(No. 10)



PARLIAMENT OF TASMANIA

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

West Tamar Highway Duplication

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

MEMBERS OF THE COMMITTEE

Legislative Council

Ms Rattray (Deputy Chair) Mr Valentine (Chair) House of Assembly

Ms Butler Mr Tucker Mr Wood

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1 INTRODUCTION

To Her Excellency the Honourable Barbara Baker AC, 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 Duplication

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

2 BACKGROUND

- 2.1 This reference recommended the Committee approve works on the Tamar Highway at Legana, between Freshwater Point Road and Acropolis Drive, to improve safety, traffic flow, and prepare for growth on the West Tamar Highway.
- 2.2 The West Tamar Highway is a key freight and tourist route that connects West Tamar communities with Launceston, for all types of transport. In particular, the West Tamar Highway is the main traffic route connecting the suburbs of the West Tamar municipality with Launceston. The highway is currently experiencing increased congestion due to urban growth in the area and a lack of alternative transport choices.
- 2.3 In 2022 the Department of State Growth completed a corridor study for the West Tamar Highway between Launceston and Legana. From this, the West Tamar Highway Corridor Improvement Plan was prepared which identified a range of options for improving the safety, traffic efficiency and corridor accessibility of the West Tamar Highway between Launceston and Legana. This plan identifies 14 proposed improvement opportunities packaged within eight projects, and which are focussed on achieving improved traffic flow, road safety outcomes and increased corridor accessibility along the West Tamar Highway Corridor. These improvements generally include:
 - speed limit review;
 - duplication works for specific highway sections;
 - access and network connectivity improvements;
 - provision of additional cycling facilities;
 - alignment upgrades at key locations;
 - intersection upgrades including pedestrian safety measures; and
 - traffic signal optimisation.

- 2.4 The highest priority project identified as part of the West Tamar Highway Corridor Improvement Plan was the duplication of the West Tamar Highway between Freshwater Point Road and Acropolis Drive, improvements to the Bridgenorth Road intersection and associated works.
- 2.5 Since then, these highest priority works have been advanced as the West Tamar Highway Duplication project. The key features of this project are:
 - the provision of two lanes in each direction between Freshwater Point and Acropolis Drive, with a central median island with safety barrier to separate traffic travelling in opposite directions;
 - upgrades to the intersections at Freshwater Point Road and Acropolis Drive;
 - a new roundabout at Bridgenorth Road;
 - two new signalised pedestrian crossings;
 - a new shared path along the highway for cyclists and pedestrians;
 - on-road bike lanes on both sides of the highway;
 - new bike paths at the Freshwater Point Road, Bridgenorth Road and Acropolis Drive intersections, for road cyclists to use to negotiate the roundabouts;
 - removal of parking along the road shoulder along the western, odd-numbered, side of the highway between Acropolis Drive and Bridgenorth Road; and
 - changes to parking arrangements outside businesses on the corner of Fulton Street and the West Tamar Highway..

3 PROJECT COSTS

3.1 Pursuant to the Message from Her Excellency the Governor-in-Council, the estimated cost of the work is \$32 million.

The following table details the current concept design cost estimates for the project:

Item	P50 estimate	P90 estimate	Notes
Base Estimate	\$26,259,880	\$26,259,880	Works including investigations, design, community engagement, acquisition (including related compensation), project management and construction.
Contingency	\$4,144,582	\$7,668,862	Contingency 16% - 29% of base estimate.
Escalation	\$5,344,140	\$5,963,597	Escalation 20% - 23% of base estimate.
Total	\$35,748,602	\$39,892,339	

4 EVIDENCE

- 4.1 The Committee commenced its inquiry on Wednesday, 14 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:-
 - Jacquelyn Tang, Project Management Team Leader, State Roads, Department of State Growth;
 - Johanna Edwards, Network Planner, Infrastructure Tasmania; and
 - Robyn Hawkins, Project Manager, Tasman Bridge Pathways Upgrade, State Roads, Department of State Growth.

The following Committee Members were present:

- Mr Valentine (Chair)
- Ms Butler; and
- Mr Tucker.

Overview

4.2 Ms Edwards and Ms Tang provided an overview of the proposed works:

Ms EDWARDS - Today we are seeking consideration for the West Tamar Highway Duplication Project between Freshwater Point Road and Acropolis Drive at Legana. The West Tamar Highway is the main traffic route connecting the suburbs in the locality of the West Tamar Council with the City of Launceston.

The highway is currently experiencing increased congestion due to urban growth in the municipality and a lack of alternative transport choices. In 2022, the Department completed a corridor study for the West Tamar Highway between Launceston and Legana. The project objectives of the corridor improvement plan are to improve connectivity between the West Tamar residential areas at Legana and Riverside with Launceston for all transport modes; to improve safety for all road users; and to improve traffic flow and reliability of travel times along the West Tamar Highway.

During development of the corridor improvement plan, workshops were held with key stakeholders in September 2019 followed by the first stage of community consultation in May 2020. As a result of the community feedback and further analysis, 14 improvement opportunities were refined. These were taken to a second stage of community consultation held in July and August 2021 and was shared with the public and key stakeholders via an online interactive map, the transport website and Facebook page, and displayed at the West Tamar Council Riverside office.

Projects were then prioritised based on the feedback from stakeholders in the community, an engineering review of current and future road demand, an assessment of project benefits, value for money and how easily the projects could be implemented and constructed.

From the study, the corridor improvements plan was prepared, packaging the 14 improvement solutions into eight site specific projects. The highest priority project, identified as part of the corridor improvement plan, involved three improvement solutions: the duplication of the West Tamar Highway between Freshwater Point Road and Acropolis Drive; improvements to Bridgenorth Road intersection; and provision of pedestrian facilities and on- and off-road cycling facilities.

These improvement solutions received the strongest support from the community and key stakeholders. In addition, the Department of Education strongly supported this project as a priority due to the development of the new Legana School. The Department of State Growth has been working closely with the Department of Education on the project. The Department is also finalising a corridor strategy for the entire West Tamar Highway from Launceston to Beauty Point, and the work done on this to date has fully supported this project.

Ms TANG - ... The project includes duplication of travel lanes in each direction between Freshwater Point Road and Acropolis Drive, upgrading key intersections at Acropolis Drive and Freshwater Point Road to [inaudible] roundabouts; installation of a new roundabout at Bridgenorth Road; two new signalised pedestrian crossings; a central median; a new shared path along eastern side of the highway; and on-road bicycle lanes on both sides of the highway.

The expected benefits to be delivered by the project are: improvement in road safety for all road users; greater connectivity and safety for active transport users; increased road capacity and overtaking opportunity leading to greater transport reliability; improved access to and across the highway from connecting roads and active travel pathways; and greater active transport access to the proposed new Legana Primary School.

The estimated cost of the work is \$36 million with funding allocated from the \$84 million commitment for the East and West Tamar Highway upgrade. The cost estimate is considered reasonable for the scale and scope of the works proposed. Once delivered, the project will improve road safety, traffic efficiency and connectivity for active transport along West Tamar Highway between Acropolis Drive and Freshwater Point Road.

Signalised Pedestrian Crossings

4.3 The Committee noted the project included two new signalised pedestrian crossings. The Committee questioned the witnesses on the design of the pedestrian crossings:

CHAIR - ... pedestrian crossing option assessment - there are signalised pedestrian crossings, two lots. I noticed that they are offset. For the record, can you explain why they are offset the way they are?

Ms TANG - This would allow a little bit of space to accommodate more pedestrians in the median and also as part of the Australian Standards, this is the recommended design for that speed of the highway and safest way to cross to the road.

CHAIR - Given there is a school in the vicinity, obviously there could be quite a number of students crossing at any one time. Basically, you need the space for them to be able to fit on to that median strip without danger.

Ms TANG - Yes.

CHAIR - In that median strip, at that point, are there going to be dual fences to funnel the people who are crossing into a safe location while they wait for the light to change?

Ms TANG - I haven't seen the drawing for this yet, but the design will be complying with whatever the Australian Standards recommendations are. There is one near Launceston Christian School. They have these mesh fences to protect the students. I am assuming that will happen.

CHAIR - Given the age of the children and a primary school, you can imagine kids playing in the middle of the road. Without something there to contain them, you think oops, out in front of a car.

Ms TANG - I will take that on notice and get back to the committee once I have the answer.

4.4 The Department of State Growth subsequently provided the following information in response to Ms Tang's commitment to take this question on notice:

... The proposed staggered pedestrian crossing was designed as per Austroads Guide to Road Design (the guide). The guide stated "where it is necessary to stage pedestrians on the island (e.g. at crossings serving school children) because the road is wider (e.g. four-lane undivided or duplicated) the length and width of the island treatment will have to be increased in order to store the necessary number of pedestrians within the island. In such cases the island will have to be wide enough to accommodate pedestrian fencing designed to prevent pedestrians from moving directly onto the second carriageway and orient them to face the direction of approaching vehicles. In some cases it may be appropriate to stage pedestrians within a larger refuge, in a similar fashion to that illustrated in Figure 8.3 for pedestrian operated signals." State Growth confirms that pedestrian fencing will be provided within the island as per the guide.¹

4.5 The Committee also sought to understand what level of usage, and by whom, was expected at these new pedestrian crossings:

Ms BUTLER - It states these crossings are considered appropriate for the expected pedestrian demand. Could you run through what the expected pedestrian demand would be on that site?

Ms TANG - For the school, the pedestrian demand would be between the school and where there are people coming off the new bus stop. We weren't expecting a whole lot of people crossing the road at that location, as in constant pedestrians pressing on the lights and stopping through traffic. I do not have the exact number of pedestrians that we have put in the modelling, but I could find that out for you again.

Normally, say for Davey Street, you would expect there would people constantly pressing on the pedestrian light and crossing the road all the time, but we are not expecting that sort of pedestrian volume in this particular corridor using that light.

CHAIR - Most dedicated school bus services would actually go into the site?

Ms TANG - That's right.

CHAIR - The majority of students going to school by school bus would go into the site. So it would be the incidental students who are walking and wanting to use that, or coming in by the general bus service that might use that and the parent with them, perhaps at certain times.

The reason you give here for an underpass not being considered is because of the low-lying ground. So you've looked at that side of it?

Ms TANG - We did look at that. So, for that pedestrian crossing, we considered the factors of the traffic flow, person crossing frequency, the feasibility of construction and value for money, and the signal lights were selected because they perform better in all those criteria.

4.6 The Department of State Growth subsequently provided the following information in response to Ms Tang's commitment to take the question about the number of pedestrians used in the modelling on notice:

¹ West Tamar Highway Duplication–Public Works Committee Inquiry, Department of State Growth, 28 June 2023, Page 1

... Most of the residential areas are located at the north-eastern side of the highway, as well as the new Legana Primary School, the shopping precinct near Freshwater Point Road and businesses near Fulton Drive. It is expected most of the pedestrian will be walking along the north-eastern side of the highway and only a small portion of pedestrians will be crossing the highway. Therefore, only 50 pedestrians per hour value was used in the modelling and this is considered conservative.²

Speed Limits near the new Legana Primary School

4.7 The Committee was keen to understand what speed limits would be in operation once the works were completed, especially around the new school site:

Ms BUTLER - ... so those digital signs, there will be a speed reduction for traffic around school starting times and finishing times?

Ms TANG - That is the plan at the moment.

Ms BUTLER - I was going to ask what the actual speed limit is outside of those peak times with the schools?

Ms TANG - ... At the moment, between Freshwater Point Road to Bridgenorth Road is 70 kilometres per hour; and from Bridgenorth Road to Acropolis Drive is currently 80 kilometres per hour. These speed limits are currently under review. We are actually reviewing the speed limit for the full corridor from Launceston to Legana. The report should be available some time next month.

CHAIR - With electronic signs, that could be altered to say 40 kilometres an hour which is a standard sort of speed around schools.

Ms TANG - That is still under discussion whether we go 40 or 50 or other speed limit but definitely there will be a speed reduction during school drop off and pick-up time.

Placement and Design of the New Roundabout

4.8 The Committee sought to understand how the placement and design of the new roundabout at the intersection with Bridgenorth Road had been determined. The Committee was also interested to understand how potential growth in traffic from the new Legana Primary School might impact on traffic flow at the new roundabout and what future measures may be available to improve flow:

Mr TUCKER - Coming back to a question that I asked this morning around the roundabouts, could you explain how you came to the design around the Legana School, with the parents having to come out that are going the other way, and having to go up and around the roundabout and then come back past the school, and the same on the other end. How did you come to that design?

Ms TANG - Where the location of the roundabout?

Mr TUCKER - Yes. Instead of putting the roundabout where the school is itself.

² West Tamar Highway Duplication–Public Works Committee Inquiry, Department of State Growth, 28 June 2023, Page 1

Ms TANG - The roundabout is placed at Bridgenorth Rd for a couple reasons. One is to improve the safety of that intersection. There was a fatality that happened last year at that intersection, and there are some reported crashes at that intersection as well. There is a lot of through traffic coming out at a 90 degree angle trying to turn right onto the West Tamar highway so there is a big safety risk. So the roundabout would resolve that safety issue at that intersection.

The other reason why we haven't put the roundabout at the school is because it would include a lot of land acquisition at that location. The roundabout takes up quite a big footprint, and there is a lot more space at the Bridgenorth Rd intersection instead of in front of the school.

The other reason is also if the roundabout is placed solely because the school location is there, it wouldn't get used much other than the two short periods of peak hours during drop off and pickup time, whereas if we put it at Bridgenorth Rd, it will constantly be used all day during the day.

The other thing is there is also a block of undeveloped land across Bridgenorth Rd at that location as well,... that could be used in the future as well. But we haven't got any plan on that front.

Mr TUCKER - What are you saying? There could be the entrance going into the school, which could go along and come in onto that roundabout? Is that what you're saying?

Ms TANG - I'm not quite, but there is potential for something like that in the future if that's what needs to be used. Because there is undeveloped land there at the moment.

Mr TUCKER - Yes. I wonder how that gets included in the planning scheme, if that's what you're thinking going ahead with the council.

Ms TANG - We're not thinking of development of that land.

Mr TUCKER - No, but what you're saying, going into the future, as the school increases in size and the traffic movements increase, that's what your thinking is at the moment, is something that needs to be there so that land doesn't get developed on for the wrong purposes, and if it's going to be an access. You understand what I'm saying.

Ms EDWARDS - It is private land.

Mr TUCKER - I realise that.

CHAIR - I think that's the problem.

Ms EDWARDS - It's zoned agriculture I believe, or rural.

Mr TUCKER - Yes. There's a dairy farm there at the moment, from memory. What you're saying it's nearly like an easement, but it isn't an easement for access to the school at a later date to come onto that roundabout.

CHAIR - The opportunity might not be there later, is what you're saying.

Mr TUCKER - I don't really know how - I've never been in that sort of situation, future planning

CHAIR - No, I don't think you can. Unless the Department was to purchase that land for possible future use, I don't know that they could guarantee its development -

Mr TUCKER - Unless they notify the council with their planning scheme, that, yes, going forward if something happens to that land that it would be -

Ms HAWKINS - I don't think that would be a matter for State Growth to take on. In terms of the scheme that we've got at the moment, with the way that roundabout and the access is incorporated, it is a safe option and works and deals with that safety issue at Bridgenorth Rd, but also allows for some future-proofing no matter what may happen on that land.

Central Median with Barrier

4.9 The Committee understood the project included a central median with barrier to separate opposing lanes of traffic. The Committee asked why this approach was taken rather than providing a central median turning lane similar to the arrangement on the Midland Highway at Mangalore. The witnesses indicated the traffic volume and number of lanes traffic turning right would have to cross meant that a median turn lane was not considered a safe option:

CHAIR - ... I noted this morning again coming up from Mangalore that there is no median fence and they have a central lane that you can pull over into and turn right, or you can pull over into and turn left, depending on which direction, at 80 kilometres per hour. This is an 80 kilometre an hour zone maybe or 70 to 80. Quite clearly for those property owners who feel aggrieved at not being able to have cars stopping near their business or whatever.

For the record, can you run through why you have chosen to put in a median fence, and how you have managed to arrive at the design that we have, and what the property owners' concerns are? Whether you have taken them on board. Can you talk us through that?

Ms TANG - We put a median along the highway middle because we were trying to restrict the vehicles to turn left only. If we put a gap somewhere in the middle for people to turn right the vehicles will have to cross the road shoulder plus the 1.8 metres of bicycle lane plus the two 3.5 metres of travelling lane. So there is a big long distance that the vehicle will have to cross.

CHAIR - So, that is four travel lanes and two bicycle lanes, well at least one bicycle lane -

Ms TANG - And footpath and shoulder as well. I am not quite sure of the traffic volume at Mangalore but the West Tamar Highway has an average daily traffic of 16 000 traffic volume so there is quite a fair bit of traffic utilising this highway -

Ms EDWARDS - ... Parts of it are around 6000.

... it obviously varies a lot but yes, those sorts of rural parts can be around 6000

Ms TANG - Yes, so to find a safe gap between the high traffic volume and to cross that width of that highway and again on to the other side of the highway we see that as a very high safety risk. So, we have two roundabouts on both sides of the highway. So from Acropolis Drive to Bridgenorth Rd is around 1.1 kilometres, which is hopefully within a reasonable distance for people to make that effort to turn around. I think we have that sort of arrangements in a lot of our other highways as well.

In part of the community consultation that went out late last year we did put this in our frequently asked question to say that now we have a median you will be restricted to a left turn only. We have not received any negative feedback around this arrangement.

Road Seal

4.10 Recognising there are residences adjacent to this section of the Tamar Highway, the Committee asked if a low noise seal would be used:

CHAIR - ... Now, the seal is going to be a bitumen sealant. It's not a chip seal, is it?

Ms TANG - No, it's going to be asphalt.

CHAIR - ... So it is a fine-crushed stone in the bitumen base.

Ms TANG -Yes. It has better sound - well, not as noisy as chip seal.

CHAIR - So it's lower noise.

Ms TANG - Yes.

CHAIR - That's an interesting point. There are different types of seals, and whether it's an asphalt seal, there are different types of asphalt seals, aren't there, for lower noise ratios?

Ms TANG - No. From my understanding, the seal that we're going to use is the lowest. The best quality there is.

CHAIR - I remember with the Huon Bypass we had houses next to a roundabout and they said that they were going to lay low-noise bitumen, but presumably they meant as asphalt as opposed to a chip seal.

Ms TANG - Yes.

Changes to Parking Arrangements

4.11 The Committee understood there would be some change to parking arrangements alongside the highway, and sought to understand the impact of these on, and acceptance by, the affected parties

CHAIR - What about the parking along the highway for some of the businesses that rely on that? There was some comment on that, wasn't there? What was the outcome of those discussions?

Ms TANG - I do not think there is any negative feedback on the removing the roadside parking between Bridgenorth Rd and Acropolis Drive. The reason we are removing the ability to park there is because the parking is right next to a very high speed highway and we do not want there to be much conflict between the bicycle lane and people trying to open their door when they stop their car -

CHAIR - I understand that entirely. I was wondering how the businesses near Fulton Street in particular -

Ms TANG - At Fulton Street -

CHAIR - What is at Fulton Street?

Ms TANG - Fulton Street is a different arrangement: it is just not banning the roadside parking. This is formalising the parking in front of their shops. At the moment they have a big space and car space where you park here there and everywhere. We have got in touch with three of the business owners at that location. We went to them and asked them how frequently are they used, what are the peak hours where there businesses are, and how often they get filled out, and where are the staff parking, and all that. We have all that information. In our preliminary design we are focusing on how we can best use that space and still provide them with some safer parking arrangement. But they may be at risk of disbenefit of reducing the number of parking that is available at the moment.

CHAIR - It might be more orderly.

Ms EDWARDS - It could be a benefit for them with it being formalised.

Ms TANG - We will keep talking to the businesses. The plan is once we have finished a preliminary design we will present to them our design and then we will talk to the business owners and see what else we could do.

Bus Stops

4.12 The Committee was aware that some property owners did not support the placement of bus stops near their property. The Committee questioned the witnesses on the placement of the bus stops and how property owners concerns were being managed:

CHAIR - ... changes to bus stops, relocation and removal. Some property owners were not too happy to have one placed closer to them or whatever. Can you talk us through some of the issues there and whether they were able to be resolved?

Ms TANG - There was one landowner who is not entirely happy about having a bus stop in front of their property. But at that time we had not actually finalised the location of that bus stop. So once we have finalised the preliminary design we will go back and talk to all the landowners because a couple of the bus stop locations have changed since concept design.

CHAIR - Is that on the western side of the highway as you travel north, or is it on the eastern side of the highway travelling south?

Ms TANG - Both sides.

CHAIR - I know there are two bus stops. Which one was the property owner who had the issue? Was it on the north bound or the sound bound?

Ms TANG - It is on the south bound. We told the owners that we had not finalised the bus stop location at that time so we will go back out and talk to them. We have drafted some letters to go out to them. We will look at starting to talk to them again in a couple of weeks' time.

CHAIR - Would that take the bus stop further away from the school?

Ms TANG - No. The location that we changed since concept design is the location near Freshwater Point Road. During the detailed design the level matches better if we shift it to the other side and also it works better with pedestrian design path as well.

Project Benefits

4.13 The Committee noted the Benefit-Cost Ratio (BCR) for this project was quite low. The witnesses acknowledged that it was low for this specific project, but that was because it was calculated in isolation of the other projects planned under the West Tamar Highway Corridor Improvement Plan. However, the benefits were expected to be greater once the wider program of upgrades for the West Tamar highway corridor were completed

Mr TUCKER - I have a question around the benefit-cost ratio: 0.69 cents in the dollar benefit to the community.

CHAIR - Yes. It is quite low.

Mr TUCKER - It is a bit low, but -

Ms TANG - So, the benefits that we looked at are travel time, crash cost saving, and active transport benefits. We mainly look at the economic assessment considering how much money you could save by reducing the crash rates and encouraging people to use alternative transport and all that. The assessment looks at the project in isolation, just for this project, whereas it is actually a much bigger program. For example, once we continue that bike lane all the way from Legana to Launceston, it would increase the BCR ratio for this.

The council also supports the future growth in the north of the West Tamar region as well, so this project is sort of used like a future proofing for future increase in the traffic volume along the highway.

Ms EDWARDS - I believe the calculations that they used, they assumed that 10 per cent of the Legana school population would use the shared path, so that could be low. It could actually be higher than that. So that is what the calculations were based on as sort of a precautionary, I guess, a low figure - a conservative figure.

4.14 The Department's submission also highlighted these points, in addition to detailing the specific benefits expected from this project

The expected positive outcomes and benefits to be delivered by the project are as follows.

- Improvement in road safety for all road users (motorists, cyclists and pedestrians).
- Greater connectivity and safety for active transport users.
- Increased road capacity and overtaking opportunities leading to greater transport reliability.
- Greater resilience to crashes within the corridor, with lower severity and impact of crashes on travel time.
- Increased future capacity of the road network allowing for future population and traffic growth.
- Improved access to and across the highway for connecting roads and active travel pathways.
- Greater active transport access to the proposed new Legana Primary School.

An economic assessment for this project determined a Benefit Cost Ratio (BCR) of 0.69. This means that for every dollar spent on these works, there is a \$0.69 benefit to the community.

While this is not a strong result, the economic assessment considers this project in isolation when it is part of a larger highway upgrade program. The benefits are expected to be greater once other projects in this program are completed, such as

providing additional cycling opportunities between Launceston and Legana, as they will increase the general connectivity of the area.³

4.15 The Committee discussed the project benefits further with the witnesses, in particular road safety and the provision of bicycle paths:

CHAIR - ... With the benefits: improvement in road safety for all users, motorcyclists, and pedestrians. Something I asked this morning at our on-site meeting, just for the record, we are not going to end up with a Mornington-style roundabout circumstance where you have two lanes going right around the whole roundabout and confusion between people travelling in different lanes and some wanting to go in one direction and others wanting to cut off and follow through to Hobart. We do not have that circumstance here?

Ms TANG - No, there should not be any requirement for the vehicles to cross lanes within the roundabout to get to the direction that they need to go to.

CHAIR - Okay. Another aspect about the benefits: our understanding is that we have an offroad cycle path that travels in parallel on both sides of the road and we also have a cycle path on the road shoulder if you like, close to the road shoulder, but separate to the vehicular traffic. So the lycra-clad bicycle riders who are out there training can still use the main highway as a training ground and pedestrians and family bicycle riders can use the other path in significant safety.

I have raised the issue of cycle paths being needed to be considered in highway construction quite a number of times. It is good to see that finally happening. It might be because there are already paths in place in some way and it is not so expensive to put that separated cycleway in.

Ms EDWARDS - I think it probably had some bearing on the slightly lower BCR but we got really strong public feedback that that was something that the community would really like to see and extended all the way through to Launceston. We see this as the first stage of that.

CHAIR - It is a public benefit in the sense that it is providing an opportunity for good recreation and lowering obesity and all of those other good health signals.

Ms BUTLER - Getting cars off the road.

Ms EDWARDS - And that shared separated path provides an equity benefit too because people who are a bit more vulnerable can then safely use it rather than just, like you said, the lycraclad people who feel more confident.

Construction Timeframe

4.16 The Committee questioned the witnesses on the timeframe for completing the project, noting that the new Legana Primary School was due to open for the 2025 school year:

Ms BUTLER - ... Any idea about when that work will be completed? You've got the commence construction early 2024. Do you know how long it will take?

Ms TANG - We are hoping to send this project out to tender by the end of this year and then start construction early next year. At the moment, the project team is still working on the preliminary design. Once the preliminary design is completed, we will start the

³ West Tamar Highway Duplication-Freshwater Point Road to Acropolis Drive, Public Works Committee Submission, Department of State Growth, 29 May 2023, page 5.

constructability review. At that time, we will work out if we were to investigate exactly how long we reckon the works will be finished. It is not going to be finished quickly. We have to consider the weather conditions during winter, we will have a slower construction time and how we stage the work to work around those times and all that.

The school is scheduled to open in February 2025. The focus is completing the section adjacent to the school as a priority. So, get those works around the school zone finished before February 2025. Then the rest of the work might still be continuing away from the school so it doesn't cause as much disturbance to the school traffic.

Ms BUTLER - It might not be completed within that 12 months of that commencement. It might take longer than that?

Ms TANG - It may not. Like I said, during winter there is not much we could do. It is a swampy area where we are going to put in a fill. During winter, it will be very hard to put those fills down in those areas, so we have to take that into consideration.

Mr TUCKER - Is it also harder putting asphalt down through the winter?

Ms TANG - Yes. You have to get to a certain degree before the asphalt will dry properly.

Ms BUTLER - ... You have two summers in there. You have early 2024 and the end of 2024 and start of 2025, so, there is lots of warm weather time in there as well. It seems a long time for such a small bit of road. Is there a hold up with anything else?

Ms TANG - No. There is a little bit of challenge with this highway as well because obviously there is a lot of traffic using this highway and also there are a lot of accesses to private properties and this is assessed as well. The construction time will be quite restricted by not starting in certain directions during peak hours and again having to finish early on certain directions before the afternoon peak hour comes in. At the same time, we have to minimise the disturbance to the businesses, landowners and school as well. There is a lot of consideration in the traffic management plan to try to work around all of those challenges.

At the same time, you don't want to go hard and fast or soft and too slow. You have to find a real balance between doing the job effectively, but at the same time not blocking off access to everyone, businesses and all that.

Weed Management During and Post Construction

4.17 The Committee was particularly interested in how weeds would be managed during and post construction. In particular, the Committee was of the view that weeds should be eradicated from the construction site, which the witnesses confirmed was the intention. Further, the Committee also stressed the need for an appropriate and effective ongoing roadside weed maintenance program so as to minimise the risk of weed spread on to land adjacent to the road network:

Mr TUCKER - ... you have said here you will get a management plan to ensure best practice of weed management. What will that involve, considering the way that State Growth manages weeds along the highways?

Ms TANG - The contractor will basically have to come up with a plan to not spread the weed and they possibly have to do some spraying before they start the work. The contractor will actually provide us with the weed management plan. They have to have a wash down area and all that before the construction starts. Mr TUCKER - So you are not going to get rid of the weeds then?

Ms HAWKINS - ... If they are within the construction site, they will be removed and they are required to manage them in accordance with their weed management plan in terms of burying and disposing.

CHAIR - ... Its 'spreading of weeds'; that is what it should read, really, shouldn't it?

Mr TUCKER - Yes.

CHAIR - It is 'reduce spreading of weeds' in the construction.

Mr TUCKER - Or it is managing to eradicate them along the edges of the roads. Once they get going on the edge of the road then we put a slasher along there, guess what happens? It spreads them further and further. It is something that we do not have a good record, do we?

Ms EDWARDS - ... So you are concerned that we will not be eradicating them appropriately as a part of this?

Mr TUCKER - I was just finding out what that actually means.

Ms EDWARDS - My understanding is that we will be eradicating the weeds within the road corridor, adjoining the works we are doing.

Mr TUCKER - ... We will be eradicating them -

Ms EDWARDS - That is my understanding. My expectation.

Ms HAWKINS - Yes it is part of the specifications that are included in the tender document so they know how to manage them.

CHAIR - The member is speaking from experience being a farmer and the problems and issues that come from road construction....

Ms EDWARDS - It is good to note though and we will be careful to make sure that it is done properly.

Mr TUCKER - ... I am just talking across the state. You see it where weeds are along the roadside and they are not managed. It goes the same with councils. Councils do the same thing.

... It is an ongoing problem to eradicate weeds. You have here 'a management plan to ensure best practice'. To ensure best practice, which is what you're saying, is to eradicate those weeds but in hindsight that does not happen with a lot of roads.

Ms EDWARDS - We would like to ensure that we do that if we can and also do not spread any weeds.

CHAIR - It comes out of the management of it after the contractors have gone as well. During construction, you have good weed control or eradication, as you are able to do that.

Ms EDWARDS - That is an interesting point that it would be good to ensure there is follow-up to in the next year or two following road construction works.

Ms HAWKINS - ... That is why we try and do pre-emptive spraying, as Jacquie said, before the project commences so that we can start on a solid footing.

Mr TUCKER - But as soon as you disturb the soil, you find all the hard seeds, which is the unfortunate thing and that is where it leads. You start off with good intentions. I am not being critical in what you are putting here but I was interested to see what that means. You start off with good intentions and you do the right thing to start with but as soon as you disturb that soil and then you build the road, then you go away and guess what, the weeds come back up and the next thing you know, you have spread them everywhere.

Ms EDWARDS - We can follow up to see if the hygiene management plan does include maintenance and for how long.

CHAIR - We have the capacity to be able to put in recommendations but we cannot make it a condition for the approval of a project. It might be something to consider if this gets through, to put in a report may be.

Cost Estimate, Contingencies and Escalation Allowances

4.18 The Department's submission provided an explanation of the contingency and escalation allowances provided for in the p50 and p90 cost estimates for the project:

The contingency allowance provides for contingent events – that is events which may or may not occur. For this project, key contingent risk items include:

- A retaining wall is required to allow split level of carriageways north of Fulton Street;
- tendered rates are higher than estimated;
- subgrade replacement is required;
- discovery of latent conditions;
- disposal of contaminated soil is required.

The escalation allowance is a provision in costs for changes in economic and market conditions over time.

Estimates of escalation are not intended to be precise forecast of future prices; they are approximations intended to represent the average trends for a large group of projects in a broad region.

The escalation rate for Australian and Tasmanian Government funded projects is determined by the Australian Government and is included in the project cost estimates as part of funding submissions.⁴

4.19 The Committee discussed with the witnesses the cost estimates for the project, including the contingency and escalation allowances. The Committee was also keen to understand how the Department could ensure the project came in on budget:

CHAIR - ... Funding and cost, P50 and P90 estimates. You have worked out the contingencies there, 16 per cent and 29 per cent roughly in the P50 and P90, and 23 per cent escalation under the P90. It is interesting how the escalations and the contingencies change. The last one we did was in the 20 per cent mark of escalation, wasn't it?

⁴ West Tamar Highway Duplication-Freshwater Point Road to Acropolis Drive, Public Works Committee Submission, Department of State Growth, 29 May 2023, pages 9-10.

Ms BUTLER - I think the Southern Outlet was only about 3 per cent of escalation or contingency. It was very small.

CHAIR - Perhaps to answer the question, with the escalation, what are you basing that on?

Ms TANG - The escalation allows provision in cost for changes in economic and market conditions over time. The escalation rates for an Australian and Tasmanian Government funded project, which would be this one, is set by the Australian Government that is included in the project cost estimate as part of the funding submission.

CHAIR - That is right, but the level of escalation, so 20 per cent or 23 per cent -

Ms EDWARDS - That is set.

Ms TANG - By the Australian Government.

CHAIR - It is not only your estimate on your project, it is a standard that is set?

Ms TANG - Yes.

CHAIR - Because we have seen some projects go quite a degree higher; generally building projects more so than road construction.

Mr TUCKER - Some of the studies that have been done on it, the infrastructure stuff, they have been double the cost and two years late in delivering across Australia. Some of the studies that they have done. Is that correct?

CHAIR - Due to the delays?

Mr TUCKER - Yes. Infrastructure, the delays and the cost increases. It's quite astronomical.

CHAIR - I know it is with buildings. I'm not quite sure how much it is with roads and bridges.

Mr TUCKER - It certainly was with the Brighton High School.

CHAIR - The high school, yes it was, that was a significant rise.

With the contingency, you've got a list of five things there: retaining wall may be required to allow split level carriageway, or tendered rates are unexpectedly higher. How do you mitigate that where you have a limited number of companies that can bid for the job, because they're all so busy? Some might raise the price because they're so in demand. How do you stop them taking advantage, I suppose is the question? There must be a way to stop companies gaming the system because the demand is high and therefore they can put their prices up. Is there a price justification process that you go through?

Ms HAWKINS - Part of that, I guess, would be in the design development where we undertake estimates for what we think the project is worth in terms of cost estimation. Another way of making sure that we're getting value for money through our projects is obviously with any of the projects that are of more significant value, we do industry consultation just to make sure that we are going to get people to bid for the project and how it fits within the work that's available at the time and the timing that we've put on the project in terms of tender time and that sort of stuff, or construction time.

... **Ms EDWARDS** - If we had plenty of time, we'd have a bit more leeway to work with that, but given we've got quite a tight time frame, we're bound by the time frames to some degree.

4.20 The Committee also sought to understand what would happen to the funding allocated for the project if actual costs are lower and do not escalate at the rate determined by the Australian Government:

CHAIR - ... So if the escalations actually ends up being lower than expected, is money then returned under the Fed's rules or not? Or is that something that once they've committed to fund, they just leave it at that, and if it doesn't escalate as predicted, then you get to keep the money.

Ms HAWKINS - In terms of our reporting, we step through a milestone process in terms of when the Australian Government will release money for projects. We have to demonstrate that what we've spent on the project, and whichever way it goes, if there's an underspend or an overspend.

CHAIR - So they simply wouldn't release the money to you for the job if you haven't spent it?

Ms HAWKINS - No. That's right.

Property Acquisition

4.21 The Committee noted there was limited property acquisition required for the project, but sought further information on any concerns these property owners may have:

Ms TANG - ... at the moment we have identified an acquisition at three properties: two held by businesses and one by an individual. We have spoken to all three of them and they are quite comfortable with what we are proposing.

There is a bit of concern around noise and safety due to the highway being moved closer to their property but we will be continuing to liaise with the landowners once we have the preliminary design to present to them to see if they have any further concern about that.

Also, we will be doing noise monitoring and assessment early next month. We will follow the Tasmanian State Road Traffic Noise Management Guidelines. For any mitigation that has been identified we will definitely engage with the landowners and work through with them.

Does the Project Meet the Requirements of the Public Works Committee Act?

4.22 In assessing any proposed public work, the Committee seeks an assurance that each project meets the criteria detailed in Clause 15(2) of the Public Works Committee Act 1914. Broadly, and in simple terms, these relate to the purpose of the works, the need for and advisability of undertaking the works, and whether the works are a good use of public funds and provide value for money to the community. The Committee questioned the witnesses who provided the following confirmation:

CHAIR - ... We have a series of five questions that we like to put to you ... based on the provisions of the Public Works Committee Act 1914. I need a clear yes or no.

... First question: does the proposed works meet an identified need or needs, or solve a recognised problem?

Witnesses - Yes.

CHAIR - The recognised problem. What is that recognised problem? Not enough pavement at the moment or lanes to take the traffic?

Ms TANG - There are some safety issues at the intersections, as I mentioned earlier. With the retinue roundabouts at Bridgenorth Road that will resolve, and also at the moment there isn't a lot of alternative transport options for users, so with the new bike lanes and shared path that would provide additional active transport modes for people. As well as at the moment there is increased congestion along West Tamar Highway as well. With the duplication lane we'll be able to improve the capacity of the road and also improve the overtaking opportunities for the road.

Ms EDWARDS - The population's growing, so that will be an increasing problem.

CHAIR - Yes. Do we know how quickly that population's growing up there out of interest? I don't know that we covered that.

Ms EDWARDS - I think it's around 3 per cent per year. But there is a lot of potential there and planned growth in Legana.

CHAIR - Hence the new school. Are the proposed works the best solution to meet identified needs or solve the recognised problem within the allocated budget?

Witnesses - Yes.

CHAIR - Are the proposed works fit for purpose? We're not going to see bitumen sort of failing months after construction because of water problems, water being able to get away off the surface, those sorts of things? It is a pretty swampy area and you're not likely to see water coming up from underneath and destroying the pavement?

Ms TANG - We've done pavement investigation as well as your technical investigation, and it should be taken care of with the engineering designs.

Ms EDWARDS - We alluded to those issues.

CHAIR - It's fit for purpose as far as you're concerned?

Witnesses - Yes.

CHAIR - Do the proposed works provide value for money?

Witnesses - Yes.

CHAIR - Are the proposed works a good use of public funds?

Witnesses - Yes.

5 DOCUMENTS TAKEN INTO EVIDENCE

- 5.1 The following document was taken into evidence and considered by the Committee:
 - West Tamar Highway Duplication-Freshwater Point Road to Acropolis Drive, Public Works Committee Submission, Department of State Growth, Final to PWC, 29 May 2023.
 - West Tamar Highway Duplication–Public Works Committee Inquiry, Department of State Growth, 28 June 2023

6 CONCLUSION AND RECOMMENDATION

- 6.1 The Committee is satisfied that the need for the proposed works has been established. Once completed, the proposed works will include: duplication of travel lanes in each direction on the West Tamar Highway between Freshwater Point Road and Acropolis Drive; a central median with safety barrier; upgrades of the intersections at Acropolis Drive and Freshwater Point Road to dual lane roundabouts; installation of a new roundabout at Bridgenorth Road; two new signalised pedestrian crossings; a new shared path along the highway for cyclists and pedestrians; and on-road bicycle lanes on both sides of the highway
- 6.2 The proposed works are expected to improve safety for all road users, increase network capacity to improve traffic flows and transport reliability, provide an environment that supports safe active transport, provide improved access to and across the highway and cater for future population and traffic growth.
- 6.3 However, the Committee does hold some concern regarding weed management, not just for this project, but for all road projects on the State Road network. The Committee is of the firm view the Department of State Growth needs an effective, ongoing weed management plan, with the aim of eradicating weeds along the State Road network by means that do not lead to the spread of weeds to adjacent land. The Committee therefore urges the Department of State Growth to review and evaluate the effectiveness of its weed management processes to ensure these aims are being, or will be, met.
- 6.4 Notwithstanding this concern, accordingly, the Committee recommends the West Tamar Highway Duplication, at an estimated cost of \$32 million, in accordance with the documentation submitted.

Parliament House
Hobart
10 July 2023

Hon Rob Valentine MLC Chair