2004 (No. )

2004

PARLIAMENT OF TASMANIA

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

# West Tamar Highway, Cormiston Road to Legana (Legana Park Drive), Highway Duplication

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

MEMBERS OF THE COMMITTEE

| LEGISLATIVE COUNCIL | HOUSE OF ASSEMBLY |
|---|---|
| Mr *Harriss* (Chairman) | Mr *Best* |
| Mr *Hall* | Mrs *Napier* |
| | Mr *Sturges* |

By Authority: Government Printer, Tasmania

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## INTRODUCTION

To His Excellency Mr Richard William Butler, Companion of the Order of Australia, 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, Cormiston Road to Legana (Legana Park Drive), Highway Duplication**

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

### Background

The planning for the construction of a dual carriageway on the West Tamar Highway from the end of the existing dual carriageway at Cormiston Creek to Legana commenced in the mid 1980's. In 1992 the Committee gave approval for the first stage of the works to construct a dual carriageway from Cormiston Creek to Danbury Drive (South).

Construction works on the first stage of the works (from Cormiston Creek to Danbury Drive (South)) were delayed due to continuing consolidation of the soft sediments on which the dual carriageway was to be built. The consolidation of the soft sediments has been monitored on a continuing basis to determine when the first stage works can be commenced.

The delay in the construction of the first stage has now resulted in the proposal that both the first and second stages (Danbury Drive (South) to Legana) be constructed together. This eliminates the need for temporary staging works. In addition, works between Cormiston Road and Cormiston Creek have been included in the project in order to improve the safety for road users on this section of highway.

The usage and design standards for this highway have changed considerably since the approval of 1992. The design for the dual carriageway has been revised to reflect the current requirements and design standards. This has resulted in an increase in the estimated construction and total project costs and is a substantial change from what was originally approved by the Committee in 1992.

### Project Objective

The objectives of the project are as follows:

- Upgrade the West Tamar Highway to a four lane dual carriageway from Cormiston Creek to Legana (Legana Park Drive)
- Make provisions for cycle traffic on the Highway

- Rationalise accesses onto the Highway where possible
- Improve safety
- Improve junction turning facilities

## PROJECT JUSTIFICATION

The significant justifications for this project are the traffic conditions on the highway and at the junctions and safety for road users including recreational cyclists. These main issues are discussed in detail as follows.

### Traffic

The most recent traffic count on this section of the West Tamar Highway was conducted in June 2001 and indicated an Average Annual Daily Traffic (AADT) of 10200 vehicles per day. The AADT in 1990 was 7500 vehicles per day, which represents a growth rate of 3% from 1990 to 2001.

The peak hour traffic volume in June 2001 was measured as 1128 vehicles per hour (AM peak with a 78%/22% directional split). Using the 2001 traffic count results and allowing for an average growth rate of 3% gives a current peak hour traffic volume of 1230 vph. This volume of traffic on the existing highway exceeds the volume of traffic for a Level of Service D (LoS D traffic volume 1093 vph).

The Austroads Guide to Traffic Engineering Practice Part 2 – Roadway Capacity states *"Level of Service D is close to the limit of stable flow and is approaching unstable flow. All drivers are severely restricted in their freedom to select their desired speed and to manoeuvre within the traffic stream. The general level of comfort and convenience is poor, and small increases in traffic flow will generally cause operational problems."*

This level of service on the highway results in significant difficulties and delays in accessing the highway from any side roads or accesses.

At a growth rate of 3% it is expected that the highway will be at capacity (LoS E) by the year 2016.

A four lane dual carriageway highway as proposed would provide a Level of Service A with the current traffic volumes. At a growth rate of 3% the traffic volumes on the four lane dual carriageway highway would reach a Level of Service D in 42 years or by 2046.

### Safety

There have not been a significant number of accidents on this section of the West Tamar Highway for the past several years. However, it is expected that with the decreasing Level of Service being provided by the existing two-lane two-way highway, there will be a rapid increase in the number of accidents and accident severity. The construction of dual carriageway and turning facilities at junctions and accesses would improve the safety on this section of highway.

This section of the West Tamar Highway is used extensively by cyclists for training and recreational purposes. The existing highway provides approximately 1.0m wide sealed shoulder adjacent to the 3.0m wide through lanes within a 100km/hr speed zone. This is not considered to be a safe facility for cyclists as there is very little width for motorists to manoeuvre to avoid a cyclist and the air turbulence caused by larger vehicles can result in cyclists losing control and possibly entering the path of following vehicles. The construction of dual carriageway with 3.5m lanes and a 2.0m sealed shoulder would provide a significant improvement in safety for cyclists.

## THE PROJECT

### Proposed Works

The project involves upgrading the West Tamar Highway to four lane dual carriageway from the end of the existing dual carriageway at Cormiston Creek through to Legana (Acropolis Drive). The four lane dual carriageway tapers back to two lanes at a new single lane roundabout at Acropolis Drive. To the north of the new roundabout the lanes converge back to a single carriageway to tie into the existing highway. The design of this tie in allows for future road widening works through Legana.

The new roundabout at Acropolis Drive will provide improved accessibility to the Legana Park Industrial Estate with the construction of a new access road from the roundabout to the existing road within the industrial estate. The roundabout design has been approved by the DIER Chief Traffic Engineer.

The upgrading of the highway includes upgrading the turning facilities at junctions. Right turn deceleration lanes and left turn facilities are included for the junctions with Danbury Drive (South) and Danbury Drive (North) as well as at the accesses at Ch.340, Ch.1500 and the Tamar Island Wetland.

The project includes the construction of a right turn deceleration lane for south bound traffic at the Cormiston Road intersection. Also included is the widening of the existing north bound carriageway between Cormiston Road and Cormiston Creek to provide a sealed shoulder as well as upgrading the safety barriers to the current standards.

This section of the Highway is used extensively by cyclists for training and recreational purposes. The project includes a 2.0m sealed shoulder, which will provide a facility for the use of cyclists.

To allow for the road works some services will require relocation including Aurora overhead power lines, Telstra fibre optic and copper cables and an Esk Water water main.

### Typical Cross Section of the Design

The typical cross section on which the design is based provides two 3.5m lanes on each carriageway, a 2.0m sealed shoulder on the outside and 1.0m sealed shoulder on the inside of each carriageway. The verges on the outside of each carriageway are 0.5m, which is widened to 1.0m where safety barrier is required.

The median is a constant width along the full length of the highway to produce an improved visual appearance.

Where left turn lanes are provided, the turning lane is 3.0m wide and shoulder width has been reduced to 1.0m. Where right turn lanes are provided in the median the turn lanes are 3.5m wide. A kerbed and paved median with safety barrier is provided between the turning lane and the opposing fast lane.

**Horizontal Alignment**

The horizontal alignment has been designed to fit the dual carriageway within the existing road reserve and on the surcharge embankment. This has provided very little flexibility in the alignment. Where possible the alignment has been selected to maximise the reuse of the existing pavement. The landform consists of low lying river flats and gentle rolling hills and design speed of the horizontal curves have been achieved in excess of 100km/hr.

**Vertical Alignment**

The vertical alignment of the existing Highway is generally very flat. Some local deformations as a result of settlement in the embankment are expected with time between Cormiston Creek and Danbury Drive (South).

A minimum level for the Highway has been set at 3.4m, which provides 0.3m of freeboard to the bottom of the pavement for a flood in the Tamar River of one in one hundred year occurrence.

There is a slight rise and crest to the north of Danbury Drive (South), the vertical curves associated with this have large radii with a design speed in excess of 100km/hr.

The vertical alignment of the design has been chosen to maximise the reuse of the existing pavement while removing deformations arising from settlement in the surcharge embankment.

**Provisions for Cyclists**

This section of the Highway is used extensively by cyclists for training and recreational purposes.

Four options were considered by DIER for providing facilities for cyclists both on and off the carriageways. These options were as follows:

- Formal cycleway on outside of each carriageway.
- 2m sealed shoulder on outside of each carriageway.
- Separate 2 way cycleway.
- North bound cycleway on north bound carriageway and separate south bound cycleway.

The submission of DIER was that the most cost effective option is that of providing a 2m sealed shoulder, which is easily maintained, on the outside of each carriageway instead of providing a formal cycleway. DIER further submitted that the sealed shoulder would not be marked or signed as a cycleway.

**Junctions and Accesses**

Ch.830m Access and Shared Private Driveway

The access at Ch.830m services six houses on the west side of the Highway. This access incorporates the access from Ch.960m by the construction of a new shared private driveway. The new shared private driveway will be sealed as the existing access is sealed and a steal beam safety barrier will be installed.

Ch.960m Access to Tamar Island Wetland

The right turn and left turn lanes for the Tamar Island Wetland are designed for 100km/hr which is the signed speed for the highway. An "in-only" access to Tamar Island is provided adjacent to the median opening, with an "out-only" access provided south of the in access.

The out access is located so that vehicles cannot turn right onto the north bound carriageway through the median opening adjacent to the in access. The restricted width in the median precludes right turns out. Access to the north bound carriageway is via a U-turn facility at Ch.340m.

The existing access at Ch.960m LHS has been relocated via a new shared private driveway at Ch.830m. This is required to enable the median opening at Ch.960m to be restricted to only allow right turn movements into the Tamar Island Wetland. The relocation of the access also removes the need for a right turn facility off the south bound carriageway.

Ch.1790m Danbury Drive (South) Junction

Both left turn and right turn lanes are provided for turning into Danbury Drive (South). These turning lanes are designed for 100km/hr. Access to and from the south bound carriageway would be via the median opening adjacent to Danbury Drive (South) junction.

Ch.2720m LHS Danbury Drive (North) Junction

A right turn deceleration lane is provided for turning into Danbury Drive (North) from the south bound carriageway. This right turn lane is designed for 100km/hr. A 50m taper is provided for the left turn into Danbury Drive (North) from the North bound carriageway. It is expected that the majority of the North bound vehicles accessing the Danbury Drive area will do so at Danbury Drive (South) where a full length left turn deceleration lane is to be provided.

House and Minor Farm Accesses

In addition to the above accesses and junctions there are a number of house and minor accesses. Some of these minor accesses shall be closed as has been agreed with the property owners. There is not expected to be any significant impact on any of the house accesses.

**Service Relocations**

Water Main

There is an existing 375mm MSCL water main that crosses under the Highway immediately north of Danbury Drive (South). The water main then runs northward between the existing Highway and the fence line to the east of the Highway.

The water main is located under the new south bound carriageway over a length of 1400m from Ch.2000 to 3400m. Following discussions with Esk Water it was decided that this section of the water main needed to be relocated clear of the earthworks.

Telstra

There are existing Telstra optical fibre and copper lines along the Highway over the full length of the site. The cables are to be relocated over the following sections:

- Ch.800 to 1050m
- Ch.1600 to 1720m
- Ch.3000 to 3500m

There are a number of other Telstra copper cables within the site that are used for local supply. These copper cables are located outside the earthworks, with the exception of road crossings. These copper cables are not expected to require relocation.

Aurora

There are existing Aurora overhead services along the highway over the full length of the site along with several overhead crossings of the highway.

The Aurora poles to be relocated are in the following sections:

- Ch.40 to 140m
- Ch.3100 to 3300m

In addition to these there are a number of poles that require replacing with longer poles to provide sufficient clearance on overhead road crossings.

There is an existing overhead supply line to the Tamar Island Visitor Centre at Ch.980m that will be placed underground with the supply for the lighting at the access to the Visitor Centre. Spare conduits shall be included in the underground road crossing to allow the Parks & Wildlife Service to upgrade their communications service from the existing limited service supplied by microwave link.

## ENVIRONMENTAL AND SOCIAL IMPLICATIONS

### Environmental Issues

The works are located within a highly modified environment with a long history of disturbance from agricultural and residential activity and previous road construction activities, including construction of surcharge embankments.

The environmental impacts of the works have been assessed and no species listed under the Threatened Species Protection Act 1999 will be impacted. Also no sites listed under the Historic Cultural Heritage Act 1995 and no sites under the Aboriginal Relics Act 1975 have been identified.

The project will not have a significant impact on any matter of national environmental significance in accordance with the Environment Protection and Biodiversity Conservation Act 1999.

The works have been classified as a Level 1 activity and therefore do not require State Government approval under the Environmental Management and Pollution Control Act 1994 (EMPCA).

The environmental risks of the project are considered moderate and can generally be managed by standard 'best practice environmental management' procedures, as set out in the DIER's general and road specifications.

Particular attention will be focused on protecting the sensitive wetlands of the Tamar Islands Wetland Reserve. Although the wetland reserve is established in a highly modified area, it now supports a variety of plants, frogs, reptiles and a wealth of birds. The wetland reserve will be protected from run-off from the construction works by the use of sediment traps and silt stop fences.

### Property Issues

The construction of the new shared private driveway between Ch.820 and 1040m will require the acquisition of land from one property owner and the placement of right of ways on several other properties.

The relocation of the Esk Water water main out of the road reserve will require the acquisition of an easement on land owner by Mr J. F. Griffiths.

Minor acquisition at Acropolis Drive will be required for the construction of the roundabout to ensure the protection of sight lines for safety.

The construction of the new access road to the Legana Park Industrial Estate will require acquisition of land from Mr J.F. Griffiths. This acquisition will result in a severance of land of approximately 2.5Ha from his main property.

There are no other properties significantly affected by the works

**Planning Approval**

The project area is located in the West Tamar municipality and within the jurisdiction of the Beaconsfield Planning Scheme 1986. The majority of the road works are within the road reserve, and therefore do not require planning approval.

However, a number of project components fall outside the road reserve and do require development approval under the Beaconsfield Planning Scheme 1986. Planning Permits were obtained for the following:

- Relocation of the Esk Water water main
- Shared private driveway works
- Construction of the new access road to the Legana Park Industrial Estate
- Reconstruction of the car park at the Tamar Islands Wetland Reserve

**Public Consultation**

The local community and property owners have been aware of this project for many years and are keen to see the completed works. The West Tamar Council has been involved in the design process through meetings between the design consultant, the DIER Project Manager and Council Engineer.

A public display of the design was provided at the West Tamar Council offices at West Tamar and Beaconsfield.

There have been discussions with each of the affected property owners to determine what accommodation works are necessary and to enable acquisition of necessary land.

## PROJECT COST

The major project components and estimated costs are as follows:

| | |
|---|---|
| Roadworks Construction | $6.1M |
| Esk Water Relocation | $0.5M |
| Aurora and Telstra Service Relocations | $0.3M |
| Acquisition | $0.1M |
| Tamar Island Wetland Carpark Reconstruction | $0.1M |
| Professional Fees for Design, Contract Administration and DIER | $0.9M |
| **TOTAL** | $8.0M |

## EVIDENCE

The Committee commenced its inquiry on Monday, 28 June 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:-

- Graeme Nichols, Senior Project Manager, Department of Infrastructure, Energy and Resources (DIER)
- Peter Todd, Manager Transport Infrastructure, DIER
- Leigh Barrett, Consultant, Pitt & Sherry
- Ian Woodward, Consultant, Pitt & Sherry
- Barry Easther, Mayor, West Tamar Council
- Ian Pearce, General Manager, West Tamar Council
- Ray Wright, Technical Services Manager, West Tamar Council
- Anna Povey, Resident of Trevallyn
- Doug Benporath, Member of the Northern Ratepayers Association of the West Tamar
- Richard Hooper, Member, Northern Ratepayers Association of the West Tamar
- Keith Darke, Chairman, Northern Ratepayers Association of the West Tamar

***Project justification***

Mr Nichols made the following submission to the Committee in respect to the justification for the project to proceed:-

> *The significant justifications for this project are the traffic conditions on the highway and at the junctions and safety for road users, including recreational cyclists. Firstly, with the traffic, the most recent traffic count on the section of the West Tamar Highway was conducted in June 2001 and indicated an average annual daily traffic of 10 200 vehicles per day, and that is in both directions. The AADP in 1990 was 7 500 which represents a growth rate from 1990 to 2001 of 3 per cent. The peak traffic volume in June 2001 was measured as 1 128 vehicles and that gives a 78:22 per cent directional split, so that would be south, 78 per cent and north, 22 per cent of that 1 128 vehicles per hour.*
>
> *Using the 2001 directional count results and allowing for an average growth rate of 3 per cent gives a current peak hourly traffic volume of 1 230 vehicles per hour. This volume of traffic on the existing highway exceeds the volume of traffic for a level of service D. I will just explain that level of service D is close to the limit of stable flow. All drivers are severely restricted in their freedom to select their desired speed and to manoeuvre within the traffic stream. The general level of comfort and convenience is poor and small increases in traffic flow will generally cause operational problems. This level of service on the highway results in significant difficulties and delays in accessing the highway from side roads or accesses. At a growth rate of 3 per cent into the future it is expected that the highway will be at capacity which is level of service E by the year 2016. A four-lane, dual carriageway highway as proposed would provide a level of service A, the highest level, with the current traffic volumes. At a growth rate of 3 per cent the traffic volumes on the*

*four-lane dual carriageway highway will reach a level of service D in 42 years or by 2046.*

*Just dealing with the safety under the project justification, there have not been a significant number of accidents on the section of West Tamar Highway for the past several years, however it is expected that with decreasing level of service being provided by the existing two-lane, two-way highway there will be a rapid increase in the number of accidents and accident severity. The construction of dual carriageway and turning facilities at junctions and accesses would improve the safety on this section of highway. This section of the West Tamar Highway is used extensively by cyclists for training and recreational purposes. The existing highway provides approximately 1 metre wide sealed shoulder adjacent to 3 metre wide through lanes within 100 kph speed zone. This is not considered to be a safe facility for cyclists as there is little width for motorists to manoeuvre to avoid a cyclist and the air turbulence caused by larger vehicles can result in cyclists losing control and possibly entering the path of following vehicles. The construction of the dual carriageway with 3.5 metre lanes and 2 metre wide sealed shoulders would provide a significant improvement in safety for cyclists.*

Mr Barrett added:-

*The project is to construct a dual carriageway to increase the existing road from two lanes to four lanes - two lanes in each direction. A typical cross-section for the road will provide two 3.5 metre lanes for through traffic in each direction with a 2 metre sealed shoulder on the outside of each carriageway, with a 1 metre sealed shoulder on the inside of the carriageway. There will also be an installation of a grass median between the two carriageways; we also propose to install a wire-rope safety barrier to prevent cross median traffic accidents.*

*The horizontal alignment is not fixed by the existing road. The current road has the design standard in excess of 100 kilometres an hour horizontally, so there is no need to modify that. The additional new carriageway will simply follow the existing road. The existing road is generally very flat and provides design standard in excess of 100 kilometres an hour, so there is going to be very little change to the existing vertical alignment proposed.*

*As to the provision for cyclists, a number of options were considered for this section of the highway: a formal cycleway on the outside of each carriageway; a 2-metre sealed shoulder on the outside of each carriageway; separate two-way cycleway; a northbound cycleway on the northbound carriageway and a separate southbound cycleway. It is considered the most cost-effective option to provide a 2-metre sealed shoulder on the outside of each carriageway. It is not proposed at this stage to mark the sealed shoulder as a designated cycleway, though it will certainly be allowed for use by cyclists*

The Committee questioned Mr Barrett as to his submission regarding the designation of a cycleway. The following exchange took place:-

> ***Mr STURGES*** *- Mr Barrett, could you explain why you are not going to mark it as a cycleway?*
>
> ***Mr BARRETT*** *- If it is designated as a cycleway, it prevents any motorists from using the shoulder or that area of the pavement. They would not be allowed to pull up in that area to, say, take a mobile phone call or for an emergency.*
>
> ***Mr STURGES*** *- So once it is designated a cycleway, that is it?*
>
> ***Mr BARRETT*** *- Yes. It is a lane for cyclists. As I understand, if a motorist was to pull up in that area, they could be booked by the police for standing in a cycle lane.*
>
> ***Mr HALL*** *- I notice that you did say 'not marked at this stage', so is there an intention that it might be marked down the track?*
>
> ***Mr BARRETT*** *- To make it a cycle lane would simply mean installing signs and putting marking paint on the ground. If at some future date it was decided it would become a cycle lane, it would be very inexpensive. Our proposal at this stage is not to do that. If it was considered later on that it was appropriate, what we are building would not prevent that occurring.*
>
> ***Mr HALL*** *- I recognise what is being proposed is a great improvement as far as cyclists go, but you note that in other States and other places formal cycleways are marked - even in urban streets of Melbourne and everywhere else. It would appear from the representations that we have had that it is a very important issue.*
>
> ***Mr TODD*** *- … we would then need to consider allowing for car parking and I think that the member would recognise that in other cities where there are designated cycle lanes there is car parking on the other side of that so you need to look at the suite of those things.*

***Acropolis Drive roundabout***

Mr Barrett made the following submission to the Committee in relation to the Acropolis Drive Roundabout:-

> *A roundabout was chosen as it has the advantage of providing a break between the normal open highway and coming into an urban area. The roundabout will slow traffic down. At present people reach the 80 kilometre speed limit just north of Acropolis Drive and many motorists are still traveling past the caravan park at speeds exceeding 80 kph. The roundabout will provide an obstacle to slow people down to drive at appropriate speeds through an urban area. The roundabout also*

*provides improved access to the industrial estate. At present the industrial estate has a junction onto the highway directly opposite the caravan park and at peak hours it is extremely difficult to enter the highway due to the traffic on the highway.*

*In our discussions with the owners of the industrial estate that was one of the key things that was brought out by all of the owners, that access to the highway, especially at peak hours, is extremely difficult and dangerous, they felt. Providing a roundabout with a leg going into the industrial estate will provide far greater access to the industrial estate and a far safer access to the highway for people in the industrial estate.*

*North of the roundabout we would bring the two lanes back together to merge into the existing highway with the works being just north of the existing Legana Park Drive. The works have been designed to incorporate any future roadworks north of this area so that we won't have to come back and reconstruct anything that we are proposing now. It has been designed to match in with any future works.*

The Committee questioned Mr Barrett as to whether the design allowed for a future extension of the dual carriageway north of the roundabout, he responded:-

*That is always a possibility. This design wasn't designed on the basis of dual carriageway going through north of the roundabout, as the roundabout is only a single-lane roundabout. If in the future a dual carriageway were to be constructed through Legana, that would require reconstruction work on the roundabout to make it a two-lane roundabout and to extend the two lanes south of the roundabout through the roundabout and then through into Legana. It would be quite a large exercise to do that, that is if our design hadn't incorporated that.*

The Committee questioned the witnesses as to the rationale for concluding the works at Legana Park Drive given that much of the commuter traffic utilising the highway come from Legana and Grindelwald. Mr Todd responded:-

*The reason that the project concludes here is that it is entering into a more urban area. There is certainly development on the left-hand side going north and the speed zone drops here. The levels of service are measured slightly differently where the speed zones are different and so this gives quite a different feel to the road when you go between this roundabout and the roundabout at Freshwater Point Road, so it is a different environment. That doesn't preclude that in the future there may be a project to duplicate it to four lanes. That is not ruled out but it is certainly not in the plans at this stage.*

The Committee sought an estimate of the additional cost of extending the project to the Legana roundabout. Mr Todd responded:-

*… there are a number of other issues in terms of the number of accesses and junctions that would need to be sorted out as well, so it may be of*

*that order but I wouldn't say that is implicitly right. I don't know of any detailed estimate that has been carried out but I would expect in the order of $3 million would be appropriate.*

***Services***

Mr Barrett outlined the services component of the proposed works:-

*The first is the Esk water main. Apparently the Esk water main is the major trunk main located between Danbury Drive South and Legana. It is on the river side of the highway and a substantial length of the pipeline is located underneath the ultimate southbound carriageway. In discussions with Esk Water they indicated that they are not happy to have the water main underneath the carriage way, as any repair works they would have to carry out would have occupational health and safety issues. They are not prepared to allow the water main to be underneath the roadway. Also, if there is any blow-out in the water main, that could possibly cause holes in the roadway, which would present a major safety hazard. We are proposing to purchase an easement for the water main on private property outside the road reserve and construct a new water main from Danbury Drive South through to north of Acropolis Drive within that easement to allow the construction of the new southbound carriageway.*

*There are a number of smaller off-take mains off that water main. There is one at Acropolis Drive, which we are upgrading at the crossing to provide for any future developments. There is a water main for a number of wayside users - houses which take water off the bulk main - and we have taken the option of relocating them onto council water mains where they are more appropriately serviced. That will require the installation of a small main from Danbury Drive North, back along the road reserve to the south of approximately 300 metres to provide a water supply to several houses.*

*Telstra services - there are quite a number of Telstra services located within the road reserve and outside the road reserve in this area, including fibre-optic cables. Fibre-optic cables in this area constitute one of two links from the State to the mainland and are critical to the supply of telecommunications to the State. Because of that, we have undertaken to relocate those services prior to the roadworks contract to minimise any risk of disruption to the Telstra services. There are three locations in which they have been relocated. They are now clear of all the earthworks so when the roadworks contractor starts there is a substantially reduced risk of any incidents which might cut the State off from the mainland.*

*There are also a number of Aurora poles within the road reserve which we are relocating. The majority of those are around Acropolis Drive at the roundabout. With the Aurora relocations we would also get Aurora to install lighting into the roundabouts - lighting for median openings,*

*junctions and also to the new junction in Legana Park Drive with the new access road. Those are the only services that are being affected.*

***Cycle traffic***

The Committee questioned the witnesses regarding the four options proposed to address the issue of cycle traffic, in particular, why the proposed solution was chosen. Mr Barrett submitted:-

*I have a copy of the preliminary design report for the first section from Cormiston Creek to Danbury Drive South in which we actually investigated the options of cycleways. I will give you the details of the four options. The first option is of a formal cycleway on the outer side of each carriageway - and I will just read from this report. The Australian road standards indicate that for a single-lane cycleway adjacent to a road with a speed limit of 100 kph the following widths are required: a 1.5 metre clear width of the edge line and cyclists; a 1 metre width allowance for cyclists; a 1 metre clearance between cyclists and an embankment. To allow for a formal cycleway on the outside edge carriageway on this section of the highway, the width of the dual carriageway would need to be increased by 4 metres beyond the original preliminary design width. … To combat the increasing width of pavement the existing surcharge embankment would need to be widened by up to 4 metres over a length of approximately 800 metres of the site. The widening of the surcharge embankment by up to 4 metres would present considerable geotechnical issues that would likely result in delaying the construction of the dual carriageway. The widening of the surcharge embankment by up to 4 metres could be expected to cause primary consolidation with the underlying silts as a result of the settlement rate of the order of 200 millimetres per year. This is not considered to be a viable option on this section of the highway. The existing design that we are proposing uses all of those compacted berms, so if we were to then put another 4 metres on we would be spilling over into the soft silts again.*

*The option of a 2-metre sealed shoulder: sealed shoulders 2 metres wide with a 0.5 metre verge on the outside could be installed on the outside of each carriageway without having to widen the surcharge embankment. This would eliminate the geotechnical problems that are associated with other options.*

*A separate cycleway on the east side of the highway: as an alternative to constructing cycleway facilities on the highway, a separate two-way cycle path could be constructed on the east side of the highway. Off-road standards for a dual-lane cycleway that is separated from a roadway are as follows: a 1 metre width allowance for each cycle lane; a 0.5 metre clearance between opposing cycle lanes and a 0.5 metre minimum clearance to obstacles. This could be constructed on lower surcharge embankment berms on this section of the highway. There are some sections between Cormiston Creek and Danbury Drive South where there*

*is no existing surcharge or berm. In these areas the embankment berms could be constructed with maybe only minor settlement issues due to less fill being required to the cycleway.*

*A separate cycle path would have significant advantages as follows: cyclists will be further away from the motorists, improving safety; cyclists will not be buffered about by wind generated by large vehicles; the reduced width of the carriageways will require less width of the existing surcharge embankment; the cycleway is likely to stay cleaner than the sealed shoulder and will reduce riding risks. The facilities would need to be constructed to allow northbound cyclists to cross the highway at Cormiston Creek and at Danbury Drive South so that they can access the cycleway.*

*A northbound option: a north bound cycleway adjacent to the highway with a southbound separate from the highway. The northbound cycleway could be constructed adjacent to the northbound carriageway, while a separate cycle path to be constructed on the eastern side of the highway. This could be constructed without widening the existing surcharge embankment. It is expected that the southbound cycleway that would be separated from the highway would carry cycle traffic in both directions even if a northbound cycleway were provided adjacent to the highway. This separated cycleway would need dual lanes to provide for cycle traffic in both directions and would effectively be the same as a cycleway previously described. Facilities would need to be constructed to allow northbound cyclists to cross the highway at Cormiston Creek and at Danbury Drive South as they are likely to do this even if a formal facility to cross the highway is not provided.*

The Committee sought the cost of the third option. Mr Barrett responded:-

*I could give you some cost estimates on each of the options. The first option of a formal cycleway: for this first stage from Cormiston Creek through to Danbury Drive South, the cost is estimated at $500 000 …*

*… The first option, a formal cycleway, would be adjacent to the through lanes, so it would be a part of the road, whereas a separate cycleway could be 30, 40, 50 metres away from the road so it would not be linked to the road at all.*

*… for the formal cycleway adjacent to each road, my cost estimates for the first section from Cormiston Creek through to Danbury Drive South is $500 000. The 2-metre sealed shoulders, as proposed in our design, will cost $200 000. The separate cycleway on the eastern side of the highway is a cost of $270 000. The northbound adjacent to the highway and the southbound separate from the highway is a cost of $450 000.*

Mr Todd added:-

*The other point of course is that that estimate is only to Danbury Drive South so you need to double it really to take it through to the end of the project. That was some preliminary work which was done through Danbury Drive South so that 270 is only to about chainage 1 800 …*

The Committee sought information as to what funding sources were available for the construction of cycleways which are separate from existing roadways. Mr Todd responded:-

*It is the general practice of the department not to fund those as separate facilities. Where we interfere with where there is access, we will make good to allow access but the department doesn't build specially built cycleways. It is not its policy or practice.*

*The other thing is that within our discussions with cyclists and particularly training cyclists their preference is to ride on the shoulder of the road and they have expressed to us that they would not support a separate cycleway. They tend to become rough and bumpy, they do not present the same level of service, particularly for training cyclists. I suggest that, even if this sort of facility was built, they would still ride on whatever shoulder was there on the existing highway. That seems to be the experience that we are aware of and that would certainly represent the representation made to us some months ago.*

Ms Anna Povey was called by the Committee and made the following submission with regard to the use of the highway by cyclists:-

*… My aim is to highlight the importance of this stretch of highway for cyclists in Tasmania so that the committee can make a good decision as far as supporting cyclist facilities on this highway. It is probably the most important stretch of road in Tasmania for cyclists. We want cyclists to have access around a lot of areas but this particular stretch is used almost every day by racing cyclists - they are the ones you see - and they probably comprise the bulk of people you have consulted with. It is also a fabulous access for recreational cyclists and for commuters from Launceston to the major areas of Legana and the north. For cycle tours along the river, inland and in all directions - to the ferry for cycle tourists - this stretch is absolutely critical. If you are trying to get out of Launceston, this is the best way out. The southern outlet is not the best.*

*Most cycle tourists who arrive in Tasmania - of which there are hundreds; I was one in my first trip to Tasmania - launch off onto the Scottsdale road, which isn't the best either. But with some direction I think this could be promoted as a cycle tourist destination at the highest level. I have been around the world on my bike. In France, cycle touring routes are marked and the accommodation is packed with cycle tourists around those areas. I think that is an enormous growth potential for northern Tasmania that we have not looked at or promoted. Without this stretch, the possibilities are going to continue to be limited.*

*The East Tamar Highway is a death trap. The West Tamar Highway already has serious issues for safety for cyclists. If anywhere in Tasmania you are going to be committed to cyclists, this is the place to start. It is great to see the possibility of a bigger shoulder. Two metres would improve things hugely, but we do think it is worthwhile going the extra step of somehow making this a dedicated bicycle lane.*

The Committee questioned Ms Povey as to the desirability of having a separate cycleway. Ms Povey responded:-

*I don't think that the separate cycleway, often away from the road, is the best option for all people. Yes, it would be nice for families and it would be nice for cycle tourists. I think they are right that the training bunch wouldn't use it. Also, where would it come from? There is nobody who goes around building a slow cycle path. Basically if that was the option it would never happen without an enormous amount of effort and seeking of funding from who knows where and going over the wetland - I just can't see that ever happening.*

*As far as a bicycle lane goes, 2 to 3 metres, according to this guide, 'Perfect Engineering Advice for Bicycles', Part 14, is what we would need for a bicycle lane that is adjacent to the road, so we have 2 metres of shoulder. I am confused as to why an exclusive bicycle lane suddenly needs 4 metres extra of consolidated material. As far as I can tell, it would be pretty light. The 2 metres of shoulder marked as a bicycle lane is all that we would require and it is what is typically marked as a bicycle lane in other places. As far as the guidelines in here are concerned, it seems to fit. What the difference is is that it is marked and recognised and it particularly doesn't leave us in the lurch at intersections.*

The Committee questioned Ms Povey as to the issues of cars 'running off' into the cycle lane and cyclists' negotiations of intersections. Ms Povey submitted:-

*My understanding is that for emergency stopping, you are allowed to emergency stop in a bicycle lane. I don't know anywhere in Australia where someone is not allowed to stop for an emergency in a bike lane and along that stretch I have hardly come across a car parked ever. It is not used for car parking. If someone has to answer their mobile phone then there is plenty of turn-offs dedicated in this proposal. They can drive a few more metres and pull off into the proper turning area and if we have to stop cycle lanes for the sake of people pulling over to answer their mobile phone then we are stuffed all around Australia because we are not going to be able to have one anywhere.*

*… Intersections is where we get run into. In actual fact it is amazing; there have been awful incidents of people deliberating opening their car doors onto a bunch of cyclists along a straight stretch but usually that is not the case. Usually people do try not to run into you if you ride in front of them in a straight. At intersections it is amazing how much people misjudge how fast a bike is traveling. How many times I have had to*

*brake when someone has pulled left in front of me, and I have been run into by someone turning right. They were in a right-turn lane, not on this particular stretch of highway, but people are looking ahead for cars to avoid and they do not look at the distance where a cyclist is. If there is a marked, coloured lane with cycle symbols along it - this book has a picture of options for cycle lanes to go across intersections. Obviously the cars are allowed to turn across there. The difference is in the psychology for the driver, the awareness of the bikes and that they have to look out for them. If people have to turn across a coloured, with dashed lines, lane, they will, hopefully, look out for a cyclist in it. I have cycled in France, Italy, England and Asia and you would imagine that they would be difficult for cycling. In fact, I have had the best treatment in the countries with the most difficulties. Someone mentioned earlier comfort for drivers - it was just the normal description of what this is going to do for drivers. The more comfortable the driver, the less accommodating that person is of all other users. The more the speed, the more straight, the easier the drive, the worse drivers behave towards anybody who gets in their way. If it is a log truck, you cannot argue with a log truck. People get frustrated but they are not going to risk their lives. Yet they are risking our lives. It is only a few seconds that anyone ever has to wait for a cyclist in order to pass safely, but the level of the frustration is obscene. I have had more aggressive treatment from drivers in Tasmania than anywhere else in the world, and it is because driving is comfortable in Tasmania. There is hardly any traffic; in Launceston you can drive to the shop you require and have a good chance of finding a car park right out the front of it - yet this is where we get the worst treatment.*

*If cyclists are only allowed a shoulder - granted the shoulder is a huge improvement - if we want more than just the training bunch to ride on that road, if we want to make this an option for our community, we need to have awareness of cyclists built into our roads. I think if there is one place in Tasmania you can test that out, it is here on the West Tamar Highway and that stretch is the best starting place. Then we might have a chance of getting our community fit again.*

***Environmental impact***

Dr Woodward addressed the environmental issues surrounding the project as follows:-

*… most of the project area has been cleared for residential and agricultural use. There are some patches of remnant vegetation and there are also some exotic trees that have been planted at various places along the project area. The most obvious environmental issue is the Tamar Island Wetlands Reserve which is an area of 60 hectares and it forms part of the Tamar River Conservation Area, which is on the register of the National Estate. It has abundant wildlife, perhaps more than 45 bird species, and it is a designated Ramsar wetland.*

*Within the project area itself, however, there are no threatened species, no listed heritage sites and no known Aboriginal sites, so the project area itself, although surrounded on the eastern side at least by sensitive environmental areas, the featured area is of no particular sensitivity.*

*In terms of planning, the project is covered by the Beaconsfield Planning Scheme 1986. Under the planning scheme, the road upgrade works that occur within the road reserve do not require planning approval, nevertheless we have prepared a detailed environmental management plan which will govern the construction of the works. There are a few components of the project which fall outside that road reserve and they have required the preparation and submission of four separate development applications: one for the Esk Water water supply main relocation, one for the shared private driveway, one for the industrial estate's new access road, and one for the car park upgrade. As I said, those development applications have been submitted to council and been approved and the permits have been issued.*

*Just running through those DAs very quickly, the Esk Water relocation project required removal of only a few trees, particularly some Monterey cyprus trees in a residential lot. They were large and possibly 60 years old and they were quite unsafe anyway. They will be removed and there is a small patch of melaleuca ericifolia that has to be removed as well.*

*The shared private driveway; there will be a loss of some vegetation, a mix of native and non-native. One large spruce tree has been particularly protected from the construction works and we are ensuring that there are appropriate run-off controls along that driveway as well.*

*The industrial estate access fairly obviously crosses pastures and there is no significant vegetation there. The old access road will be replanted under a landscaping plan which will be prepared and submitted to council for approval. Subsequent to the planning approval, the owner of the land, Mr Griffiths, requested that drainage be improved in one corner where there is currently quite a boggy area and that drainage will be redirected into an existing drain on council land.*

*The carpark at the Tamar Islands Interpretation Centre; the current sewage treatment tanks are in the carpark area itself as are the absorption beds for the septic effluent. The treatment tanks themselves can remain in place but the reconstruction of the carpark will require the absorption beds to be relocated. Although it is in the road reserve, that relocation will be the responsibility of the Parks and Wildlife Service. We have provided some assistance to them and we understand that they have now submitted their plans to council and I think they are still finalising the vegetation planting for those relocated beds.*

*Within the main project area itself, the main issue that we looked at was noise. Under the draft State noise policy there was a desirable target standard of 63 decibels to meet at the facade of residential properties.*

*We looked at the possibility of that being achieved on this project. We did some measurements and noise modeling and we think that probably at the moment about 15 houses already exceed that 63 db standard. The predictions are that in 2006, when the project is opened, with the natural growth of traffic there will probably be 17 houses that will exceed it, and 10 years after that probably 21 houses will exceed it. This is virtually entirely due to the natural 3 per cent per annum traffic growth. Obviously more vehicles on the road adds to the noise. The typical increase, though, for all those houses will generally be less than 1 decibel, which for most people would not be perceptible. Nevertheless, we are looking at the draft noise policy and the desirability on new projects of trying to construct the roads so that that 63 db target is met. We did examine the possibility of constructing noise barriers but the terrain means that that is neither feasible nor desirable. It probably would require several hundred metres of noise barriers and they might be up to 15 metres high, which would hardly be something that the community would be wanting on a stretch of road like that, so no particular noise barriers will be constructed.*

*The environmental management plan is being finalised and will be incorporated in the construction contract. It will be an obligation of the contractor to meet the commitments in that plan. Those commitments reflect the permit conditions that have been issued by the West Tamar Council.*

***West Tamar Council***

Mr Easther made the following submission to the Committee:-

*… the West Tamar Council has consistently maintained over a long period the need for upgrading the West Tamar Highway to four lanes, extending from Cormiston Creek to Legana and we certainly support the submission that was put before you by the department this morning.*

*The basis for our support of this work is certainly to improve the safety of that area, taking into account the very high volume of traffic that is being experienced. We heard today of a traffic movement figure of 11 000 per day. It is certainly at least that and it is increasing. There has been over a long period a lot of community pressure placed on council and the State Government for this roadwork to be done and of course the commitments go back over 20 years.*

*We believe that the work should be undertaken as quickly as possible, certainly as a matter of urgency. The traffic movements on that section of road are considerable right now. In the future, with Legana being West Tamar Council's growth area for residential development, it will continue to increase. We certainly would agree with the forecast of something like 3 per cent in traffic in each year. Right at the moment, council has inquiries and draft plans for subdivision in the Legana area consisting of in excess of 400 lots and we heard this morning the land at*

*Acropolis Drive, owned by Jimmy Tsinoglou. I believe he is considering putting a proposal into council for in the order of 150 allotments in there.*

*We support the work that is proposed to be undertaken and we look forward to it being done with a lot of haste.*

*… I would venture to say that we don't consider the roundabout is really necessary. There is a lot of money involved in the construction of the roundabout. I heard $300 000 mentioned today and that didn't include the $350 000 for the new road into the industrial estate that was mentioned on the development application and it certainly doesn't include any costs for acquiring land. So we considered the money out of this total project of $8 million being expended on a roundabout to be a lot of money that could be well spent on other areas of the West Tamar Highway to improve some of the other less than satisfactory places.*

*We have been told by the department that they did consider a number of options but they weren't prepared to agree to change even though the first plan that we saw did not have a roundabout in it and that was an agreement that we made with the then minister and now Premier Lennon. I don't know whether Mr Wright would have anything else that he would like to add with regard to the roundabout.*

Mr Wright added:-

*… that summary is correct. We have questioned the cost effectiveness, not the safety. There is no doubt the roundabout is a very safe option but we have questioned whether there are other options that are more cost effective to equally deal with the change from four lanes down to two lanes while dealing with the intersections at that location*

The Committee questioned the witnesses as to whether alternatives to the roundabout had been investigated by the Council they responded in the negative. Mr Wright added:-

*Certainly the planning scheme allows for more residential development in Acropolis Drive and there have been some tentative discussions with the landowner there regarding a fairly large subdivision in that area. In the longer run, as far as safety is concerned, the roundabout will be a very safe option for that and it will address the issue of the industrial estate and the residential area off Acropolis Drive now rather than waiting until we get down the track at some stage.*

***Northern Ratepayers Association of the West Tamar***

The witnesses made the following submissions to the Committee:-

***Mr DARKE*** *- Thank you very much for the opportunity to speak to our submission. Just to summarise our points that we would like to make*

*clear, the standards of the West Tamar Highway right to Beauty Point we see as a major problem and you have evidence in the submission there. Doug has done a detailed log of defects and the meetings that we have had have generated a lot of information on the highway - public opinion and whatever - so you have minutes from that meeting and you have the log there which will give you a feel for that. Supporting what has come from the council today, it is just the economic benefit to the community of that money being spent north of Danbury Park South just at this point in time. We see that as a real problem in that the State funding is so difficult to obtain and we have some really serious issues to deal with.*

*The whole purpose, as far as I am aware, of the corridor study which has been run by DIER is to work out the best way for traffic movement through an area and come up with the best solutions for the road network and then identify the problems and then give a hierarchy of needs. I believe this extra funding over and above Acropolis Drive South should be measured in terms of the corridor study, which is not far away from being completed, and that is the whole purpose of that study. We would definitely like to have some input into the study and we would support the final decisions of that study. I think that is pretty much where we are at, unless you would like to add further to that, Doug.*

***Mr BENPORATH** - The intent of our Association is not to redesign the highway but to highlight to the committee and the department where the obvious black spots and danger spots are. I would say we are fully in favour of the highway being duplicated from Cormiston Creek bridges to Danbury Drive South - how to get the road out of the low part, the swampy part, get rid of existing poor alignment and surfaces - that would be great to there but it is the feeling of our association that the bulk of the money should be spent further north of Legana in the bad spots like Flowery Gully Road, which is immediately south of Beaconsfield, upgrade the crossing or have a new crossing at Supply River Bridge and a host of other points which you have in the reports in front of you.*

*We have heard the comments this morning about the value of this roundabout at Acropolis Drive. In your bus trip this morning you would have gone from Cormiston Creek Bridge heading north, two lanes at 70 kph into one lane at 100 kph. Okay, you are now on the open highway and that is great. Coming back into Riverside, you have one lane at 100 kph going into two lanes at 70 kph, so there is a 30 kilometre speed differential there. At Acropolis Drive we are talking about four lanes of divided highway from 100 kph to 80 kph with a roundabout in the middle. Those two lanes heading north have to converge to one at 80 kph to reduce to one at 60 kph. We heard here this morning that the speed around the roundabout will be 40 kph but existing speeds around existing roundabouts are 35 kph. As you leave the roundabout, accelerate to 60, accelerate to 80 as you go through Legana. Conversely, as you come south through Legana, from 80 down to 60 to 35 then up to 60, 80 and then to 100. It certainly slows the traffic down possibly to the extent that*

*you would have a bottleneck at the roundabout because two lanes are coming into one at the roundabout.*

*Where the speed change lanes are at Cormiston Creek Drive, there is a higher speed change differential of 30 kph as against 20 kph up there at Legana. There is no roundabout at Cormiston Creek. We don't need a roundabout. Just get rid of the excess speed with the transitional from two lanes to one lane. Now you are going to say, 'What about the traffic at the industrial area or at the retirement village or the nursing home or the caravan park?' Sure, they will always be there but the point is, if you provide four lanes of traffic it doesn't mean overnight you are going to double the volume of traffic straightaway. There may be a temporary increase on current figures but what it does mean is that with the four lanes of highway you get the same amount of traffic from A to B in a shorter time. So there is the potential for things to bottleneck at the roundabout. Enough of that.*

*The whole point of our association is to just highlight the death traps along the existing West Tamar Highway as most of the people who travel on the West Tamar live north of Legana and a great many live north of the Supply River so upgrade the roadworks for all the people who live in the West Tamar region.*

***Mr HOOPER** - I will outline very briefly what the accident level is on the highway we are talking about. Down to Legana it is very low, and that was mentioned this morning, whereas on the West Tamar Highway generally it is pretty high, particularly in the Flowery Gully area.*

## DOCUMENTS TAKEN INTO EVIDENCE

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

1. Department of Infrastructure, Energy and Resources (DIER)
2. West Tamar Council
3. Northern Ratepayers Association of the West Tamar:-
    a. Correspondence (email) dated 22 June 2004
    b. Correspondence dated 23 June 2004
    c. "A Discussion on the Relevance of the Proposed Roundabout on the West Tamar Highway at Acropolis Drive, Legana, with Regard To Road User Safety"
    d. "Log of the West Tamar Highway (A7) Legana to Beauty Point – An Inventory of Intersections and Sections of Highway with Features not Conforming to Desirable Design Standards"
    e. "Log of the West Tamar Highway (A7) Riverside to Beauty Point"
    f. "Minutes for the Special Meeting – Northern Ratepayers Association of the West Tamar, held at the Beaconsfield Community Centre, Weld Street, Beaconsfield – 14th April 2004".
4. Dale Lisson - submission
5. Michael Bailey - submission

6. Michael Donovan, President Tasmanian Veteran Cycling Council - submission
7. Anna Povey - submission
8. Richard Fyffe & Alison Ward - submission

## CONCLUSION AND RECOMMENDATION

The evidence presented to the Committee clearly established the need for the project. Apart from ugrading the West Tamar Highway to a four lane dual carriageway from Cormiston Creek to Legana (Legana Park Drive) the project, once completed, will have made provision for cycle traffic on the Highway, rationalised accesses onto the Highway and improved safety and junction turning facilities.

Considerable weight was given by the Committee to the evidence, both written and oral, given in support of the interests of the many cyclist users of the highway. It is clear that a two metre sealed shoulder will provide a greatly enhanced amenity for cyclists. The Committee is strongly of the view that, subject to compliance with relevant standards, the shoulder should be marked as a designated cycleway.

The Committee recommends the project, in accordance with the plans and specifications submitted, at an estimated total cost of $8,000,000.

**Parliament House**
**HOBART**
**8 July 2004**

**Hon. A. P. Harriss M.L.C.**
**CHAIRMAN**