION

This project is justified by the resulting reduction in the incidence of the road closures due to flooding, as well as increased safety for road users. These major safety improvements for the road are as follows.

- Reduction in the incidence of flooding of this section of road and the inherent dangers of traffic attempting to cross the road in flood;
- Removal of guard rail across part of the floodway by providing a widened runoff zone and embankments flattened to IV to 6H instead of the typical IV to 2H:
- Increase in stopping sight distance for the section south of the floodway where an existing crest is proposed to be flattened by cutting the roadway to a lower level;
- Increase in shoulder width from 0.5 metres to 2 metres at the floodway and 1 metre in the cutting; and
- Improvements to the junction turn radii at the Rookery Road junction to suit articulated trucks, enabling trucks to negotiate the junction without the need to cross the centreline of the West Tamar Highway.

MAINTENANCE COST SAVINGS

The proposed project will reduce the damage caused by frequent flooding and the consequential repair costs.

ROAD USER BENEFIT

In addition to the road safety benefits, road users will derive benefits from the following:

- Increased security of travel for flood events up to the 100 year annual recurrence interval flood (Q100);
- Elimination of the narrow shoulder width across the floodway which adds to driving comfort and safety; and
- Improved safety from an increase in sight distance between the driver and hazards on the road.

THE PROJECT

Proposed Works

The proposed works involve raising the road across the floodway by up to 750mm, widening the shoulder and replacing the existing five bridge structures with three multiple-cell pre-cast box culverts and two pipe culverts. Associated improvement works are also proposed at a crest curve to the north of Everest Road and junction improvements will be made at Rookery Road. The road will remain on the existing alignment.

The road-works comprise:

- Raising the new road level by up to 750mm across the existing five bridges for a distance of 400m to increase flood protection of the road;
- Widening the carriageway at the floodway from the existing width (at minimum, 6.7m) to 8m, comprising 3m traffic lanes and 1m sealed shoulders to provide for safety of traffic;
- Widening the fill areas to 7m adjacent to the road for 330 metres of the floodway, for the reduction in the length of steel guard fence required to provide increased traffic safety;
- Lowering the new road by up to 1.2m at the existing crest curve north of Everest Road for a distance of 300m to provide improved stopping sight distance, and providing 3m traffic lanes and 1m sealed shoulders;
- Replacement of three existing bridge structures at the main Supply River stream and the secondary and tertiary streams with pre-cast triple-cell box culverts to provide capacity to pass the 100 year flood flow;
- Replacement of two existing bridge structures at the minor stream paths with 1800 pre-cast concrete pipe culverts to provide drainage of natural drainage courses; and
- Reconstruction of the southern junction radius of Rookery Road to improve traffic safety.

Road Width

The project includes widening of the road to provide two 3m traffic lanes and 1m sealed shoulders of the floodway and 1m sealed shoulders of the crest curve improvement.

Specific Design Issues

The proposal works include the following:

- Increasing the flood capacity of the floodway to the 100 year recurrence interval flood;
- Pavement design for 20 year traffic with 5.2 percent compound annual growth rate and 11.3 percent heavy vehicles with three-layer granular pavement (derived from historical traffic data);
- A two-coat bitumen seal;
- New triple-cell box culverts (1.8m deep by 3.6m wide triple units) of precast design, so as to reduce the construction period; and
- Improvements to the stopping sight distance of the crest curve.

CONSTRUCTION PROGRAM AND COSTS

Construction Program

Construction is programmed to commence in December 2005, with completion anticipated by May 2006.

Costs

The cost of the works has been estimated based on historical rates for similar works delivered by DIER in recent years. The main components of the cost are shown in the following table.

Estimated Costs

Element	Estimated Cost
Project Specific	\$187,000
Earthworks	\$467,000
Drainage	\$775,000
Pavement	\$253,000
Bituminous Surfacing	\$45,000
Traffic Facilities	\$64,000
Landscaping	\$17,000
Miscellaneous	\$160,000
Sub-Total	\$1,968,000
DIER costs	\$200,000
Professional Fees	\$300,000
Acquisition	\$32,000
Contingency 20%	\$500,000
Project Total	\$3,000,000

ENVIRONMENTAL AND SOCIAL IMPLICATIONS

Environmental Issues

There will be limited impact on the natural or built environment by the proposed works. The weed areas will be identified and requirements for treatment of the various declared weeds will be included in the tender documents.

As no Aboriginal heritage sites were identified, the provisions in the DIER standard construction specifications are considered adequate. The results of the spring flora survey will be included into the construction specification should any potential impacts be identified.

Public Consultation

The Supply River crossing upgrade is a high community priority in the West Tamar Highway corridor and has the support of the travelling public, transport operators and Local and State Government. This has resulted in the project being brought forward by two years.

The impetus for the fast-tracking of this project originated at a public meeting at Exeter in October 2003 on safety issues on the highway. The West Tamar Council subsequently formed the West Tamar Highway Safety Committee comprising council and community representatives. The Committee has been very active in raising awareness of the issues with politicians and through the media. The October 2004 Draft West Tamar Corridor Study identified over \$150 million of potential works and the public comment on this document identified Supply River as a high priority. The Minister for Infrastructure, Bryan Green, addressed a rally in November 2004 and announced that this project would be brought forward and construction would commence in 2005. On 20th December 2004, the Minister met Committee representatives at the floodway and provided concept designs for the upgrade of the Supply River crossing. He confirmed that works would begin in the 05/06 financial year and be completed by the end of 2006. This project is one of a suite of projects being undertaken to improve safety on the West Tamar Highway.

A final design has now been prepared. It meets the outcomes originally identified in the corridor study which had considerable community input. It has not changed substantially from the concept design distributed for comment in 2004.

A Public Contact Plan, providing information to the community, has been developed and will be implemented throughout the project. Key stakeholders include the West Tamar Highway Safety Committee, West Tamar Council, property owners and the community. These key stakeholders will be individually contacted. A brochure has been prepared that will be delivered to 3000 addresses in the West Tamar and there will be a public display at the Council Chambers. Advertisements and media releases will complete the public awareness campaign.

Property Matters

The works will require the acquisition of land from two property owners. Both have been advised of the need to acquire land and no objection has been raised. Consultation is currently underway.

The accesses to one abutting property will be lowered to facilitate the construction of the road-works at the crest curve improvements.

Two existing accesses through existing guard rails near Supply River will be relocated clear of the guard rail for safety improvement.

The road-works do not require planning approval under the current West Tamar Planning Scheme. Overhead Aurora service (nine poles) will require relocation as a consequence of the works. An underground Telstra service located on the western side of the road adjacent to the existing property boundary fence line will also require relocation.

EVIDENCE

The Committee commenced its inquiry on Thursday, 17 November last with an inspection of the site of the proposed works. The Committee then returned to Henty House whereupon the following witnesses appeared, made the Statutory Declaration and were examined by the Committee in public:-

- Hein Poortenaar, Project Manager, Department of Infrastructure, Energy and Resources;
- Geoff Mulcahy, Manager Project Services, Department of Infrastructure, Energy and Resources;
- Ross Cumming, Consultant, GHD Pty Ltd;
- Ray Wright, Technical Services Manager, West Tamar Council;
- Christina Holmdahl, Chair, West Tamar Highway Safety Committee;
- Jim Ockerby, Resident; and
- Christine Miller, Resident

Background

Mr Mulcahy made the following submission in relation to the background of the proposed works:-

The State Government has provided \$3 million to replace the Supply River bridges, this being part of a multimillion dollar program to improve safety on the West Tamar Highway. Works are programmed to commence this summer and be completed by the end of 2006. The Supply River crossing upgrade is high on the list of community priorities on the West Tamar Highway corridor and has the support of the travelling public, transport operators and local and State governments. This has resulted in the project being brought forward by two years. The impetus for the fast-tracking of this project originated at a public

meeting at Exeter in October 2003 regarding safety issues on the highway. The West Tamar Council subsequently formed the West Tamar Highway Safety Committee, comprising council and community representatives. I note that this committee has been very active in raising awareness of the issues with politicians and through the media.

The October 2004 draft West Tamar Corridor Study identified over \$150 million of potential works, and the public comment on this document identified the Supply River as a high priority. The Minister for Infrastructure, Bryan Green, addressed a rally in November 2004 and announced that this project would be brought forward and construction would commence in 2005. On 20 December 2004 the minister met committee representatives at the floodway and provided concept designs for the upgrade of the Supply River crossing. He confirmed that works would begin in the 2005-06 financial year and be completed by the end of 2006.

This section of the West Tamar Highway carries 4000 vehicles per day, including commuter and tourists, and up to 10 per cent heavy vehicles. It forms part of the heavy transport route from the north-west to the centres of the Tamar and beyond. Growth is expected with the proposed pulpmill and other industries. This project is one of a suite of projects being undertaken to improve safety on the West Tamar Highway. Other projects include the duplication of the highway from Riverside to Legana, and road-widening and realignment of corners between Beaconsfield and Batman Bridge.

Mr Poortenaar added:-

Mr Chairman, following the original scoping report that was done, GHD were commissioned to design the works. They first reviewed the options and produced an options report. They presented 10 options. That options report was reviewed within DIER by the various stakeholders, sponsors et cetera. We identified another option that we wanted pursued, and that option was subsequently adopted. The option meets the outcomes originally identified in the corridor study, which had considerable community input. It was also substantially the same concept design distributed for comment in 2004. The design was subsequently developed, a preliminary design and environmental assessments, and is now ready for tender. Often councils require development application, but in this case West Tamar Council does not require one because roadworks are a permitted activity.

Other functions that were carried out included acquisition surveys for the adjacent properties. They are now complete and property negotiations will commence in due course.

A public contact plan which provides community information was developed and will be implemented throughout the project. Key stakeholders include the West Tamar Safety Committee, West Tamar Council, property owners and the community. Key stakeholders are written to individually. A brochure has been prepared and will be letter dropped to 3 000 address on the West Tamar. There is also currently a public display at Riverside hall. There will also be advertisements keeping the public up to date and media releases.

It is anticipated that construction will start in February 2006 and it is expected to take six months. Some traffic disruption is unavoidable due to the confined nature of the site. Disruption will consist of speed limits, gravel surfaces and short periods when the traffic is reduced to one lane controlled by lights. The adopted design with its wide formation and fewer structures minimises the duration and extent of this disruption.

Design considerations

Mr Cumming outlined to the Committee the design aspects of the proposed works:

... I was the project manager for the GHD design team that prepared the design for this project. The overall project is a 1.4 kilometre length of the existing West Tamar Highway at Supply River, approximately 3 km north of Exeter. A 500-metre length of this section of road is deficient due to a long narrow causeway with five narrow bridges. It is further constricted by a guardrail on both sides. The bridges do not have sufficient capacity to accommodate more than a one-in-five year storm estimated at 75 cubic metres per second and this causes frequent flooding over the road. The bridges were constructed in the 1940s and have reached the end of their service life and are due for replacement.

A separate 300-metre length of this section of road to the south of the Supply River comprises a sharp crest vertical curve, which reduces sight distance. It is proposed to widen the carriageway from the current 6.7 metres to 8 metres. This is the standard for this category and usage of road. The design brief included allowance for cyclists and a 1-metre sealed shoulder included in the design provides for this. The 500-metre long causeway currently has guardrail along both sides. By providing a 5.5 metre wide verge and gentle batters, most of the guardrail can be eliminated. This improves safety and amenity and reduces maintenance. A short section of guardrail will still be required over the Supply River, as that is the main channel of the floodway, including the kerb at the northern end of the floodway where gentle batters were not adopted due to the potential impact on the vegetation adjacent in the Supply River.

The five existing bridges within the causeway section will be replaced with three triple-cell box culverts 1.8 metres high by 3.6 metres wide by 3 metres at the Supply River main stream, the secondary stream and the tertiary stream, and two hot culverts will be installed at the two intermediate streams. The road surface level across the causeway will also be raised by up to 750 millimetres to achieve a combined culvert capacity of 200 cubic metres

per second. This is included for a one-in-100-year storm event which is the standard for this category and usage road.

The crest curve to the south will be lowered by up to 1.2 metres to provide the required sight distance for 100 kph design speed. In addition to these other works, Rookery Road junction, which is 400 metres north of the Supply River bridge at the northern limit for this project, will be improved to provide safe turning for semitrailers. It will also be sealed.

Environmental, European and Aboriginal heritage assessments were conducted and no particular issues were found. The road follows the existing alignment and apart from a few trees needing to be removed for a widened carriageway, plus some clearing for relocation of an existing overhead Aurora line, impacts are negligible.

Cyclist/pedestrian considerations

The Committee questioned the witnesses as to whether a guardrail was proposed for the northern end of the works. Mr Cumming confirmed that approximately 150 metres of guardrail would be constructed on each side of the roadway. The Committee sought clarification as to what provision would be made for cyclists and pedestrians. Mr Cumming submitted:-

Yes, the 1-metre sealed verge continues right through.

... In addition to that there will be a half-metre verge on the outside of the guardrail for emergency pedestrian access.

The Committee sought clarification from the witnesses as to the proposed width of the roadway and its conformity with standards. Mr Cumming answered as follows:-

Well, it is two 3-metre lanes plus 1 metre on the shoulder.

... That would comply with typical standards and would be a State roads policy for that usage of road - that amount of traffic and that category of road.

The Committee questioned the witnesses as to the adequacy of the 1 metre shoulder for use by cyclists as opposed to a dedicated cycle path, Mr Cumming responded:-

In my view, given the direction from the departmental officers, yes (the 1-metre lane provides safe access for cyclists and pedestrians).

... I am not a specialist on cycling lanes but my understanding is they need to be in the order of 2 metres wide.

Heritage/environmental values

The Committee questioned the witnesses as to how much vegetation was required to be removed and what species were involved. Mr Cumming responded:-

There is possibly a dozen to 15 trees to be removed ... there was no environmental value put on those trees.

... I would need to refer to the flora report but there were some boxwoods. There are a lot of weeds in that area and there will be a couple of small eucalypts at the river itself. Some of those are required for clearance purposes for the relocated Aurora overhead line.

Traffic disruption

The Committee sought detail of the disruption to traffic flow that would result from the proposed works and in addition, the proposed speed limit after the completion of the works. Mr Poortnenaar responded:-

There will inevitably be some disruption. Construction is expected to take six months. Given the fairly generous formation that we have constructed they would be able to construct first one side, put in half the boxed culverts and turn the traffic onto that while they demolish the remaining structures and widen on the other side. Speeds will be reduced and there will be gravel surfaces but there will generally be two lanes of traffic open, except for short periods when cranes will be on site lifting the box culverts et cetera. We have shortened the construction period by using boxed culverts rather than bridges. If we were constructing bridges it would be a much longer construction period and more disruption.

... We generally construct the roadworks and then review the speed limit. There is actually an 80 kph speed limit over the causeway and round the corner. The bend will still remain at a design speed of roughly 90 kph. The decision will be made by traffic and safety as to whether it is worth raising the speed limit to 90 kph or 100 kph or keeping it at 80 kph.

Width of the road

The Committee referred to the draft document "Tasmanian Road Hierarchy and Targets" which provides, for regional freight road, targets which include where there are two lanes each is to be at least 3.5 metres wide, with up to 1 metre sealed shoulder and an unsealed shoulder to take the total shoulder to 1.6 metres. Having confirmed that the subject road was a designated freight route, Mr Poortenaar was questioned as to why a three metre lane was proposed in preference to a 3.5 metre lane. Mr Poortenaar responded:-

This was dictated by the infrastructure section of our department. They advised that, for the moment - and I understand that the West Tamar Council was anxious to get the lane width increased to 3.5 metres - the

department's current policy is to keep it at 3 metres. That falls within that category of road which is a freight category 2 and for those vehicles per day the 3-metre lane applies. If traffic increases above the threshold - and I am not entirely sure what the limit is - then the whole highway will need to be increased to 3.5 metres. Generally we would not increase a short 500-metre section of highway to 3.5 metres and leave the rest at 3 metres. If at some future stage the traffic increased and the department decided to increase the standard of road to 3.5 metre lanes and 1-metre shoulders then they would have to increase the width of the whole highway. Along this section of road it would be a fairly easy operation just to go along and widen the road by 0.5 metre.

... This is a freight route but if vehicles per day were to increase above a certain threshold, and I am not too sure what it is, the road section would increase to a 3.5 carriageway and 1-metre shoulders.

Contingency

The Committee sought an explanation from the witnesses as to why such a relatively high contingency allocation of 20 per cent had been made. Mr Poortenaar responded:

That contingency is higher than normal. Normally at the detailed design stage it would be closer to 10 or 15 per cent.

Mr Cumming added:

... during the estimates for construction we did put in a contingency of 20 per cent to allow for the fact that the construction industry rates were changing quite rapidly over the past 12 months, and it was to basically apply a global increase to the unit rates that we used for the construction estimates.

Boxed culverts

The Committee questioned the witnesses regarding the proposed use of three boxed culverts and in particular sought confirmation of the adequacy of such structures during flood events. Mr Poortenaar responded:

Debris is a problem in some rivers with boxed culverts. With this particular river it was not believed, given the relatively flat grades and the nature of the existing channel, which is fairly small and very wooded, that there is a significant amount of debris coming down it. If debris does lodge against the culvert, it will be part of standard maintenance to clean it out periodically.

... The debris will catch whether it is in a grille or in a culvert. The culverts will have stock guards across them and they will catch some debris, so the debris will not get lodged within the culvert. It will be lodged on the upriver side. Generally, it is cleaned out, chainsawed and taken away.

West Tamar Council

Mr Wright made the following submission on behalf of the West Tamar Council:

Council confirms the urgent need for the upgrading of the West Tamar Highway - Supply River Floodway, to improve the level of safety for all road users.

As early as 1999, the West Tamar Council identified safety problems at this location and in November 2004, submitted to DIER, as part of the corridor-study consultation, this project as the highest-priority project on the West Tamar Highway.

As referred to in the department's evidence, a public meeting in Exeter in October 2003 clearly indicated the community's views on safety users on the highway and this particular section of the highway was highlighted by a number of speakers there. The narrow width of the road between the guardrails, the amount of heavy traffic, and the increasing volume of traffic on that road, were issues pointed out by the community.

This is part of a regional heavy freight route. It is recognised in the Northern Tasmanian Integrated Transport Plan as a regionally important freight route. It carries about 4 000 vehicles per day and, as indicated by the department, 10 per cent of these are trucks, which is a fairly high percentage of commercial vehicles. Also a reasonable growth rate, something like 5 per cent, was indicated.

The Vehicle and Traffic (Vehicle Operations) Notice 2002 identified this section of the highway as part of an approved route network for vehicles with road-friendly suspension, B-double trucks and truck and dog trailer combination vehicles. In other words, the larger heavy vehicles are permitted to use this section of the highway.

Council has two major concerns with the project. One is the width of lanes being provided on this road, given that the structures on the road are long life - we are looking at 100 year life on bridges and so on - and therefore the width of those bridges ought to suit future needs of the highway over that life time.

The lane widths recommended in the department's draft, Tasmanian Road Hierarchy and Targets, for the traffic volumes, value of freight, for this road is 3.5 metres wide with a 1-metre sealed shoulder. Similarly the Austroads Guideline for Geometric Design of Rural Roads indicates for vehicles over 3 000 vehicles per day on rural roads, a lane width of 3.5 metres. That is only a guide, it is not a mandatory document, but it certainly gives an indication of recommendations for lane widths where you have heavy traffic and large numbers of vehicles per day.

The second issue is making adequate provision for cyclists and pedestrians, although there are not a large number of pedestrians, to safely move through the area over the Supply River itself, where guardrail is proposed. Given the narrow lanes of only 3 metres and a 1-metre sealed shoulder we consider the width at the moment is inadequate for the safety of cyclists through that area and there is not much opportunity for pedestrians to safely walk through.

Trucks are generally 2.5 metres wide - the legal maximum width nowadays - and you have the mirrors outside that. You need some clearance to a pedestrian or a cyclist. The Austroad guidelines for cyclists indicates a cycling envelope of 1 metre because cyclists do wobble and meander around a little bit and then you need some clearance outside that envelope to the traffic lane.

Council certainly supports this project. We would like to see it go ahead at the earliest possible date but would also request that adequate consideration be given to the width of the lanes and to provision for cyclists and pedestrians to make sure that we end up with the safest possible.

Ms Holmdahl, on behalf of the West Tamar Highway Safety Committee, added:

... I would just like to endorse the comments that Ray has made and we certainly subscribe to the views of the council. I also believe that the community would place a great priority on seeing this project brought forward as quickly as possible, and any further delays to the project are really quite undesirable. The problems that the users of this road face every day don't go away with the delays to it, so the community certainly wants to see this project go ahead.

Pedestrian usage

The Committee questioned Mr Wright as to what was the level of pedestrian usage of the subject road, he responded:

Our observations are that there is not a lot of pedestrian activity there and council does not have any format policy that identifies that as a pedestrian route. There has been general discussion about the need for a pedestrian link all the way from Launceston to Greens Beach ultimately and I had various stages of that discussion with the department concerning the upgrade from Cormiston Creek to Legana for instance. It may not always follow the highway in the Rosevears area. There have been no discussions about it following Rosevears Drive or the walkway in that area. There are talks at the moment, and suggestions from the community, about a footway linking Beaconsfield and Beauty Point, also along the section of this highway, so it is about making provision for the future to ensure that there is adequate space.

I am not suggesting, and the committee is not and representatives of the committee are not suggesting, that there be a constructed footpath, just that there is sufficient safe space for somebody to walk through that area. Certainly before you get to the guardrail section, the embankment cross-section does provide that capacity because there, is a very wide, reasonably flat, earthfill embankment there so there is space to walk alongside the highway safely.

Alternative route

Mr Ockerby made the following submission to the Committee:

... I am very concerned as to what is going on at the moment in relation to the planned so-called improvements.

We are in an era of B-doubles and various sizes of machinery on the road. I see no improvement coming out of the money that is going to be spent if we go ahead with what is there at this stage. It will not alleviate any of the traffic-flow problems. I believe the road should be totally realigned and I have shown it in the sketch that I have put forward. I also stated that it should be a three-lane aspect, thus giving overtaking chances to vehicles. As I say, with the B-doubles and their 500 hp to 600 hp motors, it is not going to improve much by continuing around that long, sweeping bend. The people of the West Tamar deserve more. As I say in the notation, if the pulpmill goes ahead, how much more traffic is it going to be put on that section of that road? We have heard today that the culverts in the Supply River were done in about 1940. Are we going to submit the travelling public to another 60 years of not second-class, not third-class, but probably thirtieth-class road?

One of the greatest revenues that the Government has - first federally and then they pass the money back - is the great old sacred milking cow of excise on fuel. I know it all doesn't come back to the roads, as it was originally designed to. It was on record that Mr Howard has said, 'They're not going to get all that for roads', and maybe we don't, but we can be wise in our spending of it. Admittedly it will cost more to do but we are not going to commit for another 60 years - and that is what it will be because that is the way they will take it - of going around that long, sweeping bend. I ask that it be noted that the realignment is necessary.

The Committee questioned Mr Cumming as to what was the estimated cost of realignment, he responded:

... I am not familiar with the proposal that has been presented to you but I have been involved in looking at 11 options for the kilometre or so that we looked at. These figures would need to be verified perhaps by some research. Our budget is \$3 million for what we are proposing and we have looked at 11 options to come down to that budget. To build a by-pass or two roads would

at least double the cost to \$6 million, and to add passing lanes - and I understand that the standard now is to have passing lanes on both sides on standard passing lane sections - would add another \$3 million, so you would be going from \$3 million to \$6 million to \$9 million. I cannot guarantee those figures. I would need to do some checking, but based on work that we have done in the past on dollars per kilometre to construct a lane, two lanes, three lanes or four lanes, they are the sorts of figures that would eventuate. They do not include the additional costs of land acquisition. I believe there would be probably significant costs of acquisition through that pasture land.

Impact on property

Ms Miller made the following submission to the Committee:-

... I welcome the opportunity to make a submission to the Parliamentary Committee on Public Works. I do so as a ratepayer and a holder of land adjoining the Supply River in the West Tamar region in the area known as Loira, which you would have visited today. As I said earlier, my family own the property going towards Beaconsfield on the left-hand side and so it will have a significant social, economic and environmental impact on that particular property and the landscape surrounding in this heritage area.

I have listed, not exhaustively, some of the issues that I thought needed to be given robust consideration by the committee before the approval of any public works funding. It appeared that, in talking to Heritage Tasmania and historians - and I have spoken to people within the Historical Society, particularly Jean Pritchett - there is no heritage plan. Historical rural landscape exists there and there seems to be no appreciation of the significance of the heritage that is there as such.

I believe the Supply River mill is listed on the National Heritage List and there is no reference to that that I have seen in the reports. They just say that there is no heritage there in this preliminary environmental assessment. I have had discussions with them in the last 24 hours and they are realising that there is heritage. ... There is a considerable heritage report and a community partnership between Parks and Wildlife and the council of that area that the committee might like to consider. I am not sure of the boundaries of that or what we are really talking about because there is a riparian water right. Some of it is publicly owned and some privately owned, so there is a real mix-match there.

... There is a heap of documents which will help the level of understanding of the committee of what heritage actually is there when we are told that there is not any. This location holds significant early European Tasmanian history resources from a State perspective. It says there that you do a heritage resource assessment and then a heritage plan - that is protocol. So I

would expect, given the significance of this area, that that should be done before we consider putting bulldozers and whatever works there.

Hydro have completed an Aboriginal cultural heritage assessment and they evidently did not find anything but when you read the other report on the Supply River mill, that seems to contradict it. It was a centre for our early Aboriginals and whatever. I think it needs a historian to tease those issues out; it is not an economist's area. There are social and economic benefits for all Tasmanians to be gained by highlighting and enhancing such features and I honestly do not believe that this has been considered.

I have said the committee is not only a guardian of public works funding but it also has significant obligations to all Tasmanians that a holistic, exhaustive and integrated approach is adopted by policy makers to show that this is a significant historical area with profound early history. There has been funding from both ends of this area and most of the West Tamar families that are still down there and in Launceston - the early pioneer families - come directly from that area. If we look at any family trees we see that they have strong links to the structures and the Supply River, so to speak. I can supply evidence to justify that claim if need be.

At this stage I do not believe the proponents of the upgrade have met Tasmanian policy needs and I think one of the policy directives is to sustain the potential of natural and physical resources to meet foreseeable needs of future generations. That has just definitely been ignored or certainly not sufficiently addressed at this point.

In my submission I said that there had been funding to the Supply River church through the bicentennial grant, and that was the birth of Methodism in the west Tamar and the resting place of many pioneering families. It seems to be that we have some association there with John West, who you may know of. It has not been confirmed but I believe Charles Page, who is my greatgreat-grandfather, leased the property of John West. Reverend John West, who founded the City Mission, was the instigator of the formation of the Examiner and was a friend of the owner of the Sydney Morning Herald. There is a string of achievements. I think he wrote a book about the early history of Tasmania and Patricia Ratcliff has written a book about his life and achievements. It is something that Tasmanians celebrate and to think that is where he owned a parcel of land, possibly, and we have relations of John Glover there, too. I do not think we have really identified what resource we have there, although when I say that, the Historical Society has started both ends of it but we need to get it together and we need State resources in there. I can understand the community wanting a road but we have to be sensitive to what tourism resource we might have there.

There are other features that I am aware of. People talk of a walking track to Exeter - because Exeter was an early town - from the flour mill and the

wheat fields on the early farms. Perhaps those tracks could be determined and used for cyclists or for walking. There is a historical home that was built in 1830 - and I was lucky to be the owner of it for about 20 years. There is a foundation stone nearby that I believe was the little Loira school, which was, I believe, erected on the banks of the Supply River. Footings may be there but we need to have a look at that. Are they there or aren't they? I am not sure what year that was built in, but I believe it is on the stone.

I refer in my submission to managing historic rural landscapes. It is probably a fairly new area for Tasmania as such but there has been some work done on it. I refer to this particular manuscript (The History and Heritage of the Tasmanian Apple Industry: A Profile, by Anne McConnell and Natalie Servant; report of the Queen Victoria Museum and Art Gallery, Launceston, December 1999 by Anne McConnell and Natalie Servant) they refer to the challenges and opportunities that you might embrace to highlight the pluses of cultural heritage and tourism.

That gives you some sort of insight into the heritage as such. There is an article on John West, just exemplifying some of his achievements: general cemetery, Cornwall Insurance Company, mechanics institute, the Hobart High School, and it goes on.

Now coming to the environmental assessment and its deficiencies, clarity, and it does not appear to be robust. I am not an environmentalist, but I have some appreciation of the acts and what we need to work with. There seems to be a preliminary assessment done, and that raises a number of issues. One is that I do not think we have addressed the issues of avoidance and the mitigation of adverse effects of the activities that this development would cause. There is no environmental management plan, and when I was talking to Heritage Tasmania they said in a situation like this you would need nearly every tree marked on a plan because of the sensitivity of it. If you can work within those bounds, that is fine, but I think we have to be aware of it, and the community has to embrace it and be taken to a higher level of knowledge if this development goes ahead in the future.

The other impact that is an uncertain one is the volume of water. That bridge has been there obviously for a number of years, and you would have to bring in a hydrologist, I believe, because we have this historical heritage-listed structure down below, and the archaeologists I think have it listed as future unveiling. We have rocks in the stream with initials on them identifying that it was discovered by Collins and his mineralogist in 1800 or before 1800, so what are floods going to do, going down, with climate change affecting those heritage and cultural resources further down? Is there going to be an impact?

... So have we addressed those sorts of issues? I don't think so. In that assessment process you have a resource there in the historical society. They

would be only too willing to help identify what is there and assist the community to come to a higher level and highlight its tourist potential, and I do not think that has been done. I do not think we have seen any sort of consultation at the level the Tasmanian community would expect.

Obviously we have some remnant stands of vegetation communities there. Have these been considered, the mitigation impact on these stands within the precinct that we are looking at? Further, supposedly these stands or the corridor that we have here provide a path for the swift parrot, which is a vulnerable species, and I am not sure that it is not the emblem of the Bridgenorth Football Club, so it isn't the emblem of the original football club so is that not a tourist drawcard or a potential to highlight to the community?

Regarding the historical potential and the significance of this particular area, if people are unsure they have only got to go to any history book on northern Tasmania and there it is, so to say it has no history or heritage value, dearie me! If you stand back, with the road that is actually there, we have not got a heritage avenue. Given the species and what we have there obviously years ago that was the original road - as everybody says, nothing has been done for the last 50 years or whatever so what have we got there?

To resolve the situation, while robust interrogation and due diligence goes on, I suggest that we put in a red sun sort of signage - and I believe the West Tamar Council have funds available, from talking to the tourist officer - identifying or saying that we have a high heritage value corridor here, reduce your speed and please enjoy. It is a completely different perspective to the 3-lane alternative view and realignment. I am not against realignment. If it was out of that area, that might be a solution, given the values that we have there, but it is obviously a very, very expensive solution.

The Committee put to Ms Miller the proposition that, given the existing road corridor has been there for many years and probably has been the access to the northern end of the West Tamar for approximately 100 years or so and further, given what is proposed is basically some reconstruction along that alignment, the proposed works will have minimal impact upon any of the values to which she referred. Ms Miller responded;

I would like to think that but I have had an experience where a development was carried out in Launceston and I was given that reassurance. It didn't happen and it ended up in the courts so you do not seem to be able to have enough mitigation and plans and everything in place because people who come in to do the works and the contractors do not have the appreciation and the level of understanding of the area as probably the people here today so anything can happen. Provided the plans and the measures and everything are put in place, yes, okay, but they have to realise they are dealing with a

very sensitive area and the communities are the stakeholders in this heritage area.

The Committee questioned Ms Miller as to what, if anything, has heritage listing in the subject road corridor. Ms Miller responded:-

... I am not totally sure that we have done a heritage assessment because I am not full bottle on what is there, what resource we are playing around with because I believe we have the footings of the little Loira school on the bank there and I thought that the historical society would be only too happy to identify what is there but I do not think we have used that community resource and the senior members that we have there in a proposal like this.

The committee recalled Mr Cumming and sought clarification as to what impact, if any, the speed or flow of water would have upon the known heritage areas of the Supply River mill. Mr Cumming responded:

I would say that categorically there will be zero impact on the Supply River mill by any works that take place in the proposed project. It is impossible for there to be any hydraulic impact by the proposed works.

... Because what happens downstream happens downstream, and the construction of the culverts is simply the construction of the culverts. The water will flow through, or the water won't flow through, but what happens downstream is a totally separated activity.

... The only impact the new work on the culverts could have, or in fact the original work on putting culverts in 40 years ago, would be to slow down the transfer of flood waters from upstream to downstream. So any activities in upgrading culverts or bridges at the proposed works will have zero effect on flood levels downstream.

Additional information

At the conclusion of the hearing, the Committee resolved to request the following additional information:

- What the criteria would be under current policy as to what the traffic flow would need to be in order that a 3.5 metre carriageway be required?
- Why was the decision made to have the carriageway width 3 metres?
- What would the additional cost be to have the carriageway width 3.5 metres?
- Regarding the submission of the Department which indicates that two-way traffic is 3 700; percentage of trucks, 11.3 what would the traffic flow need to be to make the highway a category 1 freight route?
- Details of the projections, if any, for the increase in traffic, including number of trucks and commercial vehicles using that road, associated with the proposed pulpmill.

Mr Poortenaar provided a written response dated 23 November last which contained the following:-

"I have confirmed that the West Tamar Highway, at the location of the Supply River Bridge, is a category 3 State Road. In accordance with this classification the traffic volume would need to exceed 5000 vehicles per day to require 3.5 metre lanes...

The additional cost for widening lane widths to 3.5m is estimated at \$177,000. These works include extra pavement works, extra earthworks, extending culverts and widening the section of road in between the two parts of the project.

It is considered important to maintain a consistent lane width especially when the section of road being upgraded is relatively short. However given the long service life of the road formation and structures and the likely possibility that the lane width will be increased in the medium term it would be expedient to cater for a wider road. The designers have amended the design to provide a 9m wide pavement, (3.0m wide lanes and 1.5m shoulders) to cater for future lane widening. It is not desirable to mark the lanes at 3.5m at this stage as it would be a safety concern where the lane narrows down to 3.0m on the bend to the north and the undulations to the south of the project."

DOCUMENTS TAKEN INTO EVIDENCE

The following documents were taken into evidence and considered by the Committee:

- i. Department of Infrastructure, Energy and Resources West Tamar Highway Supply River Bridges Upgrade Road & Flood Capacity Improvement;
- ii. West Tamar Council Submission dated 4th November 2005;
- iii. West Tamar Highway Safety Committee Submission dated November 2005;
- iv. Christine Miller:-
 - Submission:
 - Article entitled "No more convicts: John West"; and
 - Copy of the Draft Management Plan for the Supply River Mill Reserve, dated May 2005.
- v. J. F. (Jim) Ockerby Submission dated 15 November 2005.
- vi. Correspondence dated 23 November 2005 from Hein Poortenaar, Project Manager, Department of Infrastructure, Energy and Resources to the Secretary

CONCLUSION AND RECOMMENDATION

The evidence presented to the Committee clearly demonstrated the need for replacement of the existing bridge at Supply River due to its deteriorated state. The

new bridge will provide for anticipated increases in vehicle masses and the proposed works with new alignments at each end will enhance road safety.

The proposed works will be carried out on the same alignment as the current road and accordingly will have very limited impact on the immediate environment.

Once complete, the works will provide the following benefits:

- Improved safety by providing increased flood resistance, increased sight distance, a wider pavement with sealed shoulders, and the removal of the safety barrier; and
- Reduced pavement maintenance costs through the improvement to the flood protection.

The concern of the Committee in relation to the pavement width was addressed by the Department of Infrastructure, Energy and Resources by the presentation of an amended proposal which provided for 9 metre wide pavement, (3.0 metre wide lanes and 1.5 metre shoulders) to cater for future lane widening. The Committee questioned why the 3.5 metre width lane shouldn't be immediately designated.

Accordingly, the Committee recommends the project, in accordance with the documentation submitted, at an estimated total cost of \$3,000,000.

Parliament House Hobart 22 December 2005 Hon. A. P. Harriss M.L.C. Chairman