**THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS MET IN THE CONFERENCE ROOM, BEACHWAY MOTEL, 1-5 HEATHCOTE STREET, ULVERSTONE ON FRIDAY 13 NOVEMBER 2009.**

**REPLACEMENT OF LEVEN RIVER BRIDGE**

**Mr STEVEN KACZMARSKI**, SENIOR PROJECT MANAGER; AND **Mr GRAEME NIBBS**, MANAGER, STAKEHOLDER ENGAGEMENT UNIT, ROAD AND TRAFFIC DIVISION, DEPARTMENT OF INFRASTRUCTURE, ENERGY AND RESOURCES WERE CALLED, MADE THE STAUTORY DECLARATION AND WERE EXAMINED.

**CHAIR** (Mr Harriss) - Welcome, gentlemen. Steve, you are aware of the proceedings here, that we need to get an overview onto the public record. We don't necessarily need to be too detailed about that but we would ask you to give an overview of the project. We have had a thorough briefing out on site, so we are familiar with the physical constraints within which you will be working on the site and what you seek to achieve, so we will now hand over to you for that presentation. As we have done in the past, if you don't mind, we might interrupt if there are questions along the way.

**Mr KACZMARSKI** - I am happy to take questions as we go. It's much better that way.

The existing Leven River Bridge was built in 1934 and it has served its function quite well until now. It has recently had a 38-tonne load limit placed on it subsequent to inspections of the structure. The structure itself has some significance in that it was designed by Sir Allan Knight and is comprised of a composite concrete and steel beam structure, which is one of a number of bridges built that way in Tasmania. In looking at the bridge, the department commissioned reports on whether the bridge could be strengthened or repaired, and that information is provided in the document in the introduction. Having gone through the exercise of looking at how much it would cost, a lot of the work is hidden within the existing concrete itself and it would be very hard and expensive to rehabilitate the existing structure.

**Mrs NAPIER** - Do you have any idea of what that would cost?

**Mr KACZMARSKI** - I did not bring that information with me.

**Mrs NAPIER** - The report didn't provide much information on that. I was just interested as to what it would have cost.

**Mr KACZMARSKI** - At the time the assessment would have been done it would have been a comparative cost between replacing or repairing the bridges. I haven't brought that information with me, and it would have only been useful at the time that the comparison was done.

**Mrs NAPIER** - Would it have increased the capacity of the old bridge to carry heavier weights?

**Mr KACZMARSKI** - It certainly would. The standard would have to be increased to carry the current loads that we place on bridges because they've increased since 1934.

When it was decided that the bridge should be replaced, in conjunction with the council officers and staff, the department and the council looked at a number of options - I could table a plan that shows predominantly the two options: the blue and the red, as they are identified on the plan - with the blue option forming a new Hobbs Parade into the end of Reibey Street, which is the main street in Ulverstone, with potentially a roundabout at that location. The red alternative is predominantly the design that has been adopted now, to connect in the existing Hobbs Parade into the existing roundabout that is on the eastern side of the river. I think perhaps the council might be able to answer more questions on that in their submission. Needless to say, the red bridge option was adopted and I will continue to talk about that red option.

The contract type that the department carries out with bridge construction is a designer-construct process. In that process the tenderers put forward their options of meeting the requirements that the department and the council have in this particular case. The department has undertaken perhaps more investigation into the concept of the bridge design because the council has made specific requirements about the architectural feature of the bridge. The department is mindful that this bridge is in the centre of Ulverstone and therefore would have more impact on visual amenity and aesthetics than perhaps a bridge might have that is in the middle of the highway in the middle of a rural setting. In conjunction with the council we have spent a bit more time to develop the concepts, which are contained in the attachments to the report - and they're the colour images that we have had on public display and are contained within appendix A.

Funding for the project is $8.9 million staged over two years - $1.9 million in 2009-10 and $6 million 2010-11, with the balance in years 2011-12. That estimate is our current estimate for the tender work. I noticed when the notice was read out it mentioned a figure of $6.9 million, and I can go into that as I am going through the presentation on where the differences have occurred.

Effectively, the objective of this bridge is to replace the existing structure. The review of traffic has identified that the traffic flows are not expected to increase more than the requirement for a two-lane bridge and in particular, the work that we have undertaken has identified that we need to supply a shared footpath and cycleway for use by the local community. That has been provided for in the actual design.

Of course the new bridge structure will reduce the maintenance costs that we would incur and those would increase dramatically if we were to retain the existing structure. The existing bridge has some historical significance. We have looked at those issues along with the Tasmanian Heritage Trust and an outcome of that is in section 2 - the heritage outcomes identified on what should happen if we cannot maintain the existing structure. There was some talk about listing the structure on a heritage register but with representations from DIER and the council that was not pursued.

**Mr GREEN** - And the honourable Sue Smith, President of the upper House, is a very strong advocate for the bridge coming down.

**Mr KACZMARSKI** - I was not aware of that. In section 3 the project benefits are identified in three main areas: safety benefits, maintenance benefits and other benefits. I do not anticipate going through those in any detail. With section 4, which is on project description, I pointed out previously that we are looking at replacing the existing seven-span bridge with a five- span structure. The consequences of that are that the depth of the bridge will be slightly more, but we are providing for a double curvature for the new bridge.

The existing bridge is effectively a straight line from one side to the other, and that double curvature provides for an architectural feature and it also provides for extra room for water craft through the mid-spans. There are obviously fewer piers in the river, so there are fewer obstructions and that is of benefit for navigation. But it also provides for additional headroom for our footpath on the eastern side that goes underneath the bridge.

We have made provision in the tender documentation for an underpass on the western side of the bridge. There is no footpath under the bridge in the current arrangement and there is a problem with that pedestrian underpass, particularly with the highest astronomical tide. The invert level of that footpath will need to be below that level and has the potential to flood.

We will review the information received from tenderers on that and discuss it with council and see whether we want to pursue that option or not. But that us something that we will discuss with them, as long as we can make sure that that pedestrian underpass will be safe to use and no doubt it will be progressed. If not, we may need to remove that from the contract.

The new bridge will be a reinforced concrete structure. Most likely a super-T design. But once again, that is up to the tenderers to identify to us. We have identified a minimum horizontal radius for the bridge, so that will limit its extent upstream. We do not want the bridge to be too far upstream from the existing bridge, so we have identified that as -

**Mrs NAPIER** - You don't want to upset the water skiers.

**Mr KACZMARSKI** - Yes, that is an issue for the navigation and the water skiers to do their turnaround. That curvature also is important for sight distance and sight lines as you are travelling on the bridge.

The reconstruction of the eastern roundabout is an issue that the council are keen to investigate. At the moment the design that we have identifies that the eastern roundabout will need to be reconstructed. As discussed on-site, it is the vertical alignment and vertical geometry of traffic moving from the roundabout onto the bridge which is the key issue. The level of the bridge is governed by the pedestrian access underneath the eastern abutment, which needs to be increased from its current, approximately 2 metres, to 2.5 metres. We have left that issue in the hands of the tenderers at the moment and asked them to see if they can come up with an option that retains the existing roundabout and, if so, that will be adopted. If not, then the roundabout will need to be reconstructed.

**Mr GREEN** - Pardon my ignorance with respect to this, but why wouldn't you just dig out 500 millimetres on the track as opposed to putting the bridge up by that much? Even if

you did not have a wall so that the tide did not come in, surely it would be much cheaper to dig out a few metres and take 500 millimetres out of the pathway, than build the bridge up an extra 500 millimetres, given the roundabout situation et cetera.

**Mr KACZMARSKI** - We did look at that option along with a number of other options. The footpath at the moment is predominantly level across the front of Anzac Park and then there are about three or four steps as you go under the existing bridge to go up to a higher level. So the footpath on the downstream side is at a higher level than the footpath under the bridge. Once again, the highest astronomical tide is 1.64 metres and that footpath, at the moment, is about RL 2. So there is about 400 millimetres of clearance or thereabouts between the highest astronomical tide and that footpath now. If you put that footpath down that extra 500 millimetres, you start getting awfully close to the highest astronomical tide and obviously, some sort of protection would be required. As soon as you do that, you have the issue of any stormwater that would enter that section of footpath needing to be drained through some sort of valving system.

So, once again, at the moment, the tides do come up across that footpath across Anzac Park at a lower level, at about the 1.6-metre mark and three or four times a year, part of Anzac Park is flooded. So the discussion with the council on that has been that we did not want to necessarily put that footpath any lower than what it is at the moment on the basis that the potential then is for flooding on that particular footpath.

**Mr GREEN** - What about then, an option that you take the footpath out, around, under the span a little further? It seems to me that it costs an enormous amount of money to muck around with this roundabout that has just been completed. Why couldn't you take the path out and cantilever it to the west a little way, so it is further under the span?

**Mr KACZMARSKI** - We did not look at that specific option. We did look at another pass option, which was not accepted by the council. Another pass option on the outside of the abutment would work, because there you only have the road depth and the service relocation. So that would have worked better. But the council were not in favour of that option. We did not look at an option of taking a footpath out into the river further. The curvature is probably not that much it would help that much. I think the level would still need to be lower, unless you went right out to probably the first pier, which would most probably be too far out.

**Mr GREEN** - Yes, that is too far out, obviously.

**Mr KACZMARSKI** - So, on the western approach, the council have asked us to reconstruct Tasma Parade as part of this project, and the council are willing to contribute to the cost of that work. That just improves the intersection between Helen Street, Hobbs Parade and Tasma Parade and just makes the traffic mentioned there a bit easier. So, we are doing that. That has a marginal effect on making the bridge a bit wider on the western side to allow for the right-turn slot but that can be accommodated.

After the new bridge is built, then we will be demolishing the old bridge. So, as discussed on-site, the new bridge proposal is that there are two 3-metre traffic lanes in each direction with a shoulder 1 metre wide, making a full traffic width of 4 metres on the bridge and there is a shared footpath of 3 metres width on the downstream side. The 3-metre-wide footpath is the requirement of the council and their insurers, and the result

of the discussions between the department and the council about whether it should be on the upstream side or the downstream side was that they identified that the downstream side was the preferred side.

There will be traffic disruptions during the construction of the bridge. Predominantly, that will be when the crossover works are done to connect the old infrastructure into the new bridge, and there will be increases in level and new road works required during that time. Obviously, during the construction of the new bridge there might be some minor disruptions for traffic. One of the key elements that we have identified in our documentation for the construction is that pedestrian access is very important. Lots of pedestrians walk across the bridge and it is important that that is maintained for the duration of the construction period.

We have had a representation from bicycle groups that the bicycle lane should be provided on the road proper itself and that for this environment those widths ought to be 1.2 metres. As I mentioned before, we are providing a shoulder that is 1 metre wide and so we cannot necessarily provide for 1.2 metres as was requested. Once again we have mentioned that to tenderers, and they might come up with an option on that but, nevertheless, without making the bridge wider again it is going to be very difficult and more expensive to widen the bridge any further than it is at the moment.

We have investigated Aboriginal heritage and there are no issues of concern for us in this locality.

With noise considerations, we have recently installed noise monitors on adjacent properties and found that the existing noise levels are well below any areas of concern and therefore, the noise from traffic on the new bridge should not necessarily be a problem. Obviously there will be construction noise and that will need to be governed by the local government requirements and other noise regulations. Nevertheless, people ought to expect that pile-driving will occur during the construction of the piers and abutments and that will generate a significant amount of noise. It has been reported to us that when the Bass Highway/Leven River Bridge was being constructed, everyone in Ulverstone knew that pile-driving was happening and so there is a sense that there will be noise associated with that.

With environmental considerations, we have reviewed this site with the Crown Land's Technical Advisory Group and they have identified that care should be taken with erosion, sediment and slope stability, and we have allowed for that in the tender documentation. We have looked at the issue of river hydrology and the effect of this bridge on the river hydrology and obviously, with fewer piers in the river the hydrology should not be made any worse than it is at the moment. We have looked at dust emissions from the works and predominantly, that will be during the construction phase. That will need to be monitored by the contractor in his construction and environmental management plan that he will develop for the site. There is an issue with the existing bridge and lead-based paint and once again, the contractor will need to be careful about the removal of the old bridge to make sure that the lead-based paint is not disturbed during the removal process.

Social implications: there will be the noise issues that I identified before with construction noise, and there will be some disruptions to traffic and traffic flow from

time to time depending on the activities that are happening. As I said, predominantly the main issues will be at the crossover works from the old to the new bridge. We have, along with the council, developed the concepts for this bridge to match the Ulverstone Wharf Redevelopment Master Plan; in a sense, what we have achieved in the concept design matches the requirements of that particular master plan.

At this point I would like to hand over to Graeme Nibbs, who will speak a bit about the stakeholder engagement part of the project.

**CHAIR** - Before you do, Graeme, are there any questions for Steve at the moment?

**Mrs NAPIER** - With the removal of the old bridge and trying to minimise the impact from the river and water, what systems are used now to remove a bridge like that, so it is as environmentally responsible as it can be?

**Mr KACZMARSKI** - We will most likely cut up the deck, with some sort of concrete cutting equipment, into smaller sections and most likely remove a beam and concrete section with a crane, so they will be removing segments of the bridge in large pieces and transporting them away. It is not as if it will be totally demolished on site; it will be segmented into manageable pieces. Then the main part, with the existing piers and piles into the river, will need to be extracted and removed in large chunks.

**Mrs NAPIER** - Is there any recycling potential? With buildings nowadays you're judged according to the recycling you make of the product. Can something like that be used, apart from fill?

**Mr KACZMARSKI** - The concrete part of the structure could be used as inert landfill, so that is an option that the contractor would look at at this stage. We have looked at options of inert landfill in and around the Ulverstone area, but DIER has no such areas where we could put that material. At this stage it would be up to the contractor to see whether he could find a site where that inert fill could go, and that would be the concrete part. The steel beams are a bit of an issue with the lead paint. If they were to be reused somewhere, bearing in mind we can't fix them, because they are rusted and a lot of the flanges on the steel beams are fairly rusted away, the recycling use of that will possibly end up being some sort of re-melting the metal down, but all of that at the moment is in the hands of the contractor or the tenderer.

**Mrs NAPIER** - But you'd have an expected standard or would the industry itself have its own industry accreditation to cover that?

**Mr KACZMARSKI** - They will need to comply with the standards for the lead-based paint, an absolute requirement on the tenderer.

**Mrs NAPIER** - The issues of pedestrian use and cycleways - it might be worth getting on the record what came out of the consultation on that.

**Mr BEST** - Before you do that, can I ask something slightly in connection with that? You mentioned when we were on the site inspection that to get this project moving you're looking at design and construct, so what stays in the design and what doesn't? I think you mentioned that if somebody comes in and can do this better and cheaper in

construction, you'd be looking at going that way. Everything above bridge, I suppose you're saying, stays to plan. Is that right? When you are looking at design and construct, you might end up with something different. It might be where you were talking about the walkway on the western shore under bridge. What is in and out in terms of design and construct?

**Mr KACZMARSKI** - My understanding is the department undertakes most of its bridge designs as a design-and-construct phase. That allows the tenderers and the eventual contractors to come up with a design that matches the requirements but might be different from the concept design. In this concept design we are more mindful that there are other issues in the structural integrity of the bridge and there are aesthetic and architectural features. As long as they comply with the concepts and requirements we have, we would be relatively happy, but nevertheless, it might be that an alternative tender is provided that might be vastly different. We do not know.

**Mr BEST** - Okay, but we are going to hear about the consultation and what has been requested from the committee to you in the concept of the design. That still remains, does it?

**Mr KACZMARSKI** - We will consult with the council when we are reviewing the tenders to make sure that what is being proposed still matches their requirements. We wouldn't allow -

**Mr BEST** - Cancel the walkway or something, or change the width of something.

**Mr KACZMARSKI** - Yes, the investment in time to establish the concepts we have now needs to be met and when architecturally aesthetic features are in consideration we need to make sure that they are still being matched by the new design.

**Mr BEST** - Thank you.

**CHAIR** - If you want to, perhaps you would run through the matter with the cycling lanes because Sue has raised that question and the reasons you are not going for it. That might raise some questions that Sue has.

**Mrs NAPIER** - I understand the reason for the 3 metres, as requested by the council, to ensure that there is consistency right through to Turners Beach, but a lot of commuters who use bicycles are unlikely to swing across to that part of the bridge. They will stay on the bridge.

I am particularly interested in the southern side of the bridge. As I understand, a cycleway distance needs to be 1.2 metres and we are only allowing 1 metre. So I wondered, for the record, whether you could indicate why we wouldn't:

(a) ensure that there were white lines provided for that kind of separation, and;

(b) why we might not require that 1.2 metres, at least on the southern side of the bridge.

**Mr KACZMARSKI** - The design is for a 3-metre lane and a 1-metre wide shoulder. That 1-metre wide shoulder could be line-marked. The reason that we cannot extend that out to 1.2 metres is that the cost implications we identified with making that extra width could be significant. We have raised with the tenderers that it would be something that we ought to look at if it did not include a significant cost increase.

We believe that making that lane 200 millimetres wider would add a significant cost to the bridge with potentially another beam required under the structure. So that is the reason we have this arrangement at the moment and the 3-metre wide shared cycleway and footway is meant to allow for cycling use.

**Mrs NAPIER** - So, in attempting to deal with that, is another possibility that that additional distance could be provided on the southern side of the bridge but that cycle traffic be redirected onto the cycleway on the other side? You could even eat into that 1 metre that is currently allowed on the road pavement. If you take that down to 0.5 or even 0.8, I suppose, you could make it so that there is easy access for cyclists to swing up onto that cycleway across the bridge on the northern side.

**Mr KACZMARSKI** - I am not sure how you mean to allow for cyclists to get onto that shared footpath. When they are heading in a westerly direction, do you mean?

**Mrs NAPIER** - No, I consider it important to cater for cyclists on roadways such as this, including bridge infrastructures, and we have run into this one a couple of times. I remember when we were down Circular Head way with bridges, we used the 1 metre and not the full 1.2 metres. Cycleways on bicycle-friendly roads in certain areas of Tasmania is an important objective to achieve.

If we allow for 1.2 metres on the southern side of the bridge on the road pavement, could that be accommodated by reducing the distance on the road that is currently allowed approximate to the pathway?

**Mr KACZMARSKI** - I see.

**Mrs NAPIER** - We would be encouraging cyclists to swing up onto the pathway when they are going across on the northern side, rather than necessarily using the roadway. Is that part of the solution?

**Mr KACZMARSKI** - That would require a narrower shoulder width between the traffic lane and the shared footpath and cycleway. Basically that would reduce the requirement that we would need to have on that side.

**Mrs NAPIER** - Correct. In other words, do not build a wider bridge, just reconfigure your lines.

**Mr KACZMARSKI** - I would need to check that with our traffic branch but my understanding is that, for this speed environment, you need a 3-metre lane and a 1-metre shoulder, which also gives you that extra distance away from that shared footpath, but we cannot necessarily make that half a metre.

**Mrs NAPIER** - Or 0.8.

**Mr KACZMARSKI** - I could review that.

**Mrs NAPIER** - Because we did talk about whether you could bring the pathway down to 2.8 metres and that would give you your 0.2 of a metre that we are talking about. I think you have indicated that because of insurance reasons the council would prefer to have 3 metres on that, and 3 metres is quite some considerable width. Rather than compromising the safety of cyclists, who are using the road when they are travelling west, can we, as an alternative, take that bit of space that we need off the shoulder on the northern side and encourage cyclists to swing up on that pathway?

**Mr KACZMARSKI** - To do that I would need to get our traffic infrastructure branch to assess that and approve that narrower shoulder width on that side.

**Mrs NAPIER** - Have they approved the reduction from the 1.2 metres to 1 metre as being acceptable for cyclists going west?

**Mr KACZMARSKI** - No, we have identified that 1 metre as a shoulder, not as a cycle lane, because it is too narrow for a cycle lane.

**Mrs NAPIER** - Has that been done on the premise that cyclists, under this design, would be expected to use the cycle pathway to cross the bridge?

**Mr KACZMARSKI** - That is certainly the understanding that we have, yes.

**Mrs NAPIER** - Is it your assessment that it is likely that cyclists who are commuting by going west on the bridge are going to find their way onto that cycle pathway?

**Mr KACZMARSKI** - True commuting cyclists, I believe, would probably stay on the road and on the bridge and not use the shared footpath, especially going west.

**Mrs NAPIER** - So we have two issues which we need to check with the traffic branch. It is important to look at that issue, especially if we are going to run into a cost parameter of trying to increase the width of the bridge by that 0.2 metre, because this bridge is going to be around for a long time, probably another 100 years. I am very conscious that, as we build infrastructure, and in the context of our responsibility when looking at climate change, healthy lifestyles or whatever, I think it is really important that our infrastructure caters for commuter cyclists as much as it also caters for commuter public transport and car transport. I think the 3-metre bike pathway linking into expanded infrastructure is otherwise very positive.

**CHAIR** - The point is made.

**Mrs NAPIER** - What feedback have we had about water skiers and their views about the reduced turning circle there?

**Mr KACZMARSKI** - It will not significantly reduce the water skiing capability.

**Mrs NAPIER** - It is pretty tight in there anyhow to turn around. Are we using solar energy for the lights?

**Mr KACZMARSKI** - We have not identified that at this point in time. We have identified that the lighting should be efficient but not necessarily solar.

**Mrs NAPIER** - Would there be any disadvantage to using solar-powered lighting?

**Mr KACZMARSKI** - Our normal arrangements are that street lighting and bridge lighting is connected to the Aurora network and therefore supplied through the normal grid system rather than providing solar lights.

**Mrs NAPIER** - What analysis has been made of that to ensure it is compliant with environmentally appropriate design? In schools and hospitals and other centres we are looking at energy efficiencies and the use of solar-powered lighting. It certainly seems to be coming into street lighting increasingly, and crossings and so on.

**Mr KACZMARSKI** - We have stipulated energy-efficient lighting but we have not necessarily identified solar lighting specifically. Once again, that is an issue that was left for the design and construct process.

**Mrs NAPIER** - On this bridge infrastructure, I noticed on one of these sheets that it refers to removal of a pedestrian sign. Is there likely to be appropriate pedestrian warning signage on the eastern and western end where those pedestrian crossings are? What is envisaged there?

**Mr KACZMARSKI** - I think the removal of the existing pedestrian sign identifies there is an existing crossing on the western side, I believe, that will need to be removed. New signs will be installed to identify any new crossing points.

**Mrs NAPIER** - I probably just did not see it there, but one would normally assume that. I have not studied the new roundabout. If you were to realign the roundabout, which has only recently been upgraded by the council, is the same configuration going to be used in terms of traffic movements?

**Mr KACZMARSKI** - It would effectively be exactly the same roundabout, just lifted in height.

**Mrs NAPIER** - Right, thank you.

**CHAIR** - I do not think you had covered off on the differential between the $6.9 million and the $8.9 million.

**Mr KACZMARSKI** - Originally when the comparison was made and the option was adopted to construct the bridge upstream, the estimate for the structure was $6.9 million. Since that time, we have undertaken a goetechnical investigation through the river and found that some of the piles need to be at least 30 metres deep. So there is a significant additional cost associated with that particular phase of the work. Fortunately, there are only a smaller number of piers that will be in the river itself compared with the six that are there at moment for the spans, so that is a mitigating factor. In conjunction with that the bridge is now going to be wider than we had first envisaged, particularly the extra

width for the shared footpath which originally was being promoted as 2.5 metres. So that has increased in width by half a metre.

The curvature would be marginally, in our estimation, more than the original design cost and also the bridge is slightly longer as well. So they are the main factors, apart from possibly the time span of when this project started until now - a few years down the track. So that is where the major cost estimates have been. Nevertheless, the tenders will identify what the actual cost is likely to be and then we will obviously work off that basis.

**CHAIR** - Thank you.

**Mr NIBBS** - In relation to stakeholder engagement, we are working very closely to a stakeholder engagement plan for this particular project, as we do for all significant projects. Steve Kaczmarski, the project manager, has been working very closely with the council to make sure that their requirements are very heavily taken into account.

In terms of procedure, we have sent out an original notification letter to key stakeholders advising of the works and the public display. We have conducted a public display at the council chambers with the imagery that was shown before. That was also put up on the DIER web site so that people could have access to it through that mechanism and was advertised through a public notice to make sure that the public were well aware that the public display was occurring and to give an opportunity for direct community feedback in relation to that project. As can be seen in section 4.92 there, the main issues that came out of the public consultation - and there was not a huge number of responses from that - were requests for more information from nearby residents; Steve has been working very closely with the nearby residents following on from that.

The width of the bike lane on the westbound side has been discussed, and the barriers between the road and shared footpath. They were issues that came out there and the appendix C has the report from the public display. Following that, the development application process has involved capacity for public consultation as well and there has been some media coverage of the proposal. Again, people have seen the imagery that was provided in that public display through that mechanism as well.

Within our stakeholder plan, I should note that we also have plans in train to notify key people, emergency services, residents and so forth of the works so that, if we get to that stage, people are well aware of the works that will be occurring, what is involved and so forth.

That is a quick review of the stakeholder engagement that is occurring for the project.

**CHAIR** - Thank you very much, Graeme. Any further questions?

**Mrs NAPIER** - Thank you for providing that summary of the feedback. On the issue of which side the 3-metre walkway is going to be on, one person said that it was on the wrong side and that they were concerned about children crossing over at the eastern end to that particular playground.

Your response was that the council said that was the better side because there was greater pedestrian movement. What analysis have you done of the potential of the safety issue? Is it understood that the pathway will loop down around under the bridge so that it will discourage children from crossing on the top of the bridge?

**Mr KACZMARSKI** - Certainly with the council works our expectation is that the footpath leading off the bridge on the eastern side will then link through to the ability of getting underneath the bridge rather than having to cross the bridge at road level. That is a preferred option and I assume the council plans will allow for that.

**Mrs NAPIER** - Maybe I can ask the council about that. It would seem to me that that would be much preferred than encouraging kids or even suggesting that kids could cross across there.

**Mr KACZMARSKI** - Yes.

**Mrs NAPIER** - Was there much feedback from the cyclists about the issue? There did not seem to be much in here from the cyclists.

**Mr NIBBS** - No, in fact, the level of feedback was quite low overall.

**Mr KACZMARSKI** - There was the one written letter that we received from Safer Roads for Cyclists.

**Mrs NAPIER** - They were concerned about the 1.2 metre width not being allowed for on the bridge.

**CHAIR** - I would be interested in the interpretation which you are going to undertake and the panel that will be erected adjacent to the site of the existing bridge and the fact that you indicate in the submission that you would be including a segment of the existing bridge. What sort of form will that take and is it going to be a major, massive display or is it going to be less than that? I note that you are talking about photographic evidence and so on.

**Mr KACZMARSKI** - I may refer that question through to the council when you are having a discussion with them. My understanding is that we will provide something like a square-metre segment of bridge deck and beam and in some way that will be set up as a display with an interpretation panel about all of the bridges that have been across the Leven River in the past. But I think the council may have more information on that and it is probably best to ask the council about that particular issue.

**CHAIR** - Any further questions?

**Mrs NAPIER** - Is this the time to make sure you get on the record? We had some discussion about the western underpass and I think you indicated that, as we know, there is no underpass at the moment. I think your tender asks for them to look at whether a western underpass could be provided. What kind of dollars do you think we would be potentially looking at to provide a tunnel underpass there?

**Mr KACZMARSKI -** At the moment the tender documentation identifies an underpass structure on the outside of the bridge abutment so that would actually be under the roadfill, under the road approach going to the bridge. That would be a concrete underpass structure. We have identified a level of RL1.24, which is below the highest astronomical tide level, so there will need to be flood protection for that. At the moment we have just identified in the tender documents the segment underneath the bridge approach with formations on both sides for the council to connect into later and will identify through the tender process with the council whether we think the option that is being provided in the tender is sufficient for the purpose to make sure that if that pedestrian link was formed, then it would be safe and useable rather than perhaps ending up being a personal safety issue, as well as the flooding potential for that. That is as it sits at the moment. The broadest that we would have for that would be something like $150 000 to $200 000 but we are mindful that this is the one chance to put it in. If it is not put in now then it is not likely to be able to be put in retrospectively, so we do understand that.

**Mrs NAPIER** - The height that you have set it at and the flood level: presumably you put the projection on that of a sea level rise of 0.77 that we were talking about this morning anyhow. We multiply that by 50 years. What are we potentially looking at?

**Mr KACZMARSKI -** With that 0.77 you just mentioned the footpath on the eastern side is now at RL2, so with that sort of sea level rise that footpath would be under water whenever the tide got to that level.

**Mr GREEN** - Ideal place to set your whitebait net.

**Mr KACZMARSKI -** Certainly then, the footpath on the other side would significantly have further potential to be under water. You will have people who are walking under water effectively. You would need some sort of a wall and there would be water on that side. You have to be very careful about how that is constructed.

**Mrs NAPIER** - So in your construction designs and specifications are you building in the 2050 projections?

**Mr KACZMARSKI -** Yes. We have allowed for that because the bridge is higher, the road level is higher than it currently is and that allows for future sea level rise.

**Mrs NAPIER** - I have seen modelling that has been done on the projections for storm surge impacts, particularly the storm surge on the Ulverstone township on either side of the river. It is not pretty but I accept what you are saying, that the bridge is at least higher.

**Mr KACZMARSKI -** In that scenario you will not be able to get to the bridge. The bridge will be out of the water but you will not be able to get to the bridge.

**Mrs NAPIER** - Were you saying that the parkland area gets flooded a bit already?

**Mr KACZMARSKI -** Yes, that is my understanding. Once again, the council could identify the three or four times a year that part of that Anzac Park is inundated with the high water.

**CHAIR** - Thanks very much gentlemen.

**THE WITNESSES WITHDREW.**

**Cr MIKE DOWNEY**, MAYOR, **Ms SANDRA AYTON**, GENERAL MANAGER, AND **Mr BEVIN EBERHARDT**, DIRECTOR ENGINEERING SERVICES, CENTRAL COAST COUNCIL, WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

**CHAIR** (Mr Harriss) - We have accepted into evidence the submission by way of the two-page letter under your signature, Mayor, on 9 November and we have taken evidence from the departmental officers as to the technical details and design of the bridge. We ask you to make a presentation to us about the significant matters that the council is aware of.

**Mr DOWNEY** - As the mayor for the past 11 years, I have been involved with discussions about this bridge with the current Government. I can recall back in, I think, 2002 when Jim Bacon was alive and Premier, there was a forum held in Ulverstone on the Sunday and then on the Monday Cabinet met with the council. This was one of the items that we raised with Cabinet on that particular date. I think Jim Cox was Minister for Infrastructure at the time. The Premier asked his minister, 'What's the latest score with the bridge', because I had raised the replacement of the bridge, of course. Jim went out to his car, got the paperwork and came back in and said it was in a forward program to happen within the next five years. So on every opportunity we've had as a council, as a community for that matter, to talk about the bridge we have certainly taken that opportunity.

We conducted what we called a Leven River precinct study a number of years ago, which also looked at the mouth of the river right up to the Bass Highway in that precinct, and of course the bridge fits into that as well. I heard one of the other gentlemen talk about the wharf redevelopment master plan, which came out of that study as well. We had consultants in to actually undertake that study. We had 300 people turning up to the civic centre one night to discuss the Leven River, the bridge, the redevelopment of the wharf, the showgrounds and the like. That gave us a very good indication that our community is very pleased to be able to discuss it but also to take up the opportunity if the replacement could happen. We've also conducted what we called cultural plans back in the mid-1990s, which today are named community plans. The bridge certainly raised its head through those two processes as well.

We conducted a cultural plan study back in 1997 in Ulverstone and it certainly came up then. Only about two years ago we reviewed that culture plan, which is now called a community plan, and it certainly came up once again. So as far as our community is concerned we're very much in favour of the new bridge going forward, to the degree that my council, only back in August of this year, decided that it is prepared to put into the actual replacement and any associated works to the tune of about $1.5 million. The exact figure is confidential at this point. I think that is a fairly big commitment from any council for a bridge that is not their responsibility. We believe that through the consultation that we have had with our community and the input that they have had to us at different times, people are saying that you only get one crack at these things every 100 years. As Sue said, it is probably going to last for 100 years. We always felt that there had to be some sort of feature built into the bridge in some way because we want to make sure that we can attract tourists and the like into our town to come and look at that bridge, which would then have a impact on the businesses in the area as well.

Part of that $1.5 million would be to make sure of the features that were going into the bridge. Obviously there are two curves that will go into it from the concept plans that we have looked at so far, but also the lighting and the extra pathway.

We also were so keen with the bridge that we set up a council committee to look at how we could help in any way through the government departments to make sure the bridge went forward. We met on a number of occasions to talk about that. One of the main things of course was the features that were going to be built into the bridge. Through the letter that we wrote to you the other week we have also indicated that we are prepared to take over some responsibility of the routine maintenance and tasks that are involved with the bridge - the sweeping, maintenance of the landscaped areas of the bridge approaches, the lighting - including fittings - and operating costs and all those sort of things.

We are really keen to make sure the bridge happens. Of course, it has gone through the planning process where I do not believe there was any representation against it all. When the heritage issue raised its head some months back, I cannot tell you exactly what people were telling me they would do if that bridge was ever listed. I would not like to put that on record but certainly I had half a dozen phone calls with lots of offers - just give me the nod sort of thing and the bridge might happen to disappear. So that is the sentiment out there in the community of just how strongly they feel about the bridge. It was pleasing to read finally that the bridge was not going to be listed. We certainly had enough of that in Penguin and we did not want to have that flow through into Ulverstone.

Overall, we are very pleased that the current Government are prepared to bite the bullet and replace our bridge. I pulled up there one morning. There was a bit of an accident near the roundabout and we had to pull up. A truck came back through the other way and quite frankly if you sit on that bridge in a car it certainly does rock around quite a bit, especially with trucks going across it. That gave me a bit of fright. I did not realise it was so unstable.

**Mrs NAPIER** - Hobart Bridge all over again.

**Mr DOWNEY** - Probably. Through the Leven River precincts study, I actually said to the press one day that I would love to see a weir across the river. Within a couple of days the Conservation Trust had written to me wanting to know what I meant by a weir across the river and that sort of thing. For the rowing club and the people who ski on the river and the yacht club and all the groups that use it, if it could retain the water because obviously there is about a 10- or 12-foot drop in the tides in and out of there, then aquatic sports could be undertaken in a very good way, especially up around past the rowing club area. Anyway that is probably never going to happen but we are just happy that the bridge is going forward.

We spent approximately $30 000 one year undertaking a study on the river just to see how the sedimentation and siltation and all that was taking place. A report came back from the young lady who undertook the study and I think that is still in existence. It was very good reading. You could tell exactly when pine plantations went in upstream. They took core samples of the river in their study. So that is also available if needed.

**Mrs NAPIER** - I am not sure if you heard the discussion we were having so if you could, just for the record give us an indication of the reason for, firstly, the choice of 3 metres and, secondly, the decision to put it on the northern side but also the issue of what safe connection there might be to loop it back under the bridge on the eastern end to reduce the likelihood of kids crossing the road on the top side rather than going underneath the bridge.

**Mr DOWNEY** - My understanding is that on the eastern end it's quite easy to get underneath the new bridge -

**Mrs NAPIER** - Yes.

**Mr DOWNEY** - We can get under the existing bridge on the eastern side but I think it's the western side that there was an issue with, from my understanding.

**Mrs NAPIER** - Yes, I hadn't actually raised the western side.

**Mr DOWNEY** - Perhaps our engineer may be able to give a better description.

**Mr EBERHARDT** - Yes, probably in relation to the eastern side there will be a connection so that you can come off the bridge and then underneath the bridge to get to Anzac Park. That is what we are proposing again.

**Mrs NAPIER** - So, will there be a bit of a loop?

**Mr EBERHARDT** - Yes, a loop back in there because there will be a connection from the bridge going back to the wharf area as well. So that will overcome that issue.

In respect to the choice of the 3-metre width, I guess the options that council were given in the early stages of the bridge design were to have two 1.5 metre wide footpaths on each side or go for one, I think it was 2.5 metres suggested at that stage. What we've found as we've been progressing with the cycleway project between Turner's Beach and Ulverstone is that the requirement for shared pathways is now becoming a 3-metre width and our insurers basically advised that we should be going to that 3-metre width to allow for future situations. The other thing with the 3-metre width is that we don't have a barrier proposed there between the traffic lane and the shared pathway, so that does allow a bit of extra width for safety reasons as well.

On the selection of which side to put the 3-metre shared pathway, there was quite some debate internally . There are pluses and minuses on both sides but I guess at the end of the day we are trying to get a shared pathway link through, tying it in with the wharf precinct. The shared pathway will come across the river to the western side and will go along the foreshore or the top of the embankment of the river on the western side to link up with West Ulverstone. Had it been on the other side we would have had the issue of crossing back over once you got the western side and it's already been highlighted, the difficulty in trying to get an underpass on that western side. That's the main reason we went for that one. Also, from the point of view of viewing the actual precinct, if you can imagine once the old bridge is removed, the section there looking back to the wharf and the showground areas and back out to the mouth of the river will be fairly unique from

that point of view, so it was thought that that would be the most advantageous of locations. You can still view the Dial Range from that side of the bridge as well.

**Mrs NAPIER** - While we're talking about the walkway, is it envisaged on the western side that the bike pathway would go down - is it Tasma Street?

**Mr DOWNEY** - Tasma Parade.

**Mrs NAPIER** - Is it envisaged to go down Tasma Parade or are you going to take it down in front of all the properties?

**Mr EBERHARDT** - It's in front of all the properties. There's a 5-metre wide strip of crown land in front of those properties which are leased to the council so the intention is to go down the front of the proposed development there and then link back into Airforce Park area and then along past the boat ramp area and along on the river side of the showgrounds.

**Mrs NAPIER** - That would be great. What is council's view about whether there ought to be an underpass built into the construction of this new bridge to go under the western end to link up to whatever that other park is?

**Mr DOWNEY** - Brooke Park. I personally do not see it as that important. I think people obviously will have to cross the road to get to that park if what we are trying to achieve goes forward now. I think the important part is, as the engineer just explained, that we have been looking at a shared pathway out through West Ulverstone for a number of years as well and we just felt that if the one between here and Turners Beach was ever going to happen - and obviously Federal and State governments are very keen on giving out one off capital grant funds to build these pathways - that was the right side to put it on and that was the more important, probably long-term one to us, rather that trying to get back underneath it and the major cost, I should imagine, to get down underneath the bridge on that western side without crossing the bridge. I can understand what you are saying about the safety aspect.

**Mr EBERHARDT** - I guess our preference has been to make sure that we get the eastern side underpass, or that section of the pathway on that eastern abutment, right because that has always been a difficult situation with the height we are able to achieve under the existing bridge and still maintain the path above the water level.

**Mrs NAPIER** - So what kind of kilometre speed would you anticipate being set for that bridge area?

**Mr EBERHARDT** - I think it is designed for 60 but I would presume it is going to be about 40 kilometres per hour.

**Mrs NAPIER** - Which would be an implication if you have that pedestrian crossover on the western end.

**Mr EBERHARDT** - Yes.

**Mrs NAPIER** - Do you have any views about whether solar-powered lighting ought to be used or not?

**Mr DOWNEY -** One of the suggestions to me for one of the features was to build a water feature into it. I guess you already have the resource flowing underneath the bridge every day of course. You could pump it up and then have lights through it and all this sort of stuff and solar panels. It is probably the dollar in the end that determines a lot of these things. I know what you mean. We are not opposed to any solar energy usage at all but I think that the lighting fittings that are going in will be very energy-efficient type fittings and I imagine that would be good enough for now. Perhaps in the years to come - who knows? With a 10- or 12-metre drop in the tide you could obviously put some sort of generator in there. I said to Bevan as you were talking before that one of the diaries in here said one of the pathways would be under water by whatever date it is; well, perhaps by that time we might be able to walk on water. Who knows?

*Laughter*.

**Mrs NAPIER** - Before we walk on water - riding on bikes. There has been some discussion about the current configuration of cycle-friendly edging to the roads - and we have it well catered for on the northern side because of the 3 metres - but what kind of potential is there for commuter increase in the use of cycling within Ulverstone and what percentage of people do you think are likely to stay on the road section of the bridge when they are heading west, compared to crossing over and going on the 3-metre section?

**Mr DOWNEY -** I have never really given it much thought, to be truthful.

**Mr EBERHARDT -** I think the commuter cyclists, if they are heading from east to west, will stay on the bridge. Certainly the recreational cyclists will use the shared pathway.

**CHAIR** - Can I just raise with you the matter that I raised with Steve and Graeme about the interpretation and what involvement the council will have in that? The interpretation of the history and the crossings of the river and what part of the bridge you might keep?

**Mr EBERHARDT -** Council has a theme that was built into their cultural grants some time ago about the stories of Ulverstone. There are various signs linked in there. There is one down in the wharf area so the intention was to build on that with the area on the eastern side where the underpass would go, to actually do some display there, and also pick up the previous history on the other two bridges that were across the Leven. We've already done some historical research on what we could design to be on that display. The other concept in the early stages was, and I think is still allowed for in the tender, whether we can retain a section of the bridge and also give the engineering history of the design of that bridge, which is probably of interest to engineers. It's probably worthwhile for the public knowing about it but I think we can do something quite well on that historical side of it.

**CHAIR** - You're the engineer and that's where the interest is, but it is because of Sir Allan Knight's contribution to engineering in Tasmania.

**Mr EBERHARDT** - Yes. I think we picked that up either by retaining a section of the bridge or the interpretative panel needs to incorporate that.

**CHAIR** - Maybe a sculpture of the mayor alongside of it or something like that?

**Mr EBERHARDT** - We'll see how the funding goes.

**Mr GREEN** - I asked a question of the department about the pathway and the headroom that is required, which means that the new bridge has to be elevated by 500 mm. Perhaps you might want to talk a little bit about the consultation because we've obviously had evidence, given that there was quite extensive consultation between the department and the council. The consultation said that you were opposed to an underpass on the eastern side. In other words, you wanted an open pathway, open on the western side. Why are you so opposed to having an underpass on that eastern side? Perhaps you could talk a little bit about how the consultation process went and whether you were happy with that consultation.

**Mr DOWNEY** - If it's going to come up 500 mm that means the existing roundabout would have to be elevated again, which would be another cost. That was one of the reasons we suggested that it go on the southern side. It could curve straight into the existing roundabout because I think we spent something like $300 000 when we first put that in about four or five years ago.

**Mr GREEN** - But you're opposed to an underpass.

**Mr EBERHARDT** - My experiences with underpasses are that they don't have too good a track record from the point of view of safety - and just the perception you would have.

**Mrs NAPIER** - You're talking about public safety?

**Mr EBERHARDT** - Yes, public safety. That's why, I guess, we're leaving the door open as to whether we proceed with the one on the western side.

**Mr GREEN** - I understand that.

**Mr EBERHARDT** - On the eastern side we have the potential to have that area underneath that abutment as a fairly open area as you come into Anzac Park, particularly now that we're going to have the three-metre wide pathway. Also, that's where we would have that interpretation panel.

As far as the lifting of the roundabout is concerned, I'm hoping that the design and construct process will bring out some creative design on how to overcome the issue of having to raise the level. Anyhow, we'll have to wait and see.

**Mr GREEN** - And the consultation generally?

**Mr EBERHARDT** - It has been excellent. As the mayor mentioned in the submission, we've been working on it since 2005. The fact that we have had that good consultation process right from day one has meant that we've been able to field a lot of the concerns. If the public had any concerns they have been sorted out in the process fairly quickly.

**Ms AYTON** - We did have quite a lot of the community coming in and looking at the map at the office because it was at the front of the office.

**Mr GREEN** - The concept map?

**Ms AYTON** - Yes. Quite a lot of people were coming in and making comments at the front office and were very positive about it.

**Mr DOWNEY** - Chair, is this the normal process that has to happen with a major piece of infrastructure?

**CHAIR** - Yes.

**Mr DOWNEY** - It just seems strange to us that the Government have decided to spend *x* amount of dollars on a new bridge and I thought that would have been enough, but obviously it is not.

**Mrs NAPIER** - Not if it is over $5 million.

**Mr BEST** - This is a joint select committee, not just the Government.

**CHAIR** - We have members from both Houses. As Sue said, any project above $5 million that comes out of the public account is required to be approved by this committee. The Government can announce, of course, its policy direction or its aspirations, but the committee has jurisdiction to either approve or reject. We do not have any jurisdiction to recommend any changes to a project put to us.

**Mrs NAPIER** - We can encourage them.

**CHAIR** - Yes.

**Mr DOWNEY** - So this committee could say to the Government, 'We reject this new bridge and it shouldn't be built'. Is that binding on the Government?

**CHAIR** - Yes. If we say no, Mayor, you will know who to come looking for. Thanks for your time.

**THE WITNESSES WITHDREW**.