(No. 18)



PARLIAMENT OF TASMANIA

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

Major Redevelopment of Taroona High School

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

MEMBERS OF THE COMMITTEE

Legislative Council

House of Assembly

Ms Rattray Mr Valentine Mr Brooks (Chair) Ms Butler Mr Shelton

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1 INTRODUCTION

The Committee has the honour to report to the House of Assembly in accordance with the provisions of the Public Works Committee Act 1914 on the -

Major Redevelopment of Taroona High School

2 BACKGROUND

- 2.1 This reference recommended the Committee approve works for a major redevelopment of Taroona High School to provide a new purpose built music facility, conversion of some of the current music facilities to create five additional general learning areas (GLAs) and refurbishment of some of the existing music facilities to improve functionality and acoustic separation.
- 2.2 The proposed works have been developed in response to a number of identified deficiencies, which are a result of the age, nature, layout and capacity of the school.
- 2.3 The school is situated on nearly 12 hectares of land on the banks of the Derwent River in a known landslip area. The school was built in 1957 and there have been additions and internal refurbishment works since that time. The large area, ageing infrastructure, corrosive environments and land instability have contributed to the challenges of maintaining the facilities to a high standard.
- 2.4 The school also has a well-documented capacity issue. Current capacity stands at 1050 students and current enrolments are 1037 students. Enrolments are expected to exceed current capacity in 2019, with further growth to approximately 1240 students anticipated by 2023.
- 2.5 A large proportion of the GLAs are traditional in shape, restrictive in size and not appropriate for modern teaching and learning conditions, particularly with large class sizes of up to 30 often being accommodated. Existing GLAs vary between 49.5 and 72 square metres (sq.m.) of floor area compared to a contemporary minimum target of 75 sq.m.
- 2.6 The school has a strong focus on its comprehensive music program, which is very well regarded and is very important to the school community. However, current music facilities, which are housed in converted classrooms in C Block, are not fit-for-purpose. The current music facilities also suffer from limited acoustic control, which has adverse impacts on adjacent learning areas.
- 2.7 The school has consulted widely to determine a program of works that reflects the needs and priorities of its students and the broader school community. This has resulted in a work program with the following elements:
 - A new purpose-built music facility;
 - A rooftop terrace above the new music facility;
 - Refurbishing C block;

- Creation of an appropriate home grade area within C Block;
- Addressing the inadequate sound separation in C Block;
- Dedicated music staff areas; and
- An upgraded and more accessible entry.
- 2.8 The new music building will be located in the heart of the school and comprises:
 - Two large multipurpose rehearsal areas which can accommodate full orchestra practice;
 - Five individual practice rooms;
 - Three ensemble practice rooms suitable for group practice and specialist music tuition;
 - A new multipurpose classroom, which can also accommodate large group rehearsal;
 - New staff facilities, associated support space and a resource area;
 - Student and staff amenities, including an instrument wash area and a student kitchenette;
 - A multipurpose storage facility;
 - A new mezzanine, accommodating large music instrument dispensary and store, together with an informal student practice area; and
 - A rooftop terrace, which could be used as an external GLA, a school plaza for music performance and informal student use.
- 2.9 The two existing floors of C Block, which currently accommodates the school's music program, are also being upgraded as part of the works. This includes conversion of the existing upper level to five multipurpose GLAs with a central student breakout area and a new staff office. Minor works are proposed on the lower level of C Block to accommodate contemporary music. This will provide improved practice room functionality and a new acoustic ceiling will be installed to improve acoustic isolation for the refurbished learning area above and adjacent learning areas.

3 PROJECT COSTS

3.1 Pursuant to the Message from Her Excellency the Governor-in-Council, the estimated cost of the work is \$5 million.

The following table details the cost estimates for the project:

Description	Cost Estimate (\$'000)
Internal building works to C block	252
Music learning hub building works	2,980
Music learning hub site and services	720
Landscaping to new learning hub rooftop garden	98
Construction Contingency	550
Total Construction Budget	<u>4,600</u>
Up-front expenses including consultants' fees	386
Furniture and Equipment	140
Contingency and Post-Occupancy	174
Art Work	80
<u>Total</u>	<u>5,380</u>

Funding of \$5 million has been provided by the Tasmanian State Government for the project. Taroona High School has also committed \$380,000 to the project budget.

4 EVIDENCE

- 4.1 The Committee commenced its inquiry on Monday, 1 October last with an inspection of Taroona High School. The Committee then commenced the public hearing at Parliament House, whereupon the following witnesses appeared, made the Statutory Declaration and were examined by the Committee in public:
 - Rob Williams, Deputy Secretary, Corporate and Business Services, Department of Education;
 - Matthew Bennell, Principal, Taroona High School;
 - Tim Penny, Tim Penny Architecture and Interiors Pty Ltd; and
 - Esther Murphy, Committee Member, Taroona High School Association.

Project Overview

4.2 Mr Williams provided an overview of the need for, and the focus of, the proposed works:

Mr WILLIAMS - Thank you very much, Chair. Thank you to the committee for spending the morning at Taroona High School having a look around at the facilities. We appreciate your time in doing that.

It is a good time to be in education in Tasmania because we have may the largest building program in education possibly in a generation, possibly several at least for 20 years. We have a lot of projects going on. The benefit we want to get out of that is to make sure that when people choose public education in Tasmania they are choosing a really top system of education. We value education in all its forms but, representing public education system, this is a really good time because we are updating a number of schools around the state, especially high schools that missed out under the BER, Building the Education Revolution. Some schools the committee has seen recently are the same as they were when they were first built in the 1950s and 1960s.

In terms of the Taroona High development, Taroona is a school with a large population, over 1000, it is pushing 1100 now, and we have been undertaking building works there for a number of years to keep up with capacity. This development as articulated in our statement has the full support of the school community and the school association. One of the members and the chair of the association were at the visit this morning and we thank them for their time. Having the school community on board is a very important thing for us and we work very strongly with the school association to make sure that what we present to you is something we believe the school community strongly supports.

The obvious question with Taroona is its growth and you can see in the figures in the submission that we envisage that the growth will continue. The Government committed an amount of money for studies into an inner-city Hobart high school in the last Budget. Those studies are continuing. There is no outcome and no final report on that at this stage. We are still analysing the data. It is important in this case to make sure we get that absolutely right. When we know what that report says that will give us a sense of how we might tackle the issue of Taroona's growth.

.....It will provide capacity for the medium term, but not the long term.....If it keeps growing and that is very hard to predict, but it looks like it is on a growth trajectory, this will get us by for the next few years. By then we will have some sense of where we go on, whether there is an inner city high school or some other combination of things to help us.

..... Whether it is a new high school or whether there is some other configuration of schools, especially around the options with the year 11 and 12 extension program, how do we factor that into Taroona? That will be another part of the puzzle and we don't have the answers. For today, this is to get us not only just the capacity in the classrooms, but

something that the school has wanted for a very long time, which is a decent performing arts program. Taroona has a world-class performing arts and music program and produces a lot of musicians who go on to be influential in Tasmania. It is probably the school with the biggest and most successful music program in the state.

Normally we go for classrooms first, but having a balanced education is absolutely vital, because not everyone is going to be an academic. Some people are going to want VET, some people are going to want performing arts, and some people are going to want science. So we have to make sure that public education offers all those things as equally as any other system might. That is what we hope to achieve here.

4.3 Mr Bennell provided further background on the proposed works:

Mr BENNELL - As Mr Williams outlined, it is a critical time for Taroona High, not just because of capacity and growth for the school but also in general confidence in the public education system in Tasmania. Taroona is well known for its support for the whole child. Part of that is showcasing and developing creativity through the arts. Today you evidenced that in the arts on the walls at Taroona High. Our students are high performing. A number of our highest performing students take part in reaching out to communities, namely in the arts, and through the range of subjects that offer personal choice at Taroona and enable personal growth. That is what we set out to do. It is symbolic that this development sits at the heart of the school because that is what the arts do for Taroona; they are critical and the school has built around them.

Taroona has not had a central meeting place, nor the facilities to house cohorts of year groups to have grade-based conversations in grade-based assemblies. Enabling a space that has capacity for around 300 kids to meet and to be talked to and to break in different ways is essential. The plaza area on top of this facility will provide yet another outdoor entertainment space and assembly area. It is perfect for our school festivals, which we are proud of and we celebrate with our school community, and also an opportunity for community to make use of the amazing site that is Taroona and to use our site outside school hours.

Flexible, contemporary learning spaces are not typical of those you have seen at Taroona today but all our planned spaces meet that need. They will be open, light, welcoming and well supervised.

..... In this proposal, we are addressing many of the access issues that a difficult site provides for us. As you saw today, it is not an easy site for people with access and challenges. That has been central to the work we have done.

.....You saw the C block today, which is our most challenging building. It needs some tender love and care and we have been adamant that has to be a part of it and that cannot be a poor cousin. During this process we need to make sure it is a good facility and fit for purpose. The other work that we have done is around the master planning and further consultation needs to be undertaken with our community around the master plan for the site.

Planning and Development Process for the Proposed Works

- 4.4 The Department of Education's (the Department) written submission noted that a comprehensive planning process had been undertaken to determine redevelopment priorities. Some of the key issues identified within this process were:
 - Taroona High School is a constrained site, across multiple levels within a landslip area.
 - The school is running at full capacity and student numbers are increasing.

- There is limited opportunity for providing year group cohorts and home areas. It is important for Y7 and Y8 to have their own areas but engaged within the school community as they transition to Y9-10.
- There has been incremental development of individual buildings across the site.
- External circulation within the campus is constrained, not student focused and lacks engaging or coherent landscaping.
- The site has a high level of uncontrolled visitor permeability. The 'Front Door of Administration is remote and difficult to access.
- There is a concentration of learning areas within A-B Blocks which limits capacity for contemporary teaching.
- The existing building which accommodates music (C Block) is not fit for purpose, as it was formerly classrooms converted to rehearsal and practice areas.
- There is an opportunity to enhance the iconic waterfront/ environmental relation to site.
- There is an opportunity to utilize C Block to provide additional classrooms, should music be relocated in a purpose-built facility maintaining key relationships of music/gym as the major event space.
- Currently music impacts on adjacent learning areas and has limited acoustic control.¹
- 4.5 Ultimately a Strategic Site Development Plan and Master Plan were developed to inform not only planning for the current proposed works, but for any potential future development. Mr Penny provided further detail on this process:

Mr PENNY - We have gone through a review of the existing building fabrics of the school. Part of the brief has been to identify areas of key need that ultimately forms the brief, which is what our instructions are. We have then gone through a high level consultative process to understand how the site works and how to make the most of the site, relative to school needs. We have ended up with two key documents. One is a strategic site development plan that talks about potential aspirations both at a community level and an education level, and then ultimately the master plan that specifically deals with how to best build a new music facility.

- 4.6 The development of a Master Plan resulted in three options being considered for immediate works to overcome key constraints:
 - A) Major redevelopment of the existing music building (C Block)
 - B) Demolition and rebuilding of C Block
 - C) New development on a greenfield site and retention of C Block with some modifications²

¹ Department of Education submission, page 11-12.

² Ibid, page 12.

Ultimately, Option C was selected as the best solution to meeting the schools current needs.

4.7 Mr Penny expanded on the reasons that construction of a new purpose built music facility was considered the best solution:

Mr PENNY - There has also been a fairly exhaustive assessment of the existing building fabric, given its age and condition. Part of that process has been to have a look at C block to see whether the budget could realise this potential development utilising that existing building fabric. The conclusion we very reasonably came to was that to convert C block into a reasonable purpose-built music facility would be in excess of the budget. Far and away the most realistic solution was a new purpose-built facility that is then best located in the heart of the school campus.

The other most obvious thing is that, should you choose to develop C block, ultimately you are taking out a significant component of classrooms and the school would have major disruption for a significant period of time. Standalone development enables us to deliver without significant interruption. There is going to be some interruption, at the end of which it delivers new rooms for music and new classrooms which are designed to a contemporary level as well as refurbishment of C block to enable additional classrooms to meet the need that has already been discussed.

That is how ultimately we came to the conclusion of siting it into the middle of the school and that also touched on tracking some students and getting a set feel for what is not often able to demonstrate when you are trying to go through an evidence-based design process. It is easy to bring some assumptions to the process and part of the GPS tracking was that it gives you a very tangible illustration about movement, densities and activities within the site. You could very easily see that it is being used as a street, the oval is highly desirable, the ocean side is highly desirable and the heart, in fact, is underdeveloped. What we have proposed is a new two-storey building that will provide a concourse at the level, level access at the ground but also take into account some of the complexities of music......

4.8 Mr Penny also noted that the planning process had given the school a sound framework within which to plan any future developments and would allow the school to make best use of the site:

Mr PENNY - We were trying to capture and identify at the high level site plan where the key aspects are of things to build into the school when it is thinking about future capital works.

......Within the site strategic development plan we've said things that the school is having separate conversations about. Why wouldn't you think about relocating the school canteen to a protected environment, such as developing underneath the gymnasium and develop that whole forecourt, which at the moment feels like a road and a carpark, whereas it is in the heart of the school. We've said, 'Why wouldn't you think about, at the lower level, opening up some of the library and using some of the external spaces?' Equally, on the plan, we have also alluded to the fact that if, for instance, on the hockey fields you built some infrastructure so that rather being a dumb retaining wall, there might be a series of landscaped terraces for community use. The front area is highly used in winter for the soccer series, but there are no amenities. There are no public toilets, for instance.

It was that level of being able to pull together all of the disparate activities and threads to make the site realise its full potential.

Consultation

4.9 Mr Bennell outlined how engaging with the school community had been central to developing the scope of the works:

Mr BENNELL - The consultation process we have undertaken has taken a couple of parts. First, staff, students and members of our school community have visited some of the most recent developments in Tasmania and in Victoria to see some of the great spaces, particularly the specialist music facilities we need to meet the needs of our students.

We took an innovative approach to engaging students. We think it may be the first time we have done this where we have tracked student, using geospatial technology. They have worn GPS trackers around the school, with parental consent of course. We have mapped their flow and movement in amongst the spaces and how they have transited and crossed the space at Taroona. We overlaid that across the site map and then debriefed it with a group of key students to really understand what it is our students are doing and how the data led approaches to the changes and redesign. The students loved it. When we had the conversation with students it was really interesting to unpack the way they use the spaces the way they do, and why they move in that way. It helped us understand what we had to keep and what we could jettison in the design.

It influenced the flow of student movement and influenced the way we have designed the proposed music building in particular. Students can move in from one part of the building and move out through the other part. It enables a seamless transition for students to drop their instruments and keep moving on the way out. We debriefed that to understand.

4.10 The Committee questioned the witnesses further on the involvement of the school community in the planning process:

CHAIR - Can you take me through the involvement of the student body in the consultation process, in what the committee has in front of it? That is all we can consider at the moment. But it is a really important aspect as we go through these schools what involvement the kids have. Obviously, they weren't going to design it themselves; we have expertise to do that. Over the years of these upgrades a really important aspect we've seen is the involvement of the student community and what they did and how that was communicated across the broader student body, given that you have around 1050 students? They weren't all in the room going through the details.

Mr BENNELL - Thanks for the question, Chair. In the very first phase we convened a student focus group that consisted of representatives from a number of our existing leadership groups in the school. They were asked to come forward and work alongside myself and the consultant architect in the very early phases and we helped them understand the scope and purpose. They also helped us understand and develop a set of design principles that were layered on top of what the staff and parents had investigated at the alternative sites. Students were critical in the crafting of those pieces of work and those design principles have stayed as part of the work all the way through. When we were designing the brief, they were right at the centre of that work.

Those student groups have been reconvened at regular intervals and given regular updates about the work. It is a challenge to share that more globally with students because, as you can imagine, the designs change so dramatically from drawing to drawing. We have been able to regularly communicate updates through our school newsletter, which goes to the entire school population and has allowed them to understand this is where we are today and we may be somewhere different down the track. We have had plans on display as the process has continued. Students were involved in some conversations at a technical level around music in particular with the flow of students, as Tim described, around the drop off and pick up of instruments and provided some feedback as to the best ways to manage that.

The next phase is where they get to buy in because, hopefully, we will have settled the general principles of the design and some of the finishes touched get to be owned by the students. In particular, the arts project; I would like them to be a critical part of the allocation of the arts and on the committee deciding that work and working alongside our landscape architects.

Mr PENNY -It is also worth touching on that we have undergone, as Matt touched on, engagement with students and teachers. It has not been architects working in isolation just with the project team; it has been a very conscious and consultative process.

4.11 Ms Murphy was also able to detail the level of engagement with the Taroona High School Association. Ms Murphy highlighted the importance of the comprehensive consultation process in determining priorities for the current redevelopment that did not limit opportunities for potential future development:

Ms MURPHY - This project discussion has been going for a year. Matters come to the school association and they let us know this money was allocated. Matt was very clear upfront as to how he planned on communicating and how he would like to engage with the association as well as with the wider community. The school association formed a subcommittee to support this capital works program. As part of that, we had one of the members of that committee participating in the process, attending the fortnightly meetings whenever they could so we could have awareness and input into what was happening.

We have been going through plans at every meeting, understanding the changes and the iterations. From a school association point of view we have very much been engaged. The school association has no problems in sharing their views and any concerns and they have always been considered. It has always been a healthy and constructive conversation. From my opinion it has been quite a robust process to get where we are today. We have been very clear around what our priorities are for the space and it is very much around meeting the needs of a learning space for the children and being very practical and pragmatic in that.

We did not want to go down this path unless we understood how it was going to work within the whole school curriculum, within the whole school community to make sure that it flows. I think all of us have had experiences where you build these one-off buildings and it feels like the school has evolved with these little add-ons and it is to a point where the flow was not working for the students, especially with those pressures of capacity.

We were very interested in making sure that before we commenced anything that we looked at the master plan and understood how this is going to work best for the school community, not just in isolation as we do intend to develop this school over the years. So how would that work? This is just one issue for the school. It is our immediate issue but once we sort this one out there will be more in the future. There are other issues such as Matt has alluded to with the gym that is at capacity and things like that.

We did not want to build something or spend the money in an area that limited our options for the future. The collaborative approach that we took has resulted in a really good outcome. We are really pleased with it.

The other thing is as part of that we did engage with the wider community through the forum of the Taroona Community Association which approached us to ask for more information. We attended one of their meetings. Again, we took all the plans; Matt spent about an hour and a half taking them through quite a lot of detail, the strategic plan as well as the details of this plan. From our perspective it has very much been a collaborative approach to understanding how we are going to get to where we need to be.

Ms RATTRAY - Is there a lot more to be done from what your message is?

Ms MURPHY - Absolutely. For us this is just the first step.

CHAIR - Does the school association support this project?

Ms MURPHY - Absolutely.

4.12 The Committee was also interested to hear about the level of consultation undertaken with the local community and how this had influenced the development of the proposed works:

Ms RATTRAY - I note on page 10 of the submission it talks about the consultation process. I know from this morning's site visit that there is a significantly built up area around it. I am interested in what engagement has been undertaken with neighbours in regard to this, understanding this is not the whole box and dice and potentially there is something else to come in the future? Also, I note that it says:

"Direct engagement has also enabled specific advice to be provided regarding the scope of this project."

I'm interested in what that was and what was taken on board from that consultation process, if that is possible?

Mr BENNELL - The predominant group we have worked with is one of the local community organisations, the Taroona Community Association. We've had the opportunity to meet with them and share the thinking around that. When I referred to the future work to be done and I said 'master plan', I actually meant site strategic plan to further understand the boundaries of the school and how we can best use the entire facility.

Certainly, we've been sharing updates with our local community through our Facebook page and any other opportunity we've had to engage locally; invitations to our most direct neighbours directly and shared with them the plans as they stood, certainly in the early phases to help them understand the process. We've had as much direct engagement as possible.

Our school association has also been incredibly active. A number of the people live - when I mean locally, I mean are also our neighbours. They formed a subcommittee and continually work as the interface between the school and helped resolve any of those 'unknowns', if you like, with our neighbours and also the wider school community.

The scope of the works relates to the specifics in the building of our music facility, for example; being really clear on the technical aspects and what that needs to look like, and down to the level of detail required for community access, for example, to make use of these facilities.

Design of the New Music Facility

4.13 Mr Penny provided the Committee with further detail on the design of the new music facility:

This building is not prominent in the sense that two-thirds of it is going to be subterranean. The element that is open and then permeable is within the heart of the school where you need the most connections that relate to the adjacent music areas, to administration and all the other classrooms in B and A blocks. Music facilities are also highly technical in being able to have acoustic treatment at contemporary sites, sound isolation so you are not getting disruption. You are getting students able to work in safe environments, to realise their potential and with good staff access and overview.

The other thing to touch on is that they are a complex range of spaces, some are large twostorey volumes and some are small, not cubicles, but in the order of 16 square metres. These come with their own set of issues associated with supervision, what is going on down the end of corridors, being able to integrate it properly into the whole facility so from a staff management point of view it works seamlessly as a music environment.

The other thing that I should also maybe touch on is that we have modelled this should the needs change from our pedagogy point of view into the future. This building has the capacity for redevelopment and adaption such that music might change in the curriculum of the high school in the next five to 10 years. This building has the capacity to be converted into more classrooms and be redirected. Some of the really basic ways of doing that is putting some additional building services such that you might have additional plumbing connections, you might be able to modify the air conditioning, and you might be able to connect into the water. There is a high level of adaptability and flexibility that is driven by the department's desire to be able to have flexible and adaptable building stock going into

the next 10 to 15 years. Of course, it is designed to have an additional floor put on it should the school numbers continue to escalate. Ultimately it is not just a car park at the top.

Internally the environment is going to be designed to a good quality but robust environment for a school. One of the things that is quite unique to this is that the large orchestra room has capacity for some of the walls to open up. This means whole school community engagement. When they are putting on performances, parent and community engagement, together with the planning to be able to put a large multipurpose classroom to the building perimeter so again there is the capacity for the community to use those spaces out of the school times. This has come in to inform the general planning of the building.

Internally what would you be reasonably expected to see? You are going to see some timber finishes, you are going to see a high level of acoustic control that is going to be ceilings that do have some timber slatting to be able to absorb the noise energy so it would need to be a light, lively, engaging, contemporary space suitable for students from year 7 through to year 10.

The other little trick to planning this facility is that in the school community, of which about 80 per cent get involved with music, means every day they come and drop off their musical instrument and every afternoon they then collect it to take it home. That is 600 plus students coming in and out of what you saw as a tiny little corridor in a horrible little store that has no work flow that requires a high level of staffing management; so it is ineffective and just isn't satisfactory. Part of this building enables students to come through at the mezzanine level into a large well-designed storeroom to be able to collect their musical instruments so dispensing the musical instruments doesn't impact on the other teaching spaces.

.....It is going to be energy-efficient. The footprint, as it shows, is that it is a two-story building, of which the large, two-story component is at the back of the excavation. We came to the conclusion that is a good way to deliver value for money. Trying to put energy into spaces that are large, tall volumes can be quite costly. In this instance, by making it subterranean means it is a very stable environment. There is not a lot of external glazing so that gives us a very stable environment and we don't have to put a lot of energy into the building to heat and cool it.

..... The other thing that is obvious in this is that it encapsulates the sound. You wouldn't have noticed today but had you gone to the site during school time and I am sure the neighbours will attest to this; it is vibrant school and there is a lot of music going on when you've got 70 kids doing orchestra practice in spaces that are effectively single plasterboard, timber, single-glazed enclosures. It is highly disruptive within the whole of the school. From an efficiency point of view for sound, that is part of the inherent design values of that, too.

..... the building is largely precast concrete panels around the building perimeter with glazing where there are smaller areas. The sound activity will be contained within the envelope. That is it at a technical level; we are containing the sound within the building, whereas at the moment in C block it isn't like that at all.

There are some important connections to realise here. There is a lot of activity between this building and the gymnasium. The gymnasium is where the large performances are. We have to think about the connect-ability between this building and the gym because when there is a showcase, all the instruments need to come out of this building and go up the road and connect into there. There are some functional work flows, just as at the ground level we have established that to be at the same level at the bottom of C block. We have done that consciously so there is a good flow from what will be contemporary music immediately adjacent to that so the two can connect. When you are student and you might want to go to do some smaller band practice, you can book the ensemble rooms and go across on the same level. They are the things that fed into that work flow and the connectability and why it is in the centre.

4.14 The Committee noted in the Department's submission that a key element of the Strategic Site Development Plan and Master Plan was "Benchmarking best practice educational design for contemporary music facilities for Y7 -10"³. The Committee questioned the witnesses on how this had been incorporated into the building design process:

Mr VALENTINE - You talked about reusing panelling and the like in that music room and I would have thought wood presents a reverberation rather than the deadening of sound and you are talking here about benchmarking best practice education design for contemporary music facilities. Can you tell us the reasoning behind that?

Mr PENNY - Yes, happy to. A little bit of acoustic science. This room is a good case in point. You will notice on the ceiling a combination of solid timber slats and gaps. That is one thing to hold in your mind for a moment. The other is having a room that is full of the sound absorbing material is to a musician likened to playing under water. It deadens the sound and it is very difficult to get a lively, bright sound. Good spaces have a combination of some reflective surface together with some absorption. That is what you will see and what we are designing and it is a combination. Equally, it is important to say, at the far end of the spectrum you can spend a lot of money for performance concert halls levels of which we do not have the capacity in this instance. It has to be designed around a multipurpose facility within the budget but needs to satisfy the requirements of music.

The small rooms need to not have too much reverberation; they can hear the instrument they are playing and look at themselves as they are playing so they get the structure of what they are doing right. Equally, when you are in an orchestra room, you need to be able to hear the wind instruments as opposed to string instruments and for the teacher and the students being able to hear what they are doing.

Mr VALENTINE - Who are you benchmarking with or what to?

Mr PENNY - Personally, we are benchmarking against acoustic engineering design requirements. As part of this process, at the invitation of the school, I went to Melbourne and had a look at a couple of performing music facilities for independent schools to ascertain what level of acoustic engineering they were providing to be able to provide the best quality environment. At the far end of that spectrum, they are moving grand pianos by lifts over three levels. We are not trying to do that here. We are trying to design a beautiful facility that will provide the students with great facilities for them to continue their studies.

Redevelopment of C Block to Provide Increased Enrolment Capacity

- 4.15 The Committee noted that the school's music program was currently delivered from C Block, which presented a number of issues. These issues primarily arose because C Block had not been designed as a music facility, and was in fact comprised of classrooms that had been repurposed for music.
- 4.16 The Committee also noted that sustained growth in student numbers was anticipated and the school's current capacity could not adequately cater for this growth. The Committee recognised that the school's comprehensive consultation and planning process had not only resulted in an opportunity to deliver a music facility that was fit-for-purpose, but was also an opportunity to cater for the expected growth in enrolments by refurbishing the upper floor of C Block to provide five additional GLAs.
- 4.17 The Department's submission highlighted the expected growth and noted the impact five additional GLAs would have on the school's capacity:

³ Ibid, page 12.

		Census data				Current Projections		
	2017*	2018*	2019	2020	2021	2022	2023	
Year 7	248	284	266	290	330	305	313	
Year 8	273	240	288	268	290	327	304	
Year 9	227	272	244	288	270	290	325	
Year 10	261	233	278	254	295	279	297	
Total FTE	1009	1029	1076	1100	1185	1201	1239	

*Actual first term census data

The 2018 mid-year census FTE for 2018 is 1037.

The capacity of Taroona High School is currently 1050. The Department is assisting the school with short term solutions to increase capacity by converting existing spaces.

Five new GLAs will be provided with the development taking the number of GLAs from 42 to 47, increasing the estimated capacity of the school by 125 FTE. There continues to be strong growth in the enrolment for many of the feeder primary schools including Taroona, Albuera Street, Waimea Heights, Princes Street and Lansdowne Crescent.

The Department is strategically assessing all options to address the capacity issue into the future.⁴

4.18 The Committee sought additional comment from the witnesses on the school's enrolment projections:

Ms RATTRAY - In regard to school numbers, on page 7 of our information, the submission, 2018 - 1029 students with 1037 midyear - and then the projection for 2023 is 1239. From your comment, principal, you said almost 1100 students. Are these numbers on the low side? Are you expecting that 2023 will be more than 1239?

Mr BENNELL - Those projections are interesting because currently the intake that we take from our feeder primary schools is going up by a few percentage points each year. Traditionally we have taken between 66 per cent and 67 per cent of available grade 6 students into year 7; for 2019 that looks closer to 70 per cent. It is quite difficult to actually make those projections more accurate than what we have here. This will be going in on existing around about that 70 per cent mark. Should those patterns continue, the sky is the limit. It is a difficult but nice problem to have for a public education system.

⁴ Ibid, page 7.

Ms RATTRAY - The total FTE could be somewhere around 1300 FTE in 2023?

Mr BENNELL - I am not sure I would estimate that high but well above most.

4.19 The Committee also sought further information on how long it would take for the additional enrolment capacity provided in this development to be exhausted:

Mr VALENTINE - I had that question down to ask about the potential for a central city high school. In relation to this particular development, is it fair to say that this development is needed in order to provide sufficient space for the current school population as opposed to the future population?

Mr WILLIAMS - It will provide capacity for the medium term, but not the long term.

Mr VALENTINE - Long term being 20 years out, you mean?

Mr WILLIAMS - I think probably less than that. If it keeps growing and that is very hard to predict, but it looks like it is on a growth trajectory, this will get us by for the next few years. By then we will have some sense of where we go on, whether there is an inner city high school or some other combination of things to help us.

Landslip Issues

4.20 The Committee noted that the school was located in a known landslip area. The Committee sought assurance from the witnesses that these issues had been adequately addressed in the planning process and would not affect the proposed works. Mr Penny indicated that expert geotechnical advice had been sought, and assured the Committee that there would be no adverse impact on the proposed works:

Ms BUTLER -I also have a question for Tim with the design of the site. I noted in the report it states that it is zoned as a landslip area and I am sure you certainly would have taken that into account. Are there any concerns with the eventual master plan with more development that could potentially be a risk to that slip?

Mr PENNY - To answer your question very quickly, no. To give you the background to that, the landslip is not incremental. It is a significant area of which Taroona High is one part. What you are seeing, not that I am a geotechnical engineer, but as I best understand it is it is a large volume that is moving slowly and incrementally down towards the Derwent River. Taroona High is not rated high risk. It is rated medium risk, but it is within that zone. That is also then picked up within the planning scheme and so there are lots of prescribed steps along the way that we have had to go to understand what the risks are. To that end, we have engaged Bill Cromer to do a geotechnical assessment around some of the edges. He concluded that with the appropriate mitigation it was reasonable to undertake what we are proposing.

We then sought further higher level expertise from a company called Scherzic, which then undertook onsite coring of samples down to 19 metres for taking samples and remote testing to understand exactly the sub-surface conditions. He has concluded that with appropriate risk mitigation requirements during excavation, such as some shoring, because it is largely clay. This is not a rock site and so the soil does not have a lot of high capacity to support itself when it is excavated. The risk ultimately is when you are digging the hole. The way we have designed the structure is that it is excavated and it is made safe whilst it is constructed. Then we are putting back the ground and making sure any of the adjacent structures are safe. We have received advice at a high level from experts in their field to say it is perfectly safe.

Project Costs

4.21 The Committee sought confirmation from the witnesses that the design, specifications and materials for the project were not excessive such that they

would have a negative impact on what could be delivered with the funding available. The witnesses confirmed this, noting that a pragmatic approach had been taken to designing the project, with a focus on learning spaces, orthodox building design and the use of readily available local materials where possible:

CHAIR - Moving to the design specifications, Tim, is there anything in here that is ridiculous? Do we have to freight in any varnish from Finland if you run out, or any carpet that you designed from Denmark or anything like that?

Mr PENNY - No, Chair, there is not anything ridiculous. This is a standard building at that level in that it has a focus on materials that can be provided locally. A good case in point is the timber and timber veneers. To get the sheer volume of construction within our budget we have to be very pragmatic. It is largely a conventional building that is a post-tension slab with fairly a conventional approach to external cladding, but internally it would have Tasmanian elements.

CHAIR - Are there any ridiculously expensive design parameters within the curvatures or curve walls that don't need to be there?

Mr PENNY - No. This building is remarkably free of curves, if I might say that.

CHAIR - The reason I ask that is because it costs more to build so you get less for your money, in my opinion. It does cost more to construct it and maintain it and therefore, in my opinion, that is part of the -

Mr VALENTINE - There is a balance between pleasing to the eye and a square box.

Mr BENNELL - Chair, may I comment on the cost? We recently reviewed the size of the rehearsal spaces in one of the latest iterations. We found that we could reduce the capacity of this build by around 100 square metres, which was really quite an important step for us in meeting the budget provisions and we went looking for any gains. That took quite a deal of technical expertise of both one of the key staff members, Glen Schultz, and the team to find that 100 square metres. They undertook that in good faith to make sure we came under budget.

CHAIR - As Mr Valentine pointed out, we don't want a square box but we also don't want to steal the public's money. It is public money for a school whose fundamental requirement is developing our next generation of kids. We always need to remind ourselves as part of this process and part of the requirement under the act we assess it under, is it value for money? It is written in the act that we have to consider that, so that is the reason I ask.

Mr WILLIAMS - Chair, the way we approach these builds is that the focus on teaching and learning spaces is absolutely the priority so that we don't spend money on things that look nice out the front of schools, that we get down to the nub and we re-use. We tend to not knock things down if they are still usable. We will be repurposing things. We really try to stretch as much as we can out of the money to make sure we have got the learning spaces as our first priority.

4.22 The Committee was aware that some recent tender processes conducted by the Department had resulted in bids higher than the allocated budget. The Committee sought clarification on how this would be managed if this issue arose with the project tender bids:

Ms BUTLER - In relation to that, I notice on page 17 under 'identified risks' at the top of the 'risk mitigation strategy' you have:

The tender will be packaged to allow reduction in scope should the tender sum exceed the pre-tender estimate.

What part of the current plans would probably be first to be cut?

Mr PENNY - Not so much a building envelope, but a focus on the building services. Significant parts of this building are things like the air-conditioning, the heating, and the heating assemblies. History has shown that that volume and area will always be usable for a school. Where you have compromised and had to diminish footprints ultimately leads to a substantial compromise that is always difficult to work around from a school's point of view. Our focus has been to put some priorities around building services so that we can prioritise them. There will be a cost plan done prior to going to tender so we will be confident in being able to know what those costs are.

Mr WILLIAMS - We would also go back to the committee that works through this - the school association, the school staff and the students who are involved. If we get an unfavourable tender we go back to the same people who set up the scope. We try to make sure we manage expectations so that we do not have to do that very often.It goes back to the process again to allow the stakeholders to say what they want to do. Sometimes it can be the finishes and sometimes it can be the nice-to-haves in the spaces that go.

Does the Project Meet Identified Needs and Provide Value for Money?

4.21 In assessing any proposed public work, the Committee seeks assurance that each project is a good use of public funds, meets identified needs and provides value for money. Mr Bennell confirmed that the proposed works were definitely needed, they addressed the priorities that had been identified by the school community, and delivered value for money in using public funds:

CHAIR - I have a couple of questions, Matthew. Do you believe this is good value for money for the Tasmanian taxpayer?

Mr BENNELL - Without question.

CHAIR - Will it deliver according to the stated purpose?

Mr BENNELL - Yes, we have been really careful throughout the whole process to make sure the stated purpose stays front and centre to all of our decision-making. We have tested that a number of times, so I feel really confident about that.

CHAIR - As the principal of the school, do you feel the work is necessary and required?

Mr BENNELL - I think, after your trip to the school today, you would agree with me to say that is clearly the case.

5 DOCUMENTS TAKEN INTO EVIDENCE

- 5.1 The following document was taken into evidence and considered by the Committee:
 - Major Redevelopment of Taroona High School Submission to the Parliamentary Standing Committee on Public Works Department of Education 1 October 2018.

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 deliver a new, state of the art music facility located in the heart of the school, which will complement delivery of the school's highly respected, comprehensive music program, and overcome recognised deficiencies with the current music facilities. The proposed works will also provide five additional GLAs on the first floor of C Block to relieve the known capacity pressures arising from sustained growth in student enrolments. The ground floor music rooms in C Block will also be refurbished to ensure they are fit-for-purpose and to reduce the acoustic impact on adjacent learning areas.
- 6.2 Accordingly, the Committee recommends the Major Redevelopment of Taroona High School, at a cost of \$5.38 million, in accordance with the documentation submitted.

Parliament House Hobart 21 November 2018 Hon. Rob Valentine Deputy Chair