



---

PARLIAMENT OF TASMANIA

---

PARLIAMENTARY STANDING COMMITTEE ON  
PUBLIC WORKS

# **BASS HIGHWAY – DETENTION RIVER BRIDGE BRIDGE REPLACEMENT AND REALIGNMENT OF ITS APPROACHES**

---

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

---

## **MEMBERS OF THE COMMITTEE**

### **LEGISLATIVE COUNCIL**

Mr *Wing* (Chairman)  
Mr *Harriss*

### **HOUSE OF ASSEMBLY**

Mr *Green*  
Mr *Kons*  
Mrs *Napier*

## **INTRODUCTION**

To His Excellency the Honourable Sir Guy Stephen Montague Green, Companion of the Order of Australia, Knight Commander of the Most Excellent Order of the British Empire, 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: -

#### **Bass Highway – Detention River Bridge Bridge Replacement and Realignment of its Approaches**

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

## **BACKGROUND**

The Bass Highway crosses Detention River near the mouth of the river, about 1km from the coast. The site is located about 37km east of Smithton on the North-West Coast of Tasmania.

The bridge is a critical element of that section of the Bass Highway which links Somerset to the far north-west of the State. At this site, the highway carries approximately 2000 vehicles per day, of which, approximately 17% are heavy vehicles.

The bridge has a number of deficiencies including corrosion of reinforcement, deteriorating concrete and inadequate strength to carry increased vehicle masses.

The Department of Infrastructure, Energy and Resources (DIER), together with Pitt & Sherry, developed a number of options for the new alignment for the road and bridge which addresses the deficiencies of the current bridge.

## **ECONOMIC AND SOCIAL JUSTIFICATION**

### *Need for Project*

Deterioration of the bridge has increased in recent times with the following identified deficiencies:

- Corrosion of reinforcement in the concrete.
- Expansion joint deterioration.
- Limited width for current vehicles.
- Road approach alignment deficiencies.

- Inadequate strength to carry increased vehicle masses and high productivity vehicles.

The corrosion and deterioration of the existing bridge, if not addressed, will require load limits to be placed on the bridge, and ultimately full closure for safety purposes. To ensure that this is not required and to allow for the increase in vehicle masses the bridge requires replacement.

### *Alternatives Considered*

A Concept Design Report was produced that identified 9 different options all of which located the new bridge adjacent to the existing bridge. Of these 9 options, the following 4 were investigated and costed in some detail:

- Option 1 – Curved bridge, transitions on bridge downstream of existing.
- Option 3 – Straight bridge, no transitions on bridge, long roadworks.
- Option 6 – Straight bridge, no transitions on bridge, minimal roadworks.
- Option 8 – Straight bridge, no transitions on bridge, no acquisition from BP, minimised impact on tree reserve.

Option 8 presented the ‘best fit’ for the site, recognising the constraints imposed by the BP Service Station, close proximity to the highway of shacks on the western approach to the bridge and a significant stand of trees on the north eastern side of Detention River. This option was marginally more expensive than options 3 and 6 and approximately 12.5% more expensive than Option 1. The impact on the shacks in Option 1 was considered undesirable.

## **DESIGN PROPOSAL**

### *Bridge and Road Alignment*

It is proposed to locate the bridge approximately 5m downstream of the existing bridge.

The horizontal alignment to the east of the new bridge consists of a 275m radius curve on the eastern end of the bridge with a reverse curve to tie into the existing highway approximately 400m to the east of the bridge.

The horizontal alignment to the west of the new bridge consists of a 275m radius curve on the western end of the bridge followed by a 150m section with straight alignment which ties into the existing highway approximately 400m to the west of the new bridge.

The design speed on the curves at both ends of the bridge is 90 kilometres per hour.

The vertical alignment of the new road follows the existing road as both the existing road alignment and adjacent land are relatively flat.

### *Cross Section*

The typical cross section for the bridge provides 3.5m lanes and 1.0m shoulders. The typical cross section for the road approaches provides 3.5m lanes, 1.5m sealed shoulders and 0.5m verges. The verges are widened to 1.0m where safety barrier is required.

### *Preliminary Design – Bridge*

The design and construct contract process will offer a range of alternative designs for the bridge which are developed to suit the contractor's preferred construction methodology.

The Preliminary Design has been developed for the bridge to address the technical requirements and site constraints.

The key factors influencing the selection of superstructure type and span length are:

- The bridge has simple uniform geometry.
- The superstructure needs to be erected over water, therefore pre-cast beams of reasonable weight need to be used.
- The topographical and hydrological conditions of the river and river bed and their effect in locating the piers.
- Due to the corrosive marine environment, durability is a major concern. The use of stainless steel in concrete with good construction practice during concreting and curing is considered to be appropriate to achieve a 100 year service life.

A Super-T superstructure provides an economic and viable solution and is discussed in the following sections.

### *Superstructure*

The proposed deck cross section has 6 pretensioned open topped Super-T beams with a cast in-situ deck slab over. Overall structural depth including asphalt and crossfall is 1.6m. Overall width is 12m. The new bridge has 4 spans of 24.5m length.

### *Piers and Abutments*

The proposed pier type has a single simple blade pier with a piled footings. The required height of both piers does not suit the use of multiple columns.

The ground conditions suggest that piled footings are likely to be required given the presence of soft sediments in the river bed.

The proposed abutments are retaining walls founded on pad footings.

### *Durability Measures*

The design life of the bridge will be 100 years. In this context, at the end of the design life whilst the structure will operate in a safe and serviceable manner, it will however, be due for replacement by a new bridge. Consideration of ongoing maintenance expenditure necessitates that the replacement bridge will need to be durable for much of its design life.

The replacement structure will be built from reinforced and pre-stressed concrete, except for fences, which may be constructed from galvanised or painted steel, black stainless steel or aluminium.

The use of stainless steel reinforcement along with appropriate concrete mix design, reinforcement fixing, concrete placement, compaction practices and curing are considered necessary to meet the durability objectives in marine environments.

An asphalt-running surface of 50mm minimum thickness is to be provided on the carriageway, at least for the 7m width of running lanes. The footway/cycleway will be incorporated into the structure.

### *Demolition of Existing Bridge*

The demolition of the existing Detention River Bridge once traffic has been transferred onto the new bridge will be a significant cost and time component of the overall project. Considerable temporary works will be required, probably including cofferdams to the piers, to successfully demolish the structure.

Demolition will require:

- Extensive concrete cutting and propping of the structure to provide sections which can be handled with cranes available in the region.
- Appropriate environmental controls to prevent concrete debris entering the river.
- Removal of piers and piles to riverbed level.

## **SOCIAL IMPACTS**

### *Properties*

The realignment of the highway will require the acquisition of land from two adjacent landowners on the western side of the river.

One of these owners has a right of way and access over the other property which will need to be reinstated.

A hard stand area needs to be provided opposite the service station to allow for trucks to park. Trucks currently use an unsealed area opposite the service station. The installation of a kerbed island across the front of the service station will prevent trucks parking and blocking the accesses. The existing section of highway to the east of the service station can be used as a parking area for trucks.

The access to the camping area east of the service station is currently off a section of old highway which provides two accesses onto the existing highway. These accesses will be closed and a new single access constructed.

### *Pedestrian Access*

A footway/cycleway is to be constructed on the northern side of the bridge. This will be linked by a walkway under the bridge to the river bank on the south eastern side of the bridge, the BP Service Station and adjacent properties.

## **ENVIRONMENTAL IMPACTS**

### *Introduction*

The Detention River Bridge is located near the mouth of the river within the tidal zone at the head of Pebbly Bay. The environmental values of potential relevance to the proposed bridge replacement works are both within the associated aquatic environment and the terrestrial environment in the immediate vicinity, as well as community issues, including historic and Aboriginal heritage.

### *Aquatic Environment*

#### *Setting of the Aquatic Environment*

The bridge separates an open bay area and narrower tidal channel of Detention River. The aquatic environment is within the river and extends along the eastern approach within the estuarine zone of the tributary Wilson's Creek.

#### *Aquatic Species of Significance*

The Australian Grayling (*Prototroctes maraena*) is a listed threatened fish species that lives in the middle and lower reaches of Tasmanian river systems and requires open passage to the sea for hatching of spawn and return of whitebait. These movements occur in late Spring to early Summer and late Summer to Autumn respectively and may be sensitive to water quality.

This species is listed as vulnerable in the Tasmanian Threatened Species Conservation Act 1995 and is also listed in the Commonwealth Environment Protection and Biodiversity Conservation Act, 1999.

In the higher areas above the tidal limit, freshwater species of particular conservation significance include the Giant Freshwater Crayfish (*Astacopsis gouldii*), especially in Wilson's Creek, while the Green and Gold Frog (*Litoria reniformis*) may be present. These areas are outside the limits of the proposed works and neither of these species will be affected.

### *Water Quality*

There is potential for localised short term influences on the health of aquatic plant and animal species in the vicinity of the bridge and in adjacent waters from increased turbidity from runoff of eroded soils, concrete washings or cutting wastes, accidental oil and fuel spills, chemical losses and spills including excess grouting and bonding agents. In addition, the removal of underwater parts of the existing bridge piers and abutments will result in disturbance to the substrate and the stirring up of silt with resultant increased turbidity in the receiving waters.

The flooding regime of the lower Detention River will not be altered by the proposed works as the waterway aperture will remain essentially unchanged with construction of the new bridge. It is thus unlikely that there will be any effects on the flow regime of the estuary.

### *Mitigation Measures for Aquatic Environment*

Specific control measures will be implemented to ensure that runoff from disturbed areas is minimised and that the potential for excessive turbidity in the receiving waters is controlled. The potential for scouring of river banks in the vicinity of the bridge is to be minimised through provision of adequate scour protection of the embankments at the bridge abutments. These measures are especially important during the summer and autumn months when fish migrations are at their peak.

Other measures for control of potential impacts on water quality will include control of fuel storages and avoiding refuelling operations on the river bank area, retention of absorbent materials on site and cleaning up of any accidental spills and removal of any contaminated soils for proper disposal. During bridge demolition, concrete cutting wastes will be collected and all waste materials removed from the river environs for disposal at proper facilities.

### *Terrestrial Environment*

#### *Setting of the Terrestrial Environment*

The native vegetation of the area is comprised of a range of communities including White Gum Coastal Forest, Paperbark Closed Woodland, Heathy Shrubland and the Riparian Zone. A total of 72 plant species were recorded

in the area of the project. None of the species identified are listed under the Tasmanian Threatened Species Protection Act. Cleared areas are under pasture grasses and residential development to the west of the bridge, and a service station to the east of the bridge.

The White Gum Coastal Forest adjacent to the highway and west of the bridge is recognised as one of only two similar coastal forest areas in north west Tasmania, however in other parts of the State this vegetation type is not uncommon. The area is within what is known as Myoora Park and is the subject of a plan of management for its conservation by Circular Head Council and local community groups.

The main impacts of the proposed works involve removal of a layer of trees on the outer perimeter of the White Gum Forest area of Myoora Park. This is unavoidable as site constraints on the south side of the highway relating to the proximity of a service station do not allow alternative alignment options to be progressed further. Of particular importance is that the trees to be removed appear to be regrowth on the edge of a previous alignment of the highway, and that older more mature trees within the forested area will not be affected.

The terrestrial fauna include mammals, birds and reptiles of which 75 species are known to occur in the lower Black-Detention River Catchment. Of these, the species of particular conservation significance include Eastern Quoll, Spotted Tail Quoll, Eastern Barred Bandicoot, Wedge-tailed Eagle, Grey Goshawk, White-bellied Sea Eagle and Swift Parrot.

None of the above species are likely to be affected directly by the proposed works, although indirect effects on the species through habitat clearance may occur, where the movements of quoll and bandicoot may be affected by removal of vegetation adjacent to the existing road.

#### *Mitigation Measures for Terrestrial Environment*

Earthworks will involve the construction of embankments on both sides for the bridge approaches. Runoff control measures will be required to prevent scouring and turbidity in the receiving waters. This will require flow diversion drains to prevent runoff through disturbed areas and drainage control from exposed soils during the construction of bridge abutments and related back-fill. Silt mitigation structures will be placed where control of direct runoff to the waterway will occur.

The clearing of native vegetation will require control to the necessary limits of construction, and adjacent areas of native vegetation will require protection, especially the White Gum Coastal Forest. Where possible, continuity in the fauna corridor from the downstream side of the bridge to the upstream areas will be provided beneath the bridge between outer piers and bridge abutment.

The replanting of native vegetation species will be included in the rehabilitation and revegetation of areas disturbed during construction, especially on streambanks and adjacent areas and along the highway west of



the bridge on the south side. Weed controls will be required to be implemented both prior to and during construction activities, and preventative measures, including washing of vehicles and plant will avoid the introduction of weed seeds and plant disease to the area, especially *Phytophthora*.

### *Historic Settings*

No specific historic sites are listed on the Register of the National Estate, the Tasmanian Heritage Register, Circular Head S.42 Planning Scheme nor Cultural Heritage Information System or Tasmanian Historic Places Index.

The Detention River environs were originally explored by the VDL Co and inland ventures commenced from the mouth of the river. A settlement was surveyed at Hellyer in 1895, but was not developed until the latter part of the 20th Century. The existing Detention River road bridge was constructed in 1940 to 1941 after many years of high cost maintenance and repairs of the earlier 1906 timber bridge, which was damaged in the 1929 floods.

The main historic heritage feature in the vicinity of the Detention River Bridge is the remains of the 1906 masonry abutments and remnant timber piles that protrude from below low tide on the eastern side. This feature is not listed, but may satisfy criteria for listing under the Tasmanian Heritage Register. Other features of note are a monument to the Dallas family and the existing bridge (although this design is not uncommon and does not exhibit any distinguishing technological or innovative features that are not present on other bridges in similar settings). The monument is located outside the limit of works and will not be affected by the proposed works.

The remnant bridge abutments and timber piles are located outside the limit of works, however will require protection from inadvertent damage during construction of the new bridge and demolition of the old bridge, especially vibrations from earthworks compaction and removal of piles.

### **Aboriginal Issues**

The area of the proposed works was surveyed for the presence of any relics of Aboriginal significance and the TASI data-base was searched. No sites are listed in the study area, although the area is recognised as being important for its type of locality in which Aboriginal people would have inhabited. In the event that any evidence or relics are found, the Tasmanian Aboriginal Land Council and Director of Parks and Wildlife are to be contacted for further advice and direction.

### **COST ESTIMATES**

#### *Overall*

Cost estimates have been based on the following

- A new bridge to be constructed approximately 5m upstream of the existing structure.
- A 12 metre wide (overall) new bridge 98 metres long incorporating
  - 2 No. 3.5 metre wide lanes
  - 2 No. 1.0 metre shoulders
  - A 1.5 metre wide footway
  - Stainless steel reinforcing.
- Road approaches which accommodate:
  - 2 No. 3.5 metre wide lanes;
  - 2 No. 1.5 metre shoulders;
  - 2 No. 0.5 metre verges
  - Parking provisions for trucks opposite the BP Service Station.
- The existing bridge is fully removed.

#### **Cost Estimates:**

	<b>\$M</b>
Bridge	2.00
Road	0.70
Bridge Removal	0.20
Detailed Design & Services	0.10
Contingency 10%	0.30
<b>D&amp;C Contract Sum</b>	<b>3.30</b>
Planning, Concept Design & Documentation	0.10
Contract Supervision	0.08
DIER Project Management	0.02
<b>Total Project Cost</b>	<b>3.50</b>

#### **EVIDENCE**

Members of the Committee had previously inspected the site of the proposed works at the Detention River Bridge on the occasion of the site inspection for another reference, the Black River Bridge Replacement. The Committee formally commenced its inquiry on Thursday, 15 November 2001, when it heard evidence at the Conference Room, Tall Timbers Hotel, Smithton. The submission of the Department of Infrastructure, Energy and Resources was received and taken into evidence. The following witnesses appeared, made the Statutory Declaration and were examined by the Committee in public:-

- Graeme Nichols, Project Manager, Department of Infrastructure, Energy and Resources; and
- Philip Millin, Environmental Consultant, Millin Environmental Management Services Pty Ltd.

## Overview

Mr Nichols provided the Committee with an overview of the proposal:

*This project is one of the nominated projects in the Infrastructure funding which covers this financial year's funding and next financial year's funding, so the \$3.5 million will cover those two financial years. Detention River bridge is located at the mouth of the river of the same name, about 500 metres from the coast. The site is located 37 kilometres from Smithton on the north-west coast of Tasmania. The bridge is a critical element from the Bass Highway, linking Somerset to Smithton and carries about 2 000 vehicles per day; a high percentage of these - 17 per cent - are heavy vehicles. The bridge has a number of deficiencies and, whilst it is only 60 years old, it is reaching the end of its life. Pitt and Sherry, our consultants for this project, have developed a number of options and I will deal with these a bit further on.*

*The economic and social justification for the project - the need for the project - dealing with that in detail. The bridge has severe corrosion of reinforcement in the concrete. It was built in the 1940s, commensurate with the technology available at the time. This has been found to be inadequate for an estuarine position where we have an ingress of salt into the concrete. There is also expansion joint deterioration, limited width for current vehicles - the bridge is only about seven metres wide; it has curves on and off the bridge which results in the trucks passing fairly close. Minor damage occurs to trucks on a regular basis. There are also an approach road alignment deficiencies and there have been numerous accidents on the road approaches. There is also a need to increase the strength of the bridge to carry increased vehicle masses and high productivity vehicles. All in all, with the number of problems on the bridge, it is not considered to be economically viable to strengthen and deal with all those problems and replacement is seen as the only viable option.*

*There are a number of difficulties at the site which meant that we had to look at a number of options for the bridge alignments. We have looked at nine options; we have actually retreated from the ninth and we feel that having looked at all these options - which focused on upstream and downstream alignments of the bridge without bypassing the whole town, which I think would have an adverse economic effect on some of the businesses there - we focussed on four of the options as being the most suitable.*

*Option 1 was a curved bridge downstream. That involved fairly minimal roadworks - about 400 metres - plus a bridge on the downstream side of the existing bridge. It had very complex*

*geometry for the bridge and also cut off the accesses to the houses on the north-west side of the site. We didn't pursue that any more because of the inherent safety risks with option 1. It didn't have any effect on the BP service station, I might add, or on Myoora Park.*

*We then started looking at the upstream options and the next option was option 3, which was a logical change - the bridge immediately upstream of the existing and parallel to it. The problem with that particular option was that it had an adverse effect on Myoora Park where there is a stand of *Eucalyptus viminalis* - mature trees that there is quite a bit of interest in. We wanted to minimise that effect on the park and option 3 pushed the road away from the BP service station into that park, which was not seen to be desirable, but had limited effect on the properties on the western side of the bridge. We decided that the next best options would be to skew the bridge a little bit to bring the road alignment back towards the BP service station. After a few options we had a look at option 6, which was quite heavily skewed and pushed the road right towards the BP service station a little bit too far. We then looked at three more options that reduced that skew and we came up with option 8, which actually missed the BP service station and minimised the effect on the park. Option 8 is the one that's detailed in the report to the Parliamentary Standing Committee. It was a little bit trial and error but we did arrive at what we think is the optimal solution.*

#### *River track*

The Committee questioned the witnesses as to the effect of the proposed works upon the track leading to the river. The witnesses responded:

**Mr NICHOLS** – DIPWE (Department of Primary Industries, Water and Environment) *want that closed.*

**Mr MILLIN** - *May I add, Mr Chairman, closed to vehicle traffic, but obviously they'll allow pedestrians to move into that river -*

When questioned as to whether this would necessitate pedestrians crossing the highway to gain access to the track, and if so, what was the attitude of local residents to the proposal, Mr Millin responded:

*Yes, they'll have to ... we haven't actually canvassed that amongst the locals that we're closing that off, but it's one of the preferred options of the department of Environment.*

*... It's mainly to prevent vehicles getting close to rivers, because river environments are very sensitive and they suffer long-term degradation with vehicles coming and going and the concern is*

*that if that access is left open that it's going to be very difficult to manage that river in the future.*

#### *Car parking/access*

Mr Nichols made the following submission in relation to parking and access:

*We're providing a walkway on the bridge, as per existing. The proposed pedestrian walkway ... has been modified so that it doesn't go north of the existing road alignment. ... it would have quite an effect on the existing car parking arrangements next to the park, so we're bringing it around and then down the existing roadway and under the bridge and back along to the service station on a much shorter route than what is shown there. We're providing access to the existing car parking area as shown. We're also providing parking on each side of the road, as you can see - the eastbound lane is right adjacent to the service station and for the westbound lane we're using the existing highway lane, so we'll mark that out.*

*What we're trying to prevent is the situation at the moment with the BP service station where trucks park right across the entrance and block up traffic and cars can't get in and out and if they do there's some element of danger for them. We're providing a median there in front of the service station, which was a council requirement, so that will stop the trucks parking directly in front of the service station and make it a little bit safer.*

The Committee questioned the witnesses regarding the feasibility of providing a series of steps parallel with the bridge as an alternative to the proposed looped footpath. Mr Nicholls responded:

*we've shortened the loop to about half its length with an occasional step ... the actual loop cuts in along the alignment of the existing highway so, in effect, where you would be proposing to put the stairs is where the loop cuts back to come down below the bridge. There won't be much of a difference on the return footpath ... there are also guide barriers that extend further along there.*

#### *Environment*

Mr Millin made the following submission in respect of the environmental considerations of the proposal:

*The site itself is located in an estuary of one of the many rivers that drain the northern part of Tasmania. It is regarded as a sensitive environmental area. The bridge itself will be constructed at the head of what is called Pebbly Bay where the Detention River flows into Bass Strait. The bridgeworks and the associated*

roadworks will affect both the terrestrial environment being on either side of the river and the aquatic environment of the estuarine area. I will deal with each of those separately.

On the terrestrial side, one of the main constraints faced with the alignments of the various options that were considered in the design was the presence of a parkland called Myoora Park on the north side of the highway on the eastern approach. Myoora Park is recently named, however it has been a recreational area for many years. Circular Head Council presently has a lease on the land until 2058, I believe. The area itself is regarded as very high conservation significance. It is what is called a coastal white gum forest or *Eucalypt viminalis* and in this part of the coast there are only two of those remnants left - one here and one at Pegs Beach. Our initial discussions with the Department of Primary Industries, Water and Environment was to try to minimise the impacts on that Myoora Park to the extent possible. The options we considered, the one on the downstream side of the existing bridge structure, would have had fairly big impacts on that Myoora Park, as well as the residences on the west side of the bridge. The other alignments which brought the road across and providing the curvature would have extended further into that Myoora Park area. The adopted alignment was a fair compromise between maintaining safe distances from the existing service station and cutting into the edge of that Myoora Park coastal forest area. In the discussions we've had with the conservation division in DPIWE they were quite satisfied that we would minimise the impact on the older part of the forest, however there's a number of trees - I'll estimate about 60 or 70 - that will be taken out along the northern side of the highway.

... our argument was that the edge bit that we were taking out would not affect the older more mature trees further to the north and our mitigation measures would be that, upon completing construction, we would replant densely vegetation to stop rubbish being thrown into the Myoora Park area. The park itself, there's a plan of management being developed for that and we've been sensitive to that plan of management and tried to work in with what the local community desired, including the Circular Head Council personnel and the personnel from the Department of Primary Industries, Water and Environment. That's all I would like to say about that bit at this stage.

Further along the eastern approach the road is very close to the arm of Wilsons Creek, which is still within the estuarine area of the low Detention River, and as the alignment moves further north is also starts impacting onto that estuarine area which could make embankment fills or what have you a bit more complicated but it would also have a bigger impact on the estuary itself.

*I will talk about some of the fauna that lives in this part of the world. What brings me there is that in Wilsons Creek there is known to be the giant freshwater lobster or crayfish, which is a threatened species, so impacts in that area really needed to be minimised. The other threatened species that is thought to be in the area is the Australian grayling - that is listed both in the Tasmanian legislation and the Commonwealth legislation. The construction methods and the mitigation measures that are proposed for this project will aim to reduce impacts on those species and we believe overall the impacts will not be significant.*

#### *Historic/heritage considerations*

Mr Millin made the following submission in respect of the historic and heritage aspects of the proposal:

*Going way back to the early part of the 1800s it was the crossing point for the road from Wynyard to Stanley. The first bridge was a horse bridge - 1860s, I believe. In 1907, a timber bridge was built - we can still see remnants of that bridge, being the timber piles in the river channel and then there's some masonry abutments on either side. That bridge, while at least it's site is recognised as having historic heritage and the actual remnants on the river bank will be protected during construction. The piles in the middle of the river, we've decided that those really need to be removed because of their hazard to navigation of the river and that will be discussed with the Tasmanian Heritage Council prior to the work being carried out.*

*The historic abutment on the eastern side won't be affected by the construction, however on the western side the masonry abutment is right next to the existing abutment and during demolition there's potential that that might be damaged somewhat. The contractor will be required to repair that using historic materials and try to reinstate what is there at present.*

*The other item of heritage values is a monument to the Dallas family who, I believe, ran the shop for a number of generations and generally served the transport industry. That monument is outside of the construction area and will be protected from things like stockpiles and storage of machinery and plant for the bridge construction works.*

*With respect to the Aboriginal issues, there was an Aboriginal survey carried out of the area and, due to the extensive disturbance since the area has been settled by Europeans, there were no relics discovered on site. It is however recognised as an area of importance to the Aboriginal people because of their long use of the area, so one of the important matters there would be for the contractor to be aware of the possible presence of Aboriginal*

*relics and to take the appropriate steps if any such relics are discovered during construction.*

#### *Consultation with business owners*

The Committee questioned the witnesses as to the level of consultation with the owners of the retail business at Detention River, given the disruptions anticipated to be caused by the works. Mr Nicholls responded:

*Mrs Dennis has seen the plans and we've consulted with her a number of times on it. ... I guess there will probably be an issue when they're working on the northern side of the road adjacent to the BP service station when it will be difficult for eastbound trucks to park on that side.*

The witnesses were asked whether any provision would be made for allowing vehicles to leave the road in order that they may patronise the business during the construction phase. They responded:

**Mr NICHOLS** - *To be honest, that will be fairly difficult because they can't have trucks parked right in the middle of the roadworks and until they've finished the roadworks there's no car park on that side of the road. It's a bit of the chicken and the egg type situation. We can't really extend the damage to Myoora Park by putting in additional earthworks just to provide temporary parking. We really want to minimise the effect on the park and we've certainly made an undertaking to all concerned that we'll do that. It is a vexing question.*

**Mr MILLIN** - *The only comment I could make is a general specification in the contract to make allowance wherever practical and feasible through the construction phase but it would be very difficult to actually section off part of the contract area to say, 'That is for parking and the contractor must make provision for that' because they'd need the access for their working machinery of course.*

**Mr NICHOLS** - *I think what will happen is that the contractor will come in and do the basic earthworks which will enable him to get to the bridge site. If we award this project about April - March-April is what we're looking at - so he will probably have a couple of months to do the earthworks and then he'll start work on the bridge. During the next xnumber of months there won't be any work happening on the northern side and probably very little work happening on the northern side anyway while he constructs the bridge. Then he'll come back in October-November and complete the roadworks once the bridge is well and truly nearing completion. Whilst there will be a few months of disruption, it won't be 40 weeks of disruption because the extended time is to allow the bridge to be constructed, not the roadworks.*



## **CONCLUSION AND RECOMMENDATION**

The Committee notes the evidence in respect of the shortening of the looped walkway, the undertakings for the consideration of sealing the walkway and of erecting 'no diving' signs on the bridge.

Deterioration and corrosion of the existing bridge has increased in recent times with a number of deficiencies having been identified. As a result, in order for the current level of service to be maintained for the North-west of the State, the bridge must be replaced.

Accordingly, the Committee recommends the project, in accordance with the plans and specifications submitted, at an estimated total cost of \$3,500,000.

**Parliament House  
HOBART  
3 December 2001**

**Hon. D. G. Wing M.L.C.  
*Chairman***