



---

PARLIAMENT OF TASMANIA

---

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

# New Burnie Primary School

---

*Brought up by Mr Best and ordered by the House of Assembly to be printed.*

---

## MEMBERS OF THE COMMITTEE

Legislative Council

Mr *Harriss* (Chairman)  
Mr *Hall*

House of Assembly

Mr *Best*  
Mr *Green*  
Mrs *Napier*

## TABLE OF CONTENTS

INTRODUCTION .....	2
Policy and Planning Initiatives .....	3
1.1 Strategic Asset Management Plan .....	3
1.2 Schools Amalgamation .....	4
1.3 Building the Education Revolution ( BER ) .....	6
The Tasmanian Curriculum Framework .....	7
Existing Facilities and Context .....	8
1.4 History of the Parklands High School Site .....	8
1.5 History of Capital Works .....	8
Proposed Works – Site Master Plan.....	8
1.6 School and Community Consultation .....	8
1.7 Asset Needs Assessment.....	9
1.8 Site Constraints and Master Plan .....	9
Individual Building Brief and Design.....	10
1.9 General Functional Requirements.....	11
1.10 Specific Teaching and Learning Spaces .....	11
1.11 Multi-Purpose Hall.....	12
1.12 External Spaces.....	12
Construction.....	12
1.13 Environmentally Sustainable Development Strategies.....	12
1.14 Construction Methodology .....	13
Building Services and Structure.....	14
1.15 Power Supply .....	14
1.16 Lighting.....	14
1.17 Fire Detection System.....	14
1.18 Mechanical Services .....	15
1.19 Interface Facilities.....	15
1.20 Communications / ICT.....	15
1.21 Public Address .....	16
1.22 Hydraulic Services .....	16
1.23 Structural Design .....	17
Project Funding.....	17
Cost Estimates.....	18
EVIDENCE.....	19
DOCUMENTS TAKEN INTO EVIDENCE.....	31
CONCLUSION AND RECOMMENDATION.....	31

## **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 development of a new primary school in the Burnie Area located on the parklands High School site.**

The submission of the Department of Education was as follows:-

The proposed new school will accommodate up to 500 students and has been made possible by the agreed amalgamation of the Brooklyn, Acton and Upper Burnie primary schools. The project is recognised as an exciting opportunity to create entirely new teaching, learning and support areas, to establish models for excellence in 21<sup>st</sup> Century curriculum and pedagogy in Tasmania.

Alongside teaching and administration, the new school has been designed to incorporate early learning (0-4) and child support programs, as a key community touch-stone. Early learning staff and up to four support officers will offer a range of services beyond the traditional roles of teaching and administration, including counselling and speech therapy.

In early 2009, consultants were engaged to consider the merits of a number of potential sites, and to confirm the spatial requirements of a new school. Based on these investigations and reports, an area of green space to the North West of the existing Parklands High School site was identified as the ideal location for placement of the proposed new campus.

Concurrently, a State-wide survey and consideration of a number of schools in South Australia and Victoria was undertaken by a working group of Education representatives. This working group ultimately identified the recently completed St Aloysius Catholic School, located in Blackmans Bay Tasmania, as a preferred model. The working group considered that this recently constructed facility displayed the type of collaborative teaching and support spaces best able to meet the current and future demands of a new primary school. It was agreed that this existing design could be tailored to suit the proposed site, and would offer considerable savings in terms of project fees, documentation and overall project timeframes. Accordingly, DoE engaged architectural consultants ARTAS, the designers of St Aloysius, to collaborate with the Education Department, principal and community to further develop this building model specifically for the available Parklands site.

Preferred teaching spaces, or 'pod', design options were presented to the project steering group for discussion and agreement, and with minor amendments, adopted for use on the new site. Concurrently a master planning process was undertaken, proposing an arrangement of teaching, outdoor, support, and community facilities integrated across the site.

With the design direction agreed, project budgets were determined and finalised, with a maximum funding budget made available for this work at \$14.6 million made up of amounts received in part from the Nation Building Economic Stimulus Plan, Building

the Education Revolution ( BER ), Primary Schools for the 21<sup>st</sup> Century and National Schools Pride program allocations, and Government funding within the Capital Investment Program.

## **Policy and Planning Initiatives**

### **1.1 Strategic Asset Management Plan**

The proposal to develop the new buildings on the North West corner of the Parklands High School site responds directly to the DoE Strategic Asset Management Plan (SAMP) and reflects the significant opportunity arising from Commonwealth BER funding allocated to the three primary schools that will merge.

The DoE 2006 – 2009 Strategic Asset Management Plan (SAMP), approved by the Treasurer in July 2007, provides the strategic framework for the efficient use and management of property and built physical assets, consistent with corporate goals and objectives, and in compliance with Government directives, financial management strategies and legislative requirements. The plan sets out the department's goal of optimising built asset resources to support current and future community needs and best practice, and to enhance contemporary teaching and learning practices.

The prime objective of capital investment as outlined in the SAMP is to deliver assets that support and enhance contemporary teaching and learning practices, through the following planning and design elements:

- differentiation of space and functional areas;
- accommodation of all integral functions;
- flexibility;
- shared use of facilities;
- encouragement of partnership arrangements and ;
- access to information and communication technology (ICT).

In addition to the SAMP, the DoE is guided in the management of assets by key government planning initiatives, which are interpreted and embedded in DoE policy and service delivery approaches. These include :

- Tasmania *Together* – vision and goals for the Tasmanian community. The impact of this on asset planning generally emerges within departmental planning frameworks;
- The Tasmanian Curriculum Framework is a refinement to the previous Essential Learnings Framework for the Kindergarten to Year 10 age group;
- Student at the Centre which is a plan designed to support Tasmanian public schools to further improve both the educational experience and the results of students ; and
- Building Better Schools policy framework which enables the Department to implement an approach to investing in school infrastructure which is based on a number of core project planning principles.

## 1.2 Schools Amalgamation

On 17th February, 2009 the Premier called all of the Principals of schools and all of the Chairs of School Associations across the state to a meeting in Launceston. At that meeting the Premier outlined the BER program and invited school communities to use the possibilities presented by the BER and School Futures Funds monies to look at collaboration and possible mergers.

The seven 'Burnie City' primary schools, Acton, Upper Burnie, Brooklyn, Montello, Burnie, Havenview and Cooee have capacity for more than 2000 students, with current student numbers at 1450. There has for some time now been a steady reduction in student numbers in Burnie's primary schools and even the more optimistic population projections indicate that there are now, and will be, more primary school space than is required.

There is a responsibility and a need for the Department and school communities, as expressed by the Premier and Minister for Education and Skills, to look closely at urban areas where there is clearly a number of schools significantly under utilised (table 1).

**Table 1**

<b>School</b>	<b>Capacity</b>	<b>First Term Census 2009 (head count)</b>
Burnie Primary	400	388
Cooee Primary	125	106
Montello Primary	375	252
Havenview Primary	175	115
Acton School	475	210
Brooklyn Primary	225	186
Upper Burnie Primary	275	193
<b>Total</b>	<b>2050</b>	<b>1450</b>

In addition, there was the need to make decisions promptly about this situation to capitalise on the enormous injection (table 2) of Federal funding into primary school infrastructure.

**Table 2: BER – Funding Potential (PS21 + NSP Funding)**

<b>School</b>	<b>BER Notional Allocation</b>
Acton School	<i>Contribution to New School</i> 2,125,000
Brooklyn Primary	2,125,000
Upper Burnie Primary	2,125,000
<b>Total</b>	<b>6,375,000</b>

A new school created by a proposed amalgamation of Acton, Upper Burnie and Brooklyn primary schools became the centre piece of a plan released by the DoE North West School Improvement Board.

In addition, Montello, Burnie, Havenview and Cooee primary schools will each benefit from a major injection of infrastructure spending delivered primarily through the BER funding. In conjunction with the proposed new school, an anticipated student population of up to fifteen hundred students would be catered for in the Burnie City area, over the next 15 or more years.

The North West School Improvement Board discussed the provision of public education in Burnie and then worked with the Principals and Chairs of the School Associations of Acton, Brooklyn and Upper Burnie Primary Schools to conduct a consultation process with each school community.

School Improvement Board members joined with school association leaders and principals to promote and share the proposal and seek feedback from the school communities involved. A comprehensive review of the feedback and input from this community consultation process was conducted by School Association representatives with support from the North West Learning Service.

Subsequently each School Association gave notice to their communities of their intention to recommend to the Premier and Minister for Education and Skills :

- that he approve the amalgamation of Acton, Upper Burnie and Brooklyn primary schools to enable the construction of a new primary school on the grounds of Parklands High School ;
- that he note and endorse the establishment of this new primary school as part of a proposal involving the 7 current ‘city schools’ (Cooee, Burnie Primary, Montello Acton, Brooklyn, Upper Burnie and Havenview) and ;
- that the outcome provides for five excellent Government primary schools for Burnie with the capacity to;
  - i. cater for up to 1500 students K-6 ;
  - ii. support high quality teaching and learning ;
  - iii. enable strong and effective school leadership ; and
  - iv. ensure the effective use of resources.
- that BER and State funding contribute to the achievement of this vision by ;

- i. *Burnie Primary School*: Invest BER allocation to significantly improve the school.
- ii. *Cooee Primary School*: Invest BER allocation to significantly improve the school.
- iii. *Acton Primary School, Upper Burnie Primary School and Brooklyn Primary School*: amalgamate for the purposes of establishing a new school within the grounds of Parklands High School. This involves a combined investment of BER funding and State funding. On completion of the new school Acton, Upper Burnie and Brooklyn would become asset sales, with the proceeds of the sale used as part of the new school build budget;
- iv. *Montello Primary School*: Invest BER allocation in M.P.S. and with additional state government support the school, be significantly redeveloped to enable it to cater for up to 400 students ; and
- v. *Havenview Primary School*: Invest BER allocation to significantly improve the school.

Each school association made a final assessment of feedback and then a Memorandum of Understanding from the communities involved was presented to the Premier and Minister for Education and Skills by the chairs of the school associations at Acton Primary School on Friday 24th of April. This was the trigger for this proposed scope of works.

The proposal for an entirely new school, built to a five star Green Star rating, links directly with the aims of the Department's Strategic Asset Management Plan and Building Better Schools policy framework. In addition the new school is being constructed as part of a plan that will create new and improved infrastructure enabling resources in the future to be better directed toward students and their learning not on maintaining buildings that in a number of cases are both under utilised and have significant maintenance needs.

### **1.3 Building the Education Revolution ( BER )**

In the context of considering the amalgamation of existing schools, the announcement in February 2009 of the Australian Government's Nation Building Economic Stimulus Plan, Building the Education Revolution (BER) provided an unexpected opportunity to seriously contemplate proceeding with the construction of a completely new school.

The BER Program is dedicated to build or renew large scale infrastructure in all primary schools. With an amalgamation agreement in place, permission was sought in the application process, to combine eligible BER funding into a single project fund amount. Accordingly, an application was made to the Commonwealth and approved in May 2009. The approved funding amounts create the basis for the total project funding. The BER expenditure requirements demand a quite rapid commencement of construction. The Department and the school communities were fortunate to locate a highly desirable design already operating successfully at St Aloysius school and, by engaging that architect, are therefore able to reduce the consultation and planning period considerably.

## **The Tasmanian Curriculum Framework**

At the heart of the Tasmanian Curriculum Framework is the understanding that in order to be able to learn new things as they arise, and to learn throughout life, students need to develop high-level skills in thinking, communicating, investigating, deliberating, reflecting and making judgements. This approach has an ongoing influence and impact on the design, operation and use of school buildings.

The purpose of a school is to provide the best possible opportunities for students to learn with success. Students are central to all programs and learning activities that occur in the school complex. Any new primary school must be designed with the learning needs and characteristics of the child in mind. The buildings and the physical environment should reflect the goals of high levels of participation and achievement for all learners.

The design of the proposed new buildings must provide facilities for learning that are engaging and motivate high achievement. The school will provide challenging programs for all students where the curriculum, instruction and assessments are responsive to students needs. Learning programs should be aligned with high standards which students are challenged to meet and exceed.

As a consequence of these aims, the proposed new building design must take into account the best information, experiences and understandings from current research about how students learn. The final building design needs to provide for new ways to engage students in more personalised approaches to learning for life.

A successful school should be inviting, supportive, safe and challenging. It should foster a sense of community and is a place that promotes in-depth learning and enhances the student's physical and emotional well being. In a healthy school environment, quality interpersonal relationships between all members of the school community are paramount.

A variety of learning and teaching approaches are necessary because students learn best through engagement and interaction with their teachers and each other. The development of communities of learners through the proposed POD design will enable students to work and learn together with teachers and other adults. Teachers, regardless of their teaching area, have the responsibility to work collaboratively and co-operatively as part of teams with the shared responsibility of all students.

The proposed new Primary School will support high performance in staff and students by encouraging ;

- learning through a focus on the particular needs of the students ;
- staff as learners and collaborators facilitating more personalised learning ;
- teachers embracing the notion of collective responsibility for all students within the pod design and across the whole school ;
- teachers teaming collaboratively to lead and manage the teaching and learning within each pod ;
- the use of innovative technology;

- environmental sustainable design strategies embedded within the school as a teaching and learning aide, and ;
- synergy with the surrounding environment.

## **Existing Facilities and Context**

### **1.4 History of the Parklands High School Site**

Situated at the corner of Roslyn Ave and Mount St, the corner of the Parklands High School site proposed for development has not previously been built on by the Department of Education, and is an expanse of grassed playing field shaped into three tiers of approximately 2.5 metres level difference, with an area available for development of approximately 4.3 Hectares.

Sweeping water views are evident from the proposed building location, which is bound by Mount St and Roslyn Ave on two sides, playing fields and park land on the others.

As a result, there is no built history on the proposed site linked to the DoE. The site is essentially green field with playing fields to the South, the existing high school above.

### **1.5 History of Capital Works**

For the proposed building site there is no history of capital works to be considered in the context of this report.

## **Proposed Works – Site Master Plan**

### **1.6 School and Community Consultation**

The proposed project will provide new teaching and learning accommodation for students who currently attend the local primary schools, Brooklyn, Acton and Upper Burnie. As noted above, extensive school and community dialogue has proactively explored the future educational provisioning for the region and in particular, the capacity of the three current schools to accommodate and deliver contemporary educational programs. In agreeing to the amalgamation process, the community has engaged wholeheartedly with the design process in a manner that will ensure a high level of regional ownership in the development of the project.

A project steering group consisting of key DoE stakeholders as well as joint school and community representatives formed a working committee to feed ideas and suggestions from the community back to the design consultants. The cultural integration of the school communities has formed an underpinning thread throughout the merger process that will be reflected in a new school identity. Complimentary to the building design process, a graphic designer has been engaged to work with the project steering group to develop the school logo, colour schemes and uniform ideas.

Along with the chosen school name, the developed colour-scheme will assist to forge a new identity for the student population, while acknowledging the region's history and heritage.

### **1.7 Asset Needs Assessment**

As noted, the new school proposal is a result of the agreement to amalgamate three schools, each of which have declining student numbers and an increasing area of footprint that is reaching the end of its practical working life. Each primary school currently manages more space than is practically needed, little used and yet requires constant ongoing maintenance. The move to new facilities will place an optimum number of students into buildings tailored to the teaching and learning philosophies desired by DoE, with the added benefit of reduced environmental impact, running and maintenance costs

### **1.8 Site Constraints and Master Plan**

A master plan was prepared for the new school site as a first step in the design process. Each master plan iteration was discussed in detail with members of the working group and agreed by all stakeholders in July 2009. Architectural consultants, ARTAS, collaborated with the Department, school and community to tailor the proposed 'pod' design to its specific locality, and to design Student Services and Multi-purpose Hall buildings to the Parklands site configuration.

The resulting school site plan entails three pod buildings, each containing general learning and breakout spaces, set in relation to each other around a central open courtyard area that is seen as the central social hub of the school. Typically, each pod accommodates a student cohort of 150, making a total student population of 450-500. Outside spaces are formed between the pod buildings, and are directly accessed from teaching spaces that open onto a series of intimate landscaped play and learning areas.

It is understood that the new primary school may experience a bulge in student numbers during the first two start-up years to a total of approximately 500, due to current grade 5-6 student numbers in the local areas moving through the system. Accordingly, the pod design can accommodate the reconfiguration of the 'discovery centre' space with an operable wall to meet the need for additional classroom space. In addition, an extra sixty-five square metres has been added to the discovery centre of pod 2 which also contains the library. This will provide additional floor space for general learning purposes while allowing the library to function as required. Each discovery centre can revert to its intended function once student numbers have evened out to the projected 450.

The site layout accommodates a total of sixteen to eighteen general learning areas and two kindergarten rooms accompanied by a general purpose hall and student services building. These buildings each form an enclosing edge to a central courtyard, linking administration, support services and activities such as music and performance with the heart of the campus. The central courtyard and lower level active play spaces are

overlooked by the student services and multi-purpose hall buildings and there are minor level differences between buildings with the pods at the higher point.

Parking for staff and visitors has been located along the Northern edge of the site, and is linked to the student services building and central courtyard by a covered walkway suited to disabled access. The multi-purpose hall may be accessed by the community directly without entering the teaching zones. In designing the new car park traffic engineers, Howarth Fisher, studied the existing primary school sites specifically at peak traffic times in order to understand the numbers of visitors, and the way in which this traffic can be managed. The proposed access point, car park numbers and adjacent over-flow parking all result from the studies made on site.

Three existing site characteristics impact on the project and the way in which the campus has been laid out. These items are : high-voltage power lines, the geological substrata, and a high-pressure water mains easement.

The High-voltage power lines that bisect the Parklands high school grounds, are located approximately 400 metres to the South of Roselyn Avenue. Accordingly, the proposed new buildings have been arranged on the site, to maximise clearance to the powerlines. A minimum distance of 50m separates the nearest classroom from the lines.

Geotechnical investigations across the intended building site have revealed relatively poor soil conditions caused by natural clay and introduced fill materials. As a result, the structural design has required the incorporation of a number of concrete piles, founded to a depth of approximately eighteen metres to solid rock.

As a result of the proposed building arrangement, a water mains easement maintained and managed by Cradle Mountain Water ( CMW ) must be relocated to the Western edge of the site to negate the future risk of injury or damage to foundations. Negotiations have been undertaken with CMW, with the result that agreement has been reached to install a new section of pipe work to CMW's modelling requirements. A new easement will be created along the line of the new section of pipe work at completion of the works.

### **Individual Building Brief and Design**

The proposed school design consists of a grouping of flexible spaces that may be used for a variety of purposes, such as home-based learning; studios for group tasks; indoor/outdoor capacity; protected outdoor learning areas; formal and informal learning spaces and work spaces for staff and assistants designed to encourage group planning, co-operation and team work.

The proposed pod designs offer spaces that are flexible enough to permit independent simultaneous activities involving individuals, one-on-one learning and medium sized activities. There are 6-8 general learning areas in each pod and a discovery centre which is a project room with resources for art, science and cooking to support general or at times specialist learning.

## **1.9 General Functional Requirements**

The learning pod incorporates areas to support ;

- teams of teachers working with students to create communities of learners ;
- people getting together for whole group, grade group, small group tasks ; and
- people working on individual tasks or seeking areas for quiet reflection.

Specialised spaces provided by the multi-purpose hall and student services building include :

- multi-media / performing arts space ;
- canteen area accessed from outside ;
- assembly areas ;
- counseling and meeting rooms for confidential, personal and parental conversations ; and
- outdoor courtyards, gardens, sporting facilities, playing field and hard courts.

## **1.10 Specific Teaching and Learning Spaces**

The pod :

- All teaching and learning spaces have been designed to incorporate ubiquitous access to information technology, on an 'anywhere / anytime' basis.
- The pod's have been designed to accommodate a minimum of 150 students with each, incorporating the opportunity for home base, general activity space, individual, small and large group activity, collaborative office space for staff, indoor / outdoor learning for each home base, space for practical, wet or messy activities through a 'discovery centre'.
- Individual student storage through personal bag boxes has been provided within each home base, in such a way as to allow for easy indoor/outdoor learning.
- Staff workspaces have been provided which support collaborative team discussion and planning and personal work space and storage, with high visibility to the learning spaces and students.
- Entrance area to each pod has been designed to become a library / studio space for students and families with places to read, listen and select material/music for borrowing, viewing and display of student work.
- Adequate display boards, whiteboards, interactive white boards and digital television have been considered and positioned as appropriate.
- Adequate secure storage for materials and equipment for both staff and students, including the capacity to house decentralised teaching, learning materials appropriate to the age of students, and the programs undertaken within each pod.
- Links to outdoor learning areas including covered spaces.

### **Student Support Offices**

- Administration / reception working space for three staff.
- SEO office.
- Office space for 2 senior staff, counselling, speech therapist, counselling and support staff.
- Secure storage and filing space.
- Suitable amenities including disabled facilities.
- Meeting rooms in support of working spaces.

### **1.11 Multi-Purpose Hall**

- Multi-use / performance space.
- Music teaching and store.
- Staff facilities and Music / PE office.
- Canteen.
- Ground store.

### **1.12 External Spaces**

- Central courtyard space.
- Play equipment areas.
- Hardstand play areas.
- Kitchen garden.
- General green spaces.

## **Construction**

### **1.13 Environmentally Sustainable Development Strategies**

The fabric of the building and all associated energy related systems are required to comply with Section J of the Building Code of Australia (BCA) and will be provided in accordance with the prescriptive requirements. It is assumed that the building will be constructed to meet all 'Deem to Satisfy' provisions of the BCA.

In addition the new buildings are expected to achieve a minimum 5 Star Green Star rating by the Green Building Council of Australia ( GBCA ). The design consultant ARTAS have been engaged to undertake and manage the documentation required for submission to the GBCA for the project verification, and certification process. This process includes, architectural documentation, services design and documentation, and calculations required for Green Star point allocation in accordance with all Green Star rating tool requirements.

This will be achieved with a combination of simple strategies such as :

- thorough insulation of ceilings and walls;
- double-glazed windows;
- maximised natural lighting levels and auto-dimming light fittings;
- T5 energy efficient light fittings on movement sensors – external lighting on photo-electric cell and time clock;
- heat-pump technology - for heating only;
- natural cross-flow ventilation for major spaces – mechanical extraction minimized ;
- low volatile organic compound paints and internal finishes ;
- carpets with high-recycled content ;
- Water Efficiency Labeling & Standards ( WELS ) rated fixtures and fittings, including front-loading washing machines etc ;

- captured rainwater re-used for toilet flushing ;
- storm water run-off captured and released to the storm water system via a natural filtration bed ; and
- soft landscaping to shade outdoor play areas where practical.

The Green Star Education Rating Tool was launched in December 2006 by the GBCA and is currently undergoing further development. A 4-Star Green Star rating recognises 'Best Practice', a 5-Star rating is considered 'Australian Excellence' and a 6-Star is regarded as 'World Leadership' standard. It is anticipated that the rating tool will eventually be used to benchmark the ecologically sustainable aspects of new school designs. The intention is to achieve a 5-Star rating for the proposed buildings, to match the ideological aims of providing teaching spaces to best standard.

Simple, robust and proven materials and technologies will be employed throughout the building design to achieve the maximum efficiency possible on this site.

#### **1.14 Construction Methodology**

The proposed buildings have been considered as follows :

- the buildings will all have reinforced concrete slabs and footings ;
- the student services and general purpose hall will have steel columns supporting timber roof framing. The learning pods will also utilise timber truss roof framing, with plantation pine wall and infill framing ;
- roofing will be colorbond steel sheeting in a combination of Spandek and Kliplok profiles ;
- roofs will be fully insulated with R3.5 rated roofs, ceilings and external walls with acoustic insulation in internal walls ;
- glazing frames will be powder coated aluminium double glazed units with 2 layers of 6.38mm laminated glass externally, and internally with 6.38mm thick laminated glass to doors and glazing below 2100mm above floor level ;
- painted 9mm thick fibre cement sheet, expressed joint system, is proposed externally above brick/block cladding to the building lower levels and will act as a wearing strip ;
- the walls internally will be lined to a height of 1100mm with 16mm thick laminated dado panels which will act as a coloured wearing strip. From 1100-2100 above the floor, 16mm thick fabric covered display board material will be used. Ceilings will be lined with plaster board. All wall boards will have low or nil emissions rating. Also all paints will contain nil or low volatile organic compounds ;
- extensive use of glass will be used internally to maintain visual connections between spaces ; and

- floor finishes will be sheet rubber in wet areas and carpet floor tiles in carpeted areas.

## **Building Services and Structure**

### **1.15 Power Supply**

- New power supply including pad mounted substation.
- All distribution boards to be provided with residual current device protection.

### **1.16 Lighting**

- Majority of all lighting to consist of either T5 fluorescent or compact fluorescent fixtures.
- A lighting control system to be provided.
- Feature light fixtures to be incorporated for highlighting Architectural or landscape elements.
- External lights to provide general lighting around the building controlled via photoelectric cell and clock.
- Security and car park lights controlled via photoelectric cell and time clock.
- Emergency lights will be installed in locations as required.

### **1.17 Fire Detection System**

Fire detection system as required, including main fire indicator panel, to be located in the student services building. The proposed fire services shall comprise the following systems;

- smoke detection system serving offices and classrooms etc ;
- heat detectors protecting rooms which might be subject to spurious alarms if smoke detectors are installed, such as cleaner's rooms or toilet areas ;
- fire indicator panel controlling smoke and heat detectors and building occupant warning facilities – preferably located in the main lobby. The system will be connected to DoE's brigade monitoring apparatus ;
- interconnection of mechanical services equipment such as mechanical plant shut-down with the fire indicator panel for shut down or control during fire emergencies ;
- building occupant warning system throughout the building in the form of localised sounders ; and
- magnetic hold open devices will be provided for all smoke doors.

The building occupant warning facilities will comprise local sounders which will be ceiling mounted. In the event of a fire alarm, all sounders will simultaneously operate. It is proposed that the T3 evacuation pattern will be used as the means to alert all building occupants.

## **1.18 Mechanical Services**

### 1.19 Interface Facilities

- Whenever the fire detection system operates, all mechanical systems, including the ventilation systems for the basement, battery room, etc will be shut down.

#### Air conditioning

- Cooling duty will be avoided wherever possible, with the exception of Server Room, Board rooms and any computer resource rooms, rooms with high density computer layouts, or high occupancy counts with additional thermal load.

#### Air Filtration

- Central areas equal to mid level panel filters. Remaining areas have natural ventilation.

#### Ventilation

- Natural ventilation in accordance with Building Code of Australia requirements to be provided to all occupied spaces via open able windows or opening.
- Mechanical draw-through ventilation only provided to occupied rooms that natural ventilation cannot be otherwise provided.
- Exhaust – mechanical exhaust provided to all toilet and amenities areas.

#### Heating

- Provided by reverse cycle heat pumps to all areas where possible. Room with under 2kW heating requirement may be outfitted with direct electric radiant panel heaters.

#### Building Management System

- Provision of a building control system for the whole site, including the integration of the lighting, security and mechanical system control.

### **Security**

- Each building to include a stand alone security system with facility to turn off lighting and heating when system is armed. The main security panel is to be located in the student services building.
- Selected external doors will be provided with access control equipment to operate either an electric strike or magnetic lock. Where doors fitted with electric locking mechanisms form a nominated emergency exit they are to be connected to the fire indicator panel in a fail safe manner. Internal doors that are locked will be released via a push button.
- Closed circuit television monitoring of outdoor areas spaces will be provided.
- All security alarms will be operated via the computer system. Security issues to be monitored on site.

## **1.20 Communications / ICT**

- Communication to include a wireless system for student laptops and hard-wired data system for student, staff and teacher usage. System to be installed to the DoE - Communications Cabling Installation Standards.
- Each building to be connected to the server room via a multiple core fibre connection.
- Each building to utilise both wired and wireless technologies for connectivity of all user devices.

## 1.21 Public Address

- PA to be included in each building with console located in Student Services building.

## 1.22 Hydraulic Services

### Mains Re-routing

- A high pressure water main running under the school will be re-routed to circle the school to remove the risk of damage to buildings should there be a significant pipe failure.

### Water

- All sites will be serviced via a DN100 connection to the street mains. Within the property boundary (adjacent site access or hardstand area) will be a combination hydrant booster arrangement DN100 size, and a Council metering and backflow (plus possible pressure reduction). Water Authority pressure testing will determine the size of this potable water arrangement.
- Site ring main reticulation at nominally 50-63mm will be provided to service potable fixtures at buildings, and provide redundancy of supply should sections of the reticulation need to be isolated.
- A top up off-take from the site reticulation will supply a site rainwater tank which is used for rainwater harvesting and toilet cistern supply. A registered air gap will be the means for backflow prevention at this point.
- A separate DN100 site fire main will supply hydrants. Hydrants shall be double header upstand types.

### Sewer

- The site be provided with site reticulation via conventional DN150 gravity mains and concrete manholes. Site fixture loads are 234, based on the floor plan layouts. Connection will be made to the existing council system as follows:
- Site reticulation will connect to the existing sewer in Roslyn Ave, adjacent the residential lots 2-6.

### Stormwater

- The site will be provided with a rainwater harvesting system to collect roof water only at a central tank. This water will be reused in landscape irrigation and toilet flushing.
- The site and building hardstand areas will be directed to a proposed water sensitive urban design basin for attenuation. Connection from the basin will be via overflow inlet pit to the Council mains in Roslyn Ave. Q10 peak inflow to the basin is 200 L/s for the 20 minute critical storm. Overland flow from the upstream catchment will be directed around the school site and make it's way to the basin.

### Fire Services

- Each Site will include fire hydrants to satisfy the Tasmanian Fire Service requirements a separate DN100 site fire main will supply hydrants, reticulated from the booster arrangement. Hydrants shall be double header upstand types.

### 1.23 Structural Design

#### Foundation & Ground Slab:

- slab and beam construction
- screw piles to rock founding, where required

#### Wall and Roof Structure

- Steel Column.
- Timber truss roof framing.
- Traditional timber framed brick-veneer wall structure.
- Window Lintels and door frame heads to suit.
- Steel beams sized to support all operable wall units.

### **Project Funding**

An amount of \$14,650,000 will be provided by combining Commonwealth funding amounts.

The project funding has been amalgamated from both BER grants and State Government funding as follows ;

Primary Schools for the 21 <sup>st</sup> Century ( BER )	\$6,000,000
National Schools Pride Program ( BER )	\$375,000
Other Government Funding ( Including Asset Sales )	\$8,225,000
<b>Total Maximum Funding Amount</b>	<b>\$14,600,000</b>

The project funding is divided as follows:

Construction estimate, including contingency	\$13,152,180
Furniture and equipment	\$750,000
Fees	\$567,820
Art in Public Buildings	\$80,000

Relocation	\$50,000
<b>Total</b>	<b>\$14,600,000</b>

### **Cost Estimates**

The project budget was developed by the Department of Education in consultation with design consultants ARTAS. ARTAS engaged a Quantity Surveyor as sub-consultant to provide costing information for this project.

The details of the cost estimate are as follows:

<b>Element</b>	<b>Cost Estimate (\$)</b>
<b>Building works:</b>	
Buildings	\$9,668,743
Landscaping	\$200,000
<b>Sub Total</b>	<b>\$9,868,743</b>
<b>Site Works and Services</b>	
Site Infrastructure and connections	\$994,450
Play equipment, footpaths and covered way	\$779,047
Roads and Parking	\$412,770
<b>Sub Total</b>	<b>\$2,186,267</b>
<b>Other</b>	
Contingencies + Escalation	\$1,097,170
Fees	\$567,820
Furniture and Equipment	\$750,000
Relocation	\$50,000
Arts Tasmania	\$80,000
<b>Sub Total</b>	<b>\$2,544,990</b>
<b>TOTAL CONSTRUCTION COST</b>	<b>\$14,600,000</b>

The current construction estimate indicates that the developed design is within the budget.

## **EVIDENCE**

The Committee commenced its inquiry on Monday, 19 October last. Accompanied by Officers of the Department of Education and the consultants, the Committee was conducted on a site inspection, following which the Committee reconvened in the Braddon Room, Burnie Civic Centre, Burnie. The following witnesses were called, made the Statutory Declaration and examined by the Committee in public:-

- Rhonda Dineen, Acting Principal, Acton Primary School
- Andrew Gates, Brooklyn School Association Representative
- Malcolm Wells, General Manager, Learning Services North West
- Andrew Finch, Director – Finance, Facilities & Business Support, Department of Education
- Heath Clayton, Consultant Architect, Artas Architects

### ***Overview***

Mr Wells provided the Committee with the following overview of the proposed works:-

*When this project started it was right in the middle of a backdrop where there was community awareness about the effect of demographic change, not only in terms on the general Tasmanian population but specifically on the Tasmanian school-age population. There was also a lot of talk about underutilised schools, with the minister encouraging communities to seize an opportunity; in fact, as you were probably made aware at an earlier hearing, even so much so as to speak to all principals - I think that was in February of this year - and school association reps. So, it is a very different backdrop for Romaine Park Primary. The North West Learning Services School Improvement Board had been talking about the provision of public education from a strategic point of view right across our 55 schools and the board was well aware of the overprovision of public primary schooling here in Burnie.*

*Thirdly, the project that we have now, as with the Somerset one, is guided by a steering committee and it has similarities there in that there is real strength around that table. Andrew is here representing the three school associations and Carolyn Williams and Michelle Young chair the other two school associations, Carolyn at Acton and Michelle at Upper Burnie. Rhonda is representing a group of three very hardworking principals, and I am talking about Jan Dicker, who is at Brooklyn, and Marcelle Norton at Upper Burnie. That group has some additional parent representation and Katherine Furman, who may be known to some of you, is the Deputy Chair of our School Improvement Board and Katherine chairs the steering group for the Romaine Park project.*

*... In a very tight time frame all three school communities ran an extensive as it could be community consultation around the idea of addressing the issue of an oversupply of primary schools in the Burnie area.*

*There is one really important point ... that I want to stress here. I know that the committee's focus is very much on the building of Romaine Park Primary School but from the very start and in fact at our very first launch of this whole initiative we had all of the principals from the Burnie City schools and the reason for that is that Romaine Park is part of a broader strategy to ensure the most efficient provision of public primary school education in the Burnie City area.*

*When we looked at the feedback from a whole range of processes that were run - I remember a meeting we had at the university, the Cradle Coast campus - three*

*things emerged. One was about the time frame, and I mean the time frame in which people were being asked to consider the matter and there certainly were people acknowledging that this is a reasonably tight amount of time in which to make a very important decision. That was strongly counter-balanced, in fact as strongly as you can imagine, by the view that it was almost a known thing within the community that there was an oversupply, that we had a number of schools that people would colloquially say were half empty.*

*We had people saying, 'You can stand on the roof of one school and throw a stone and you can hit four other primary schools', or whatever. I think what helped the shift was, yes, the time frames were tight but the previous position for change, the recognition that there was an opportunity to address the issue, certainly proved to be strong enough to enable people to say, 'We need to do this'.*

*The second thing from the feedback, and this came through the on-the-ground feedback, was a groundswell of support that we could definitely pick up, and it was wider than just the parents that we surveyed. It was interesting to note and very pleasing to receive a letter from the Burnie City Council, from the mayor. It was the view of the elected representatives of the Burnie City Council that this was a sensible move for the department to take.*

*Finally at that meeting, I think everybody realised we have one opportunity here and we need to seize that opportunity and to move forward. Both Rhonda and Andrew might comment later about feedback post that decision. My sense of it is that we have very strong support for what we are trying to do across the three schools. I was going to say 'and more broadly', but I think people have tended to focus on the new school aspect more so than perhaps thinking three or four years from now that we will have a much more sensible provision of public education - government primary school education - for the Burnie City area.*

*The documentation that you have in our submission includes the vision for the school, which has been collaboratively developed. It talks about a vision which encompasses all children in Burnie - the provision of best birth-to-grade 6 education for this city - and strong viable schools is an important dimension of that, ensuring that we don't, in the long term, come back here in 2015 and have this school going really well with these numbers, this one battling around in space and that kind of thing. We have put some work in, as a group, to get a good model, we think, for the town, and we have provided some data there in relation to that.*

*Of course, having a greenfield site was a bonus because it took away, in that short time frame, some of the issues that may well have emerged had we tried to say one school was a better location than others. The greenfield site was handy from that point of view.*

*As I said to you in the other part of the hearing, I do not like to deny the fact that there are challenges, and certainly this is a challenging project as well. To bring three school communities together, for students, for parents and for our staff there will be challenges and we are confident about our capacity to meet them. There is a lot of work that has been done and a lot of work that still needs to be done.*

*We have a very strong steering committee, we have a project time line and a project plan for as many elements as might be going through your minds as you think about trying to, effectively, close three schools and start a brand-new one. In my preparation today, very quickly, I didn't go to the project document but this includes student transport, uniform, levies, enrolment guidelines, equipment, class structures, staffing et cetera, et cetera. It is a big project for us over the next 12 to 18 months. I am confident about our capacity to do that. I think the work will be challenging.*

*So, being both optimistic and realistic, we have a terrific opportunity and that was the message after we did the work that we did when we said that we were interested*

*in doing this. People said, 'You need to seize this opportunity now'. Personally, I am looking forward to about 2012 to come back when it all settles down and I think what you will see at that site is a wonderful facility and I think we will have done a really good thing for setting up public education in the city.*

### **Reduction in number of campuses**

The Committee questioned the witnesses as to what efficiencies would be achieved by the reduction of the number of campuses from three to one. Mr Wells responded:-

*With the broad data that we looked at ... and I don't have the exact numbers in front of me - you are looking at 2 000 down to 1 500 students over a relatively short period, so with 1 500 students, taking into account the available capacity of existing schools - the ones that aren't part of the amalgamation - you're bringing in the capacities of Havenview, Burnie Primary, Montello, Cooee and a new school and looking at the longer-term demographics. It is already under 1 500, it is at around about 1 400 now, so somewhere in that 1 350-1 500 territory is the likely number of children that we are dealing with. When you look at the capacity across the existing sites, we think we have got it right at that conceptual level. Regarding the three schools that came together in this initiative, there had already been some very tentative talk prior to this ... I know that Upper Burnie and Acton had had some kind of discussion because of a view that their schools were quite under-utilised. I think Brooklyn was under-utilised a bit but more so age of building and a range of issues there.*

The Committee questioned the witnesses regarding the position of the Havenview Primary School community that it did not wish to be included in an amalgamation process. Mr Wells responded:-

*To be fair ... there are two dimensions to that. We had a limited period of time in which to operate to meet the Commonwealth guidelines around accessing the BER funding. Secondly, Havenview is a smaller school; nevertheless, had we wanted to bring in a Havenview population, we would have then perhaps been building a primary school of around 650. What is seen as a big primary school in Tasmania is not the case by mainland standards. We are building a school around about the size of somewhere between Spreyton Primary and Nixon Street Primary. Culturally, in the city that would have been seen as really big and so there was probably that sort of undercurrent there and not really the time to engage across four school communities. We have some feedback that in the overall model that we're putting together parents like the idea that there are a couple of smaller schools that are available within the community as well as part of the mix of schools. We end up with a Burnie of around 400; a Montello hopefully of around about that size, a slightly larger school, but in Cooee and Havenview two smaller schools as well. We did get some feedback which suggests that that mix of schools was probably a good mix for the community to have as well. So there are a number of factors in that.*

### **Funding**

The Committee drew that attention of the witnesses to the item entitled 'Other government funding' in the submission of the Department, which, it was submitted included asset sales of some \$8.2 million. The Committee sought the quantification of the asset sales of the three subject properties and an explanation of what 'Other government funding' means? Mr Finch responded:-

*Of the \$8.225 million, it is \$6.225 million in State CIP funding and \$2 million for asset sales. That is for the three sites. When we set out in forming the budget for the project we estimated \$2 million for those three sites. We have since had some valuations and I think the \$2 million is probably optimistic on these ones, given the nature of the sites, the specific locations and so on. Again, we are working with this*

*cost and we will need to find additional funding if the asset sales aren't as high as we have estimated. As I mentioned before, we still have that issue about finding a location, particularly, for a child-family centre that services most of these communities. So it may be that we end up having to use a portion of one of the existing sites for that but, again, that is subject to future decision-making but it may limit the asset sale that we can get. But, importantly, that will not impact on the budget for this build because we have been pretty careful with the cost of building this school and its components.*

The Committee cited the Message from His Excellency the Governor-in-Council referring the project for inquiry which detailed the estimated cost of the project on completion to be \$11 million. The Committee sought an explanation from the witnesses as to why the estimated cost of the proposed works was now \$14.6 million. Mr Finch responded:-

*... this has been a fairly fast-moving but evolving exercise and when we sat down and tried to get the initial estimates we were initially hoping to get the building around \$11 million-\$11.5 million. Sometimes we talk about a construction amount and I am not sure whether that is the construction figure or the total budget. That might be closer to the construction estimate because, as you can see in the table below, the construction estimate is \$13 million and then there are a number of items that go on top of the construction budget. So I am not sure whether that was it and it explains the difference but the other thing is, as we have worked more with Heath and sub-consultants, we have encountered some other costs that we probably didn't envisage when we sat down with a blank piece of paper and looked at the site and said, 'Yes, I think we can build this school for this much money'.*

*When you get into that detailed planning and design you find out things about the slope of the site, whether there is a pipe under the ground that might need to be relocated and those sorts of things. They do add to the cost so this is the correct cost now - \$14.6 million. But it is fair to say that has probably matured in the last month or so.*

*... I would say that the process of how the figure got into the message was when we initiated it, some time ago, before we had finalised the design and had those other subconsultant issues about the site and so on come into play. I think we probably have not gone back and corrected it, so it is probably a matter of timing really. For the last month or so we have been working on this \$14.6 million with everyone involved. So that is where it stands at the moment.*

The Committee questioned the witnesses as to what budget was identified in the State Budget for the project. Mr Finch responded:-

*Again, when we set off, the initial estimate was \$11 million. But, again, it was before we had done that detailed design work. That is bit like trying to assume the figure based on other schools. It is as broad a cost estimate as that. It was not until we sat down and did the really detailed design and then found some of those site issues that we had not anticipated, that we ended up getting to this budget. But it is just not practical to build the school for lower than this cost. So this is the budget. Again, it is really just how that figure was initially communicated, I think.*

The Committee questioned the witnesses as to the affect upon the project budget if the assumed figure of \$2 million for the asset sales was not realised. Mr Finch responded:-

*We will not be significantly short. No, it will not be like that at all and, again, we are under way. We have not tested the project at tender yet. That will occur in a*

*month's time. So we will look at what the tender outcome is. But it will be a question of finding additional funding if necessary - if the asset sale does not come up to that level.*

*When we arrived at the \$11 million it was really just looking at a site and then basing the cost on building the St Aloysius School, for example, on which the school is designed, and then just looking at the number of students. So it was really just a very early, basic estimate and then we have come through and firmed up that estimate with a detailed design but we have not gone back and amended the figure that has gone into the message.*

The Committee questioned the witnesses as to what the particular features of the location are that have caused the cost escalation. Mr Clayton responded:-

*... I suppose there are a couple of issues. One is, there is water pipe that is located through the site that, in consultation with the Cradle Coast Water Authority, we have to relocate. A risk assessment has been undertaken by consultants and we are in the process of agreeing the location and the route that it is to follow.*

*Secondly, the site has some slightly unstable ground and there is some additional cost in regard to the structure and how we go about using the concrete slabs and how we tie that into the building to minimise any future maintenance of the site. So they are probably the two critical factors.*

*We are still negotiating with the Cradle Coast Water Authority on the preferred route (of the water pipeline). So it is little bit up in the air at the moment. We are just in the process of finalising that with them at the moment.*

*... it goes straight through the middle. Basically, there was an easement through there. Where the buildings were located, it went through our site but we did not build over it. So the very early advice was that, as long as we did not build on it, that was okay. But then we undertook a risk assessment and it was deemed too high to have it running through a new primary school. Cradle Coast Water Authority want to relocate it completely away from both the high school and the primary school and we are just negotiating with an alternative route that diverts it around the primary school.*

*(Cradle Coast Water) ... have basically said it is a Department of Education problem ... I believe the department has held discussions directly with Cradle Coast Water and they have basically said there is no funding available.*

### ***Furniture & equipment***

The Committee sought an explanation from the witnesses as to why the allocation for furniture and equipment for this reference was \$750,000 as compared to the allocation of \$350,000 for the new Somerset Primary School, a school of comparable size, which is also subject to inquiry by the Committee. Mr Finch responded:-

*We really just work on percentages for that. The other project was less than half. That was \$6.1 million compared to \$14.6 million. So, again, it is just the basis of allocating an amount of funding. We have not really sat down and done a detailed analysis of every piece of equipment that will go in at this point in the project. But because of our experience with other projects and doing redevelopments in schools, we generally set aside an amount of about 5 per cent of the total project for furniture and equipment.*

*It is based on long-standing practice of allocating a component of a budget for schools to enable them to sit down and decide what they can buy to fit out that school. It ranges over a lot of things. When the builder walks out, you generally get*

*your carpet but then you have to go and get blinds, window furnishings, desks and chairs -*

Mr Clayton added:-

*It even goes further into external play equipment and things like that. West Somerset have quite good play equipment and things already there that we don't need to purchase. Secondly, when you are establishing a brand new school, obviously we have all that play equipment that we spoke about and the rubber soft floor. That generally comes out of the furniture and equipment budget because it is equipment; it not necessarily building stuff. That is why there might have been a little bit of a discrepancy there.*

The Committee questioned the witnesses as to whether any new equipment and furniture had been purchased by any of the three subject schools and what is envisaged would be transferred to the new facility. Mr Wells responded:-

*We have audit processes in place across the three sites to ensure what is, for want of a better expression, in good order that you would want to take forward. It wouldn't be responsible to do anything other than that. I do not know how far that work has progressed but we are looking at it in terms of ICT materials like interactive whiteboards and those kinds of things. They are good examples of recent purchases in most schools.*

*There is some assessment of furniture. Mind you, you have to look at establishing a furniture platform for the school that is relatively consistent. We are doing the best we can to identify resources within the existing schools that would suitably transfer to the new school. It would be impossible to put any dollar figure on it at this stage.*

Mr Finch added:-

*To answer your question about keeping the allocation at that level, when we learnt about some of these site factors, yes, the first option may have been to say we haven't been to tender yet so we don't really know what price we are going to be able to construct the school for. We could go into the project without a contingency and perhaps halve the furniture and equipment, but over the next 12 months of construction you would be taking a high level of risk in terms of just what might come up during the construction period.*

*... so the decision we took, especially before tender, was to keep the contingency and the furniture at the normal budgeted levels that we usually set aside for each project but to go and look at increasing the budget allocation for the cost of the pipe and the site and so on. I guess that was the decision we took.*

### ***Alternative***

The Committee questioned the witnesses as to what, if any, consideration had been given to consolidating the three subject schools on one or other of the existing sites rather than the proposed option of a new school on a 'greenfield' site. Mr Wells responded:-

*... The strong consensus was that the greenfield site was critical in enabling the amalgamation to occur. What we have had in Burnie is an enrolment pattern that has reflected perceptions about schools and their areas. That has been a complicating factor that is clearly reflected in the way enrolments have occurred right across the city. Had we tried to bring together the schools onto one of the three sites in the time frame we had with the BER resource, we would not have been able to do justice to a quality consultation and feedback process with all three*

*communities on that kind of an issue. It would have been a deep issue. You looked this morning at Somerset; over three years of work was done for two schools in one town where there was a history about the different schools. They took that amount of time to get to that point. Today is about this amount of time and that was not achievable. We wouldn't have been able to look at any group and say we would have been satisfied with the consultation process to achieve that kind of an outcome. Is that fair, Rhonda? You have worked in two of the schools.*

Ms Dineen added:-

*I am currently substantive principal at Brooklyn, and have been there for 11 years and am now acting at Acton, so I know a lot about both of those communities. The public perception and the patterns of enrolment have certainly been a significant factor and the choice of being able to bring three schools together on a brand-new site was fairly critical to the timing of the project.*

Mr Gates concluded:-

*I would have to agree with the comments made that had we tried to build one school on an existing site, I think the opposition or negativity would have surrounded that, given the factors that Malcolm has already mentioned, because the enrolment patterns indicate that in the current schools.*

### ***Learning perspective***

Ms Dineen provided the Committee with the following perspective regarding the provision of primary education within the Burnie area:-

*I wanted to start by reiterating Malcolm's point about this particular primary school being within the context of all the schools in Burnie. Having been part of the principals' group there for some time now, I am aware of the fact that that conversation has been ongoing and we have never really been able to work through a process to tackle that problem. In hearing about the funding that was available from the Building Education Revolution, we came away from that meeting realising that there was indeed the opportunity here to do something about rationalising that problem. In going back to our schools and looking at the current schools that we were in, for instance at Acton, the three schools have little boxed classrooms and were really in line with the older type of thinking in education that Denise talked about this morning. The idea of being able to do something really different and to change the way that we provide for education in Burnie was a really great opportunity. We took the idea to our school associations and ultimately to the School Improvement Board and the board was able to work with us to implement a wider consultation throughout the community to bring about the idea for amalgamating the three schools.*

*In bringing together the three schools, I guess there is an implication there for resources, that we are able to upgrade our access to staffing and to increased leadership, which means that with the principal positions and assistant principals and so on you have greater leadership potential within the schools and increased potential for a wide range of programs within the school as well. In some cases there is a larger peer group for the students themselves. So bringing the numbers together onto the one site was obviously a really great advantage.*

*In looking at the site, although there came to be some implications further down the track in terms of the actual site, it did suggest itself as being one that presented itself as an obvious option in that all three school areas converged pretty much on the corner of Romaine. The positioning of those three schools in close proximity was quite ludicrous. I mentioned this morning that you could stand in the Acton playground and hear the bell going from Upper Burnie Primary School, so obviously*

*there was some work there that could be done. There is the potential as well to provide for putting together the birth-4 programs and then looking towards high school with grade 10, of being able to put together an education program that went seamlessly from basically birth right through to grade 10 and the really great transition potential that has for our senior students in the primary schools and maybe some middle school programs being developed over time with people in the future.*

*We have come up with a name, Romaine Park Primary School, after a great deal of consultation with the community. We went to the local history society and asked for their input, and the name of Romaine turned out to be the name of William Romaine who was one of the early settlers. The area of course is geographically known as Romaine. The idea of the 'park' came about because, as you have heard this morning from Heath, the overall concept has a lot to do with the environment, with sustainability issues, and indeed with the name of Parklands. I think when Parklands was first mooted quite some years ago, it was called Park Lands. That was one of the first thoughts at that time. Looking at the site today and seeing the green and the trees up that hill, to envisage a design that develops that kind of idea and linking it to the park is fairly exciting.*

*The working party then explored options for the building designs and ultimately chose the pod design and that led to our work with Artas. Again, as Denise mentioned this morning, we know that learning these days happens in a variety of ways, that it is student-centred and it is quite often activity-, project- or inquiry-based and therefore requires multifunctional and flexible learning spaces. I think the most exciting thing about this design is its flexibility, being able to open up doors and create small spaces or large spaces for small groups or large groups or, indeed, individual work, is possibly the most exciting part. We are trying to develop learning that is about problem solving-and inquiry and ultimately engaging children in that learning. The idea of the doors and the glass and the shared spaces all add to that.*

*In amongst that is the idea of collaboration - the collaboration of students working together with their own learning - and also with the staff, making sure they have the opportunity within this space to work collaboratively, to plan and to comment on each other's teaching and inform each other's practice.*

*The learning spaces provide seamless access to staff support and to resources for learning, because the resources are spread throughout the three pods, and access therefore to information and ICT. The idea for the ICT is for it to be where you need it and when you need it for learning. It is not tucked away in a computer lab or some isolated space but is indeed part of the whole environment for learning.*

*We have looked at the idea of laptops, wireless net boards, SMART boards and some PCs with the flexibility of laptops so that there is a great deal of movability there.*

*The idea of the three pods: in our initial consultation process we found that some of the community were a little bit afraid of the school being too big. They were losing what they saw as their small-school focus and the security that came about that. So the idea of the three pods was a way to build many communities within the larger community, and therefore build a secure learning environment within that. The issue then became how we connect all of those pods. The idea of connecting them through the social court and having them all around that central hub and connected also by covered ways and with the student services building and the multifunction area seems to lend itself to that connectivity.*

*As I mentioned with environmental education considerations, there are lots of links with the outdoors and the in-site programs. At our school we currently have a Stephanie Alexander kitchen/garden program, so there are some really great links already being forged with gardening and cooking and working that through. The*

*building itself is a model for educating children about sustainability issues, in particular the way you use the water and water reticulation. That lends itself to education as well.*

*The potential for specific programs and opportunities is entrenched in our thinking right through the consultation. All three schools have a very strong arts, performance arts and music culture. Two of the schools have a specialised art program and all three schools now have a strings program in collaboration with the Cradle Coast strings group. So the multifunction area was very much around designing something that would lend itself to this as well as enabling a space for PE programs in bad weather and so on.*

*The discovery centres have really exciting potential for arts and cooking and sciences. One of the main considerations, in particular for the multifunction room, was making sure it had community access, that it could indeed be hired out. The canteen has lockable areas so that it can be used exclusively by the school but then hired out to the community. There is not a lot of community use in our schools at the moment so I would like to think there was an increased potential with the new school.*

*In terms of landscaping, I believe that the design has really tried to consider lots of different types of play and recreation, sports as well as quiet and passive play, having lots of areas where children can interact in different ways.*

*Ultimately the vision we have for this school is one that is pleasing and welcoming physically but also acoustically and aesthetically. With its position at the bottom of Parklands High School, I would like to think that as you come over the hill and look over that site there is a building there that really says something about the way we value public education in Burnie. I believe the vision we have come up with might well do that.*

*Our working party was then extended. We started with an initial group of six in the very early times and then we formally made the Burnie amalgamation steering committee. That had equal representation from each school; that included two parent representatives from each school. Within that we then formed a building design group which met regularly with the Artas representative - Heath - and the senior project officer in Scott Dickson. I would like to commend the way that process has been collaborative and the way we have been able to go along to those design group meetings and work with them and know that our thoughts and ideas have been taken on board.*

*As well, there has been a culture and identity group established. We are very mindful that communities become very strongly linked to their schools. In bringing three schools together we need to be doing two things simultaneously. We need to be guiding those communities towards establishing a new culture; we also need to respect and take forward some elements of the old cultures of each school.*

*We have hired a graphic designer who is currently working with us to explore colours and logos. That will be a good way of representing the new school and has been an area in which we have been able to involve lots of other parts of the community, particularly in the selection of uniforms. There is a strong group of parents working on the uniform committee. Because of the nature of the issue within the Burnie area, having a group collaboratively working through some enrolment protocol issues was an important consideration.*

*The culture group is also considering transition. As we transition, we have next year to work these things through, but Malcolm just hinted at a few of the things we must start to think about. There is a huge task ahead in bringing together all the resources, education programs, students and staff and making sure they are involved and taken towards the new school idea. We know we still have a fair bit of work to*

*do. The key consideration right throughout was the need to work with and involve all three communities equally. In doing so I would like to acknowledge the work of Marcelle Norton and Jan Dicker and the school association chairs - Andrew Gates, Carolyn Williams and Michelle Young. I think underneath all of our work we have been aware of the exciting potential we have in creating something new and exciting for the Burnie public education system.*

## **Design**

Mr Clayton provided the following overview of design approach:-

*The proposed new school will accommodate up to 500 students and has been made possible by the agreed amalgamation of Brooklyn, Acton and Upper Burnie primary schools. The project is recognised by education and community stakeholders as an exciting opportunity to create entirely new teaching, learning and support areas in a new school environment. The purpose of the new school is to provide the best possible opportunities for the students to learn with success. Students are central to all programs and learning activities that occur in the school complex. Any new primary school must be designed with the learning needs and characteristics of the child in mind. The buildings and the physical environment should reflect the goals of high levels of participation and achievement for all learners. The design of the proposed new buildings provides facilities for learners that are engaging and aimed to motivate high achievement.*

*The school will provide challenging programs for all students, with a curriculum, instruction and assessments that are responsive to the students' needs. As a consequence of these aims, the proposed new building design has taken into account the best information, experiences and understandings from current research about how students learn. The building design provides new ways to engage students in a more personalised approach to support learners for life. The school aims to be inviting, supportive, safe and challenging. It fosters a sense of community and a place that promotes in-depth learning and enhances the students' physical and emotional wellbeing. In a healthy school environment quality interpersonal relationships between all members of the school community are paramount.*

*The overall school site plan provides for three learning pods similar to those you have seen in the two Hobart schools. Each pod contains general learning and break-out spaces located together around a central open courtyard. The courtyard is seen as a central social hub of the school. Typically, each pod accommodates a student cohort of 150-170, making a total student population of between 450 and 500. Outside spaces are formed between the pods and are directly accessed from teaching spaces that open into a series of intimate landscaped play and learning areas. The pod design will enable students to work and learn together with teachers, consultants and other adults as communities of learners. Teachers, regardless of their teaching area, have the responsibility to work collaboratively and cooperatively as part of teams. The central courtyard is further strengthened by the radial connection of the multipurpose hall, the performing arts centre, the canteen and staff amenities and student services buildings. A covered walkway links these buildings with the learning pods and creates a sculptural canopy that protects and reinforces the central courtyard spaces.*

*Adjacent to the building site is an extensively grassed play area with a fitness circuit running track and softball play areas for both fitness and play equipment. This play area can be easily accessed from the learning pods. The lowest tier on the side is dedicated to active play with both grassed, hard stand and formal play courts. There is also provision for a market garden with stores and a future provision for an orchard, which is part of the school program - the Stephanie Alexander program.*

*Parking for staff and visitors has been located along the northern edge of the site and is linked to the student services building and central courtyard by a covered*

walkway. This has suitable disabled access. The multipurpose hall may be accessed by community directly without entering any of the teaching zones. A network of pedestrian and bicycle paths connect the broader built environment and, as we discussed on site, we have looked for future links to the surrounding areas.

The landscape is designed using the principle of water-sensitive design - all plant species of low water demand, negating the need for irrigation. Much of the planting will be native and in many cases indigenous to the area. Stormwater will be collected and used for toilet flushing and in the market garden and orchard area. These facilities will provide learning opportunities in horticulture, home economics and environmental studies. Aesthetically the landscape complements the architectural forms and the site and the views afforded from the site. It does this by suddenly softening the architectural forms through mass planting of grassy tussock and strappy-leaf plants, low-dense shrubs and strategic use of median shrubs as screening and to provide shelter from cold winds and also shade during summer.

The central social court features a range of structures to facilitate student socialisation. Half a dozen sloping, artificial turf segments are randomly sited in the centre of the court, mainly facing north. These are designed to be used to lie about in the winter sun or in the shade of the trees during summer. Circular and semicircular seating is also randomly distributed around this area to allow for eating, talking and socialising. Functionally the landscape is designed to facilitate efficient circulation of people through the school in a direct but interesting manner. Pedestrians can traverse the site between all buildings on hard surfaces, minimising the tracking of mud and dirt into the school. However, the areas of soft ground, grass and artificial turf treatments is maximised to minimise costs and to soften the landscape. A series of outdoor classrooms are situated behind each pod. These are mini amphitheatres, with terraced seating that allows classes to be held outdoors.

As we said earlier, the learning pods are based on the models of the two schools in Hobart and also at St Aloysius, with some minor adjustments to suit the needs of the users. Each pod accommodates a minimum of 150, up to 170 students, with six to eight learning areas and a discovery centre used as a project room with specialist resources to support art, science and cooking.

The pod consists of a group of flexible spaces. It can be used for a variety of purposes, including home-based learning, studios shared for a task, project-based learning, break-out spaces, connected outdoor learning, formal and informal learning spaces. The pod design offers spaces that are flexible enough to allow both independent and simultaneous activities that involve individuals, one-on-one learning, small groups and large group activities. Team teaching can easily occur within the adjacent classroom or shared space.

Staff work spaces have been provided which support collaborative team discussions and planning and personal work spaces and storage. They are all highly visible from the learning spaces and to the students. The teaching and learning space is designed to incorporate continuous access to information technology and an anywhere, at any time basis is promoted. There is lots of display, whiteboards, interactive and digital media positioned throughout the building with adequate secure storage for materials and equipment for both staff and students.

The entrance to each of the pods has been designed to become a studio space for students and families, for places to read, listen, select material, music for borrowing and for the display of student work.

One of the pods has been established as an early childhood building, located with the same features as the others but provides additional fenced and secure areas to the outdoors.

*The student services and administration building exemplifies the students' identity through the selection of joinery, finishes and colours. The administration area provides working space for staff, IT, senior executives and secure store and archival storage.*

*The office area includes the principal's office, four general offices, consulting rooms, meeting rooms and a boardroom with its own kitchenette facilities.*

*The multipurpose canteen, performing arts and staff amenities building is used for whole-of-school assemblies. It can be divided into two spaces by the knock of a wall, providing further flexibility for large groups requiring a space simultaneously. The hall is supported through a canteen which can also double as a commercial-grade kitchen when required. The hall can provide for PE, audiovisual and it has its own chair storage. It is connected to the performing arts base, which includes practice rooms and its own music store.*

*Sustainably, the fabric of the building and all associated energy-related systems are required under the building code but, furthermore, under the green-star requirements. Some of the key concepts for sustainable and energy efficiency for this site include maximising insulation in ceilings and walls, providing thermal mass, using concrete slabs, insulating the building perimeter, the use of double-glazed windows and doors, maximising natural light levels and providing auto-dimming to light fixtures, the use of low-energy, T5 energy-efficient light fittings, connected with movement sensors, geothermal -*

### **Geothermal system**

The Committee asked the witnesses to explain the geothermal system. Mr Clayton responded:-

*...The geothermal component is the equivalent to the outdoor unit of a heat pump system. Internally, the indoor unit is exactly the same as a traditional electric-based heat pump or airconditioning system and the geothermal is the box you normally see outside with the big fan on it. So what we are doing is replacing that with a geothermal, which basically has no running costs associated with it. It is a small box that pulls the heat or the cooling out of the earth centre - and then it blows it through what is a traditional internal-type unit.*

*When we are talking about running costs, I think I mentioned a couple when we were walking around when we went into one of the rooms at Somerset when there was an airconditioner just blowing away. The requirement through green star is to have a built-in management system, which will control a lot of these things, connected to thermostats. For example, it won't be enabled to run on continuously. At the end of the night when the cleaners leave, when the security system is armed all the heaters, all the lights - everything - get shut down automatically. When the first person comes back the next day they arm up the building, everything returns to the previous setting and things like that.*

*Back on the geothermal, without knowing the exact science behind the whole process, it is an extremely efficient way of being able to do it and it is basically what has enabled us to achieve five stars. Without using geothermal, it would have been very difficult to achieve five-star rating, from all the information we have been told.*

*...What we are proposing to do is have our building management system, which is a central database where everything is collected and can be printed out, and as part of the green-star requirements, the reports can be fed out of that automated response.*

*One of the features that we are also talking about is having displayed in each of the pods what each of the building's energy and water consumption is relative to the*

*others. So it will be a splash screen like a screen saver that will actually show the water and energy consumption of each pod and that is a simple linking back to each of the pods that are displayed. It is what is standard in the building management system but it is something that we have spoken about with the schools and the users so they can use that as an education tool.*

*We have been able, by combining three schools on a similar design basis, to facilitate a good deal on a geothermal system because it is so similar. To do a one-off school, the cost is extremely high. We said to this company, through our consultants, that we have three schools that are fundamentally the same. They have the same pod designs, the same requirements, but are across three sites, so what can you do. We were able to get pricing that was as competitive as traditional airconditioning but we did get the added benefit of considerable green-star requirements that we needed to be five star.*

### **DOCUMENTS TAKEN INTO EVIDENCE**

The following document was taken into evidence and considered by the Committee:

Romaine Park Primary School – Burnie – A New Primary School for 450-500 Students, located on the Parklands High School Site - Submission to the Parliamentary Standing Committee on Public Works, October 2009

### **CONCLUSION AND RECOMMENDATION**

The need for the proposed works was clearly established. The the agreed amalgamation of Brooklyn, Acton and Upper Burnie primary schools presents an opportunity to create entirely new teaching, learning and support areas in a new school environment for approximately 500 students in the Burnie area.

The Committee was of the view that the new facilities should maximise the positive environmental learning opportunities, including equipment to monitor energy savings and efficiencies, which should be installed.

Accordingly, the Committee recommends the project, in accordance with the documentation submitted.

**Parliament House  
HOBART  
13 November 2009**

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