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PARLIAMENT OF TASMANIA

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

# New Kingston High School

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

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## 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
BACKGROUND .....	2
LEARNING CONTEXT MODEL .....	3
PROFILE OF THE KINGSTON HIGH SCHOOL.....	5
DESIGN PROPOSAL .....	7
ECOLOGICALLY SUSTAINABLE DEVELOPMENT (ESD) STRATEGY.....	23
PROJECT BUDGET .....	29
EVIDENCE.....	36
DOCUMENTS TAKEN INTO EVIDENCE.....	56
CONCLUSION AND RECOMMENDATION.....	57

## **INTRODUCTION**

To His Excellency the Honourable Peter George Underwood, Officer of the Order of Australia, Governor in and over the State of Tasmania and its Dependencies in the Commonwealth of Australia.

MAY IT PLEASE YOUR EXCELLENCY

The Committee has investigated the following proposal: -

**Establishment of a new high school in Kingston designed to accommodate approximately 700 students in years 7 to 10.**

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

## **BACKGROUND**

This reference proposes that a new Kingston High School be built on a 'green fields' site in Kingston View Drive, adjacent to the existing Kingborough Sports Centre and associated community recreational and sporting facilities. The proposal is visionary in its design for the construction of a facility capable of accommodating 700 students. It is being designed to incorporate current trends and innovation in the provision of educational facilities nationally and internationally, as well as the latest information and communications (ICT) technology and infrastructure. The new high school will provide state-of-the-art general and specialist teaching and learning facilities to accommodate innovative programs in key learning areas.

Specifically the design aims to:

- establish models for excellence in curriculum, pedagogy and learning
- provide a leading edge learning environment and enterprise oriented education within the framework of the Tasmanian Curriculum
- provide a learning culture for its students that develops deep inquiry in identified learning areas in partnership with educators, local businesses and higher education experts
- respond to current and future interests and needs of its students
- prepare young people to be creative, critical, informed and motivated contributors, responding to professional, personal and social issues
- increase participation of, enhance retention and the success of secondary education students in the Kingborough region
- positively transform students' attitudes to future career paths
- become a model and agent of change and enhancement of education in Tasmania as well as nationally and internationally, and
- provide a contemporary facility that encourages, supports and enhances community use both during and after normal school hours.

Site planning includes options for extending the new educational facility to provide a potential footprint for up to an additional 300 students in the event there is a future need to expand the facility to accommodate additional students.

Accommodation to be provided in the new high school includes:

- general learning area buildings providing small learning communities or ‘pods’ (capacity for up to a maximum 125 students) for all year 7 and 8 students. These facilities comprise appropriate learning studios with a variety of types and sizes of spaces to support different teaching and learning modes. These ‘pods’ include provision for individual space and secure storage of personal equipment
- general learning areas for years 9 and 10 to incorporate provision for individual ‘work stations’ or learning / private study spaces and secure storage of personal equipment
- specialised learning areas (which may be linked and/or shared) for science, vocational and applied learning (including materials, design and technology (MDT), automotive studies, electronics and graphic design)
- specialised learning areas for visual and performing arts, assembly, music, dance, drama, multimedia and theatre production
- specialised learning areas for vocational and applied learning to incorporate foods, textiles and catering studies
- specialised learning areas for health and wellbeing, fitness, outdoor education and sport
- library/resource centre
- administration area
- staff accommodation
- car parking, bus lay-by and parking
- covered external areas
- extensive grassed spaces for formal and informal ball games to provide for large numbers of students
- landscaped external areas, providing a combination of soft and hard surfaces
- other facilities including a canteen and student amenities
- capability to facilitate teacher training, and
- spaces for community access and use.

## **LEARNING CONTEXT MODEL**

Synergy with the surrounding environment

The site offers exciting learning opportunities due to its location with views of two prominent geographical features, Mount Wellington and the River Derwent. The geographic location and distance from Hobart has provided an avenue for including disciplines such as geography, geology, botany and astronomy in the design. The site and the buildings will also provide opportunities to “see the school itself as part of a larger social ‘eco-system’ and for connecting it more closely to its community” (Nair Fielding 2005).

ICT Strategy

The school will be a ‘cutting edge’ model school in the use of technology in support of high student achievement. ‘eLearning’ is the learning that is supported by electronic devices and media. ‘mLearning’ is eLearning that uses mobile devices and

wireless transmission. The students of the new educational facility will be expert users of emerging technologies. Wireless 'mTechnology' personalises learning because students own it and use it as a normal part of their everyday lives. The technology will provide tools for teaching and learning.

The 'Generation Lap' is a reality that describes how students from an early age are learning, playing, communicating, working, and creating communities that are very different from their parents. While it is not known what the mLearning technology will be when the school opens in three years, the emerging trends are known and will be accommodated in the design of the new school. Mobile technology that provides individual students with global access to books, papers, film, photos and music from anywhere at anytime is normal life for many students.

A comprehensive ICT strategy is under development which will consider broad requirements for technology that will:

- provide an ICT learning showcase as a model for other schools
- enable 'anytime, anywhere' learning with consideration given to future Ultra Mobile PCs (UMPCs) that incorporate the features and benefits of laptops and PDAs into a smaller footprint and even enable connection into corporate 3G wireless networks
- provide collaborative e-spaces for staff, students, parents and the community, with online information, advice and guidance, tailored to the needs of these different groups
- provide a single network for data, voice, video and wireless communication based upon an Internet Protocol (IP) platform
- support a wireless layout with a footprint that enables staff and students to move about the campus freely with their mobile equipment and yet still remain connected to the network / internet. The campus buildings should also not inhibit connection into corporate 3G wireless networks such as Telstra, Vodaphone, etc.
- have fibre links between each of the campus buildings to a single central location for communications equipment / servers, etc.
- enable use of environmental control systems so that office staff can monitor, control and adjust air and heat flow, track energy use, and manage a range of safety and security operations. Classroom teachers and students should have options to adjust temperature (heating and cooling) and lighting as needed in their classrooms / learning spaces, and
- cater for online real time collaboration and presentation by using some or all of the following that are linked (via IP) to a central broadcasting centre if required:
  - large flat panel (LCD) monitor displays
  - data projectors and screens
  - high-end video communications – including streaming of video / TV / internet, etc
  - video conferencing (VC) including both desktop based VC and purpose specific VC equipped rooms
  - campus based voice system, including VoIP.

## **PROFILE OF THE KINGSTON HIGH SCHOOL**

The school was opened in 1972 to service the growing Kingborough region south of Hobart. It immediately took on a progressive charter under the principalship of Mr Sid Eldridge, an innovative leader who was influenced by the internationally acclaimed Summerhill School in Wales. The school was small, with an initial enrolment of 168 students, and personal with a rural flavour. It became known as being different from other comprehensive high schools by operating a progressive time table and was prescient in encouraging and supporting the development of relationships between students and staff through the introduction of a regular activity afternoon, whole of school camps and a week of Work Experience.

Enrolments at the school had declined steadily since an enrolment peak of 797 students in 2000. This trend began reversing in 2007, where the last two years have resulted in higher numbers than projected. There are currently 641 students enrolled in years 7 to 10 at the school in 2008 and the number of enrolments is expected to increase in future years as the region continues to grow and students who currently bypass Kingston High School to attend schools in Hobart realise the advantages of attending a state-of-the-art school in their local district. Today, Kingston High is a six plus stream high school, accommodating at least six class groups for each grade level at the school.

### **Historical and Projected Enrolments**

	Actual First Term Census									Projected			
Year level	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
7	216	191	178	147	148	146	145	163	169	158	155	146	168
8	178	216	194	174	153	151	150	147	171	169	162	160	151
9	175	180	213	185	178	158	159	158	148	171	173	166	164
10	228	167	172	206	186	180	162	154	153	156	174	175	169
Total	797	754	757	712	665	635	616	622	641	654	664	647	652

Traditionally, the majority of students at the school have enrolled from associated primary schools in the Kingborough region, including the smaller nearby townships of Margate and Snug. Although the school receives enquiries for out of area enrolments, very few of these students are accepted as the school has operated at capacity for the last decade. In recent years, there has been substantial residential development in the region as well as a significant influx of families from interstate and overseas (including a growing number of African refugees) to take up employment or a 'sea change'. The school is also now part of the State Government's program to accept international students.

## Source of Year 7 Students

Feeder Type	From	Yr 7 2004	Yr 7 2005	Yr 7 2006	Yr 7 2007
Neighbourhood	Blackmans Bay Primary School	27	35	31	37
Neighbourhood	Illawarra Primary School	16	14	20	19
Neighbourhood	Kingston Primary School	49	37	30	36
Neighbourhood	Margate Primary School	19	24	25	31
Neighbourhood	Snug Primary School	16	12	23	19
Others		13	12	11	11
Others	Bellerive Primary School			1	
Others	Branxholm Primary School		1		
Others	Campbell Street Primary School	1			
Others	Cygnets Primary School				2
Others	Dodges Ferry Primary School				1
Others	Geeveston District High School		2		
Others	Goulburn Street Primary School				1
Others	Herdsmans Cove Primary School		1		
Others	Huonville Primary School	2		1	
Others	Lansdowne Crescent Primary School		1		
Others	Lenah Valley Primary School	1			
Others	Montagu Bay Primary School				1
Others	Mt Faulkner Primary School	1			
Others	Oatlands District High School		1		
Others	Princes Street Primary School		1		
Others	Risdon Vale Primary School		1		
Others	Roseneath Primary School				1
Others	Sorell School			1	1
Others	Springfield Gardens Primary School			1	1
Others	Woodbridge School	3	4	1	2

DoE stats based on First Term Census 2008

### Community Access to Facilities

The school has traditionally had a high profile in the community, with its facilities available for a wide range of community use. The new facility will promote and support further development of various partnerships and potential for sharing facilities. Of particular interest will be a myriad of opportunities for community use of the Performance and Cafeteria building and school use of sporting facilities provided by Kingborough Council at the Kingborough Sports Centre. Life long learning will be promoted in the community.

Agreements between Kingborough Council and the Department of Education are currently being drafted to support the sharing of resources.

Kingston High School fosters and enjoys a positive reputation in the community and actively seeks mutually beneficial partnership arrangements with local businesses and community organisations. The school is renowned as one of the few in the state to use Restorative Conferencing practices to develop and maintain harmonious relationships between students and students and staff. Understanding that interpersonal relationships are best nurtured in groupings of around 150, the school is divided into four sub-schools each of which has a team of staff that supports all aspects of learning and personal and social development.

The new facility will provide new opportunities to develop mentoring, work placements and meaningful community relationships with significant local organisations such as the Antarctic Division. The community and business people will be resources for student learning, and the school and its facilities will be a resource to be used in a variety of ways by the community.

## **DESIGN PROPOSAL**

The proposal seeks to relocate the existing Kingston High School facility to a new site and provide accommodation of approximately 8000m<sup>2</sup> as detailed below.

### **The Site and Buildings**

The master plan proposed for this site has been developed in consultation with all the responsible parties as identified in the earlier sections of this report.

The design for the creation of the planning diagram has been based on the knowledge that one of the most powerful mediums of learning is to connect theoretical concepts with real life experiences. Remarkable views of the Derwent River, the corner aspect on both Summerleas Road and Kingston View Drive, the community presence adjacent to the site, and the well vegetated and sloping gradient are key features of the site. The site master plan has arisen as a united landscape and architectural response to these features, drawing upon key design principles, as described below, inspired by the site itself and the pedagogical link between life and learner.

### **The Sine Wave**

The diagram of an abstracted sine wave constructs the main path of circulation that traverses the site. The metaphor of the simple harmonic motion of the sine wave abstracts a mathematical phenomenon and relates it to the journey that the learner undertakes in the progression from year 7 – 10. The peaks and troughs represent the stages of the journey, these forming six learning pods for each of the year levels present on the site.



### **The views of the Derwent River**

The southern aspect of the site draws on tremendous views of the Derwent River. The ability for the school to engage and interact with its surroundings is of great importance in this global age of technology. As such the sine wave provides the opportunity for the buildings to be staggered in a uniform pattern such that the views of the waterfront remain unimpeded. The ability for a learner to vary the viewing distances during the course of a day is imperative to maintaining concentration. As such, the ability to view outdoors and engage with one's environment at varying scales is of extreme importance.

### **Orientation**

The horizontal orientation of the buildings in an east west direction provides excellent opportunities for the buildings to obtain north light and make use of passive heating, cooling and ventilation. The sine wave has gently been tilted eastwards so that the buildings are encouraged to face due north capturing daylight not only on the perimeter but into the heart of the collaborative zones through the use of roof lights. The buildings have been oriented such that there is minimal disruption to the site in terms of earth works and leveling. The buildings have been designed such that the pods can be on a similar grade, with the northern learning pods nestled into the site and the southern protruding to maximise different environmentally sustainable design benefits.

### **The Learning Street**

The simple harmonic motion of the sine wave around a horizontal point provides the opportunity to create a learning street through the middle of the site uniting all the learning pods together. The learning street is approximately 12m in width and 250m long, traversing from the Gymnasium to the furthest year 9 and 10 learning pod. This provides a comfortable and equitable walking distance from one point of the site to the eastern most extremity. Each of the learning pods has its main entry off the learning street, with under cover walkways created by the gentle form of the sine wave as roofing overhead. The learning street works with the contours of the site, gently stepping towards the Summerleas Road boundary. A series of ramps are included to ensure equitable grading for all.

### **The Community Interface**

The inclusion of community facilities in the brief for the Kingston Education Project provides the opportunity to greatly contribute to the existing community presence on Kingston View Drive. Starting from the positioning of the new Gymnasium nestled in with the existing facilities at the start of the sine wave the speciality buildings present themselves as beacons to the public on the street façade. This not only encourages the community to interact with the school site, but also ensures that a duty of care is maintained so that the public interface remains distinct from the heart of the school precinct.

The Performance and Food Technology building is sited on the street front adjacent to the Gymnasium. Together, these two buildings present the opportunity to create a large community entry point adjacent to the stadium with an outdoor amphitheatre, adding to the already existing carpark entry. The Design, Discover and Technology building sits adjacent to the Performance and Food Technology building. This provides a strong connection for art facilities housed in the DDT building to cater for

activities such as set and costume design. The Administration building is co-located with the Resource Centre, also known as the Global Learning Centre (GLC). This sits prominently on the approach to the site being the first speciality building visible from the street.

### **The Learning Clusters**

The sine wave provides the opportunity for the learning pods to cluster in groups of three. Each learning pod has a diagonal visual and physical connection to another, with landscaped areas and learning decks to all sides of the learning pod. The landscape connection is an important part of the master planning diagram. As such, beyond the boundaries of the sine wave, pockets of lawned areas between each learning pod provide outdoor learning and play spaces.

The location of the learning clusters begins with the year 7 and 8 learning pods being located close to the recreation zones, with the year 9 and 10 being located closer to the Performance and DDT speciality facilities.

### **Amenity and Infrastructure**

An integral part of the functioning of the master plan is the strategic location of site car parking, access and egress. The master plan seizes on the opportunities to integrate the existing parking with the proposed facilities. The north western carpark that currently services the Stadium will be retained for access to the Performance and Gymnasium buildings. The south western car parking will assist with staff carparking, along with proposed additional parking planned for the north of the site.

A bus drop off zone has been located to the northern boundary of the site between the Performance and Design, Discovery & Technology buildings, providing strategic access to the heart of the school via a secondary entry point. The main entry point to the school will remain in the vicinity of the GLC/Administration building, with visitor and Principal parking located in 90 degree carparks off Kingston View Drive.

### **Building Design and Materiality**

The key principle behind the design of the building form and choice of materiality has been to strive for an architecture and landscape design that minimally impacts on the existing site, and also contributes to the existing “green” aesthetic. The parabolic nature of the learning pods was borne from the form created by the sine wave.

The parabola not only provides a planning shape with a simple and accessible perimeter, but the form also provides the metaphor of a seed drawing upon the ideas of nurturing and growth. The repetitive nature of this form distributed along the sine wave provides an economy of means through repetition, making it a modular building feature on the site. The speciality buildings are treated in a similar fashion, employing the use of elliptical shapes. The use of the elliptical shapes is in keeping with the idea of the seed, drawing upon a pure simple geometry as home to the more complex activities of the brief.

The parabolas interact with the site in one of two methods: cut or fill. The learning pods to the north are gently cut into the southern part of the slope and the landscape around battered so as to foster the ability to access natural light to all facades. The southern learning pods are leveled by sitting on fill taken from the cuts to create the

benching for the northern learning pods. This ensures that there is minimal wastage of earth works by ensuring that the earth is merely moved from one part of the site to another. The ellipses, being larger in area than the learning pods, are sited on the higher, flatter parts of the site to again minimise the amount of earth works.

The intent is that the buildings will mainly be steel framed construction with light weight, but well insulated skins. Cladding materials will be a composition of timber, glass and metal paneling repetitive in nature for simplicity of construction and tactility of the building skin. The cladding of the learning pods will be similar in nature, whilst the cladding of the speciality buildings will vary according to the activity housed within the building. The materiality of the GLC/Administration building may be more transparent, as compared to the DDT building which may be more industrial in nature.

A combination of concrete slabs with geo-thermal and hydronic technology are being explored to more efficiently heat the buildings, with the opportunity for some green roofs to be provided creating additional thermal mass, and also providing relief to the master plan by making built form appear as landscape elements. Clerestory windows that also operate as thermal chimneys are being employed to provide north light into the collaboration zones. They also provide central points in the ceiling to help naturally ventilate the buildings. Gabion rock wall construction will be employed to create retaining walls that may also form balustrading.

In essence the building forms on the site will seek to recede into, and enhance the existing landscape yet at the same time provide a precinct of community buildings that are of an inviting and welcoming nature. The design seeks not to provide a series of institutional buildings, but rather a place where learning is part of a living experience.

### **Teaching and Learning Areas**

Key teaching and learning areas will include:

#### **Learning Pods**

A series of 'learning pods' for general teaching and learning activities have been designed to accommodate up to 125 students with each incorporating a home base area, general practical activity space, collaborative studio, space for group meetings, staff workspaces (for collaborative team discussion and personal individualised planning), storage, some amenities and outdoor learning areas.

The learning pods are folded off the central urban learning street as the main learning buildings. It is in these buildings where the infrastructure for learning is planned out. The layout of these buildings focuses on providing flexible ways for space to be utilised and flexible ways for students to engage with learning.

The spine that holds the group learning areas together is the collaborative zone, similar to the learning street. It is the communal part of the building where students can mingle in smaller groups in a less formal manner or alternatively all students can congregate in this zone for a group function. The spine is the circulation space between all the parts of the building and the entrance space from the learning street.

There is the opportunity to provide a kitchenette, support IT and printing facilities in this zone that can be shared with all members of the learning pod.

The heart of the building is in the five learning rooms. A smaller nook is provided by the 'L' shaped configuration to the learning rooms which promotes direct teacher interaction with smaller groups. Each learning room has flexible walling to interact with the space of the adjacent 'group meeting' room or the 'collaborative zone'. The group meeting rooms provide similar functionality as the nooks and 'collaborative zone' promote but in a more formal setting. The smaller meeting rooms expand upon the formal flexible zone for smaller groups of students or for meetings between students and teachers.

Each of the learning rooms interacts with the outdoor learning deck. The landscape around the building will be shaped to the perimeter of the learning decks expanding the potential for the learning rooms indoors to interact with outdoors. The 'Art and Science room' contained within the year 7 and 8 pod is not designed as a high end specialist facility for these learning pods, but rather more as a space intended as a general messy work area, allowing for experimentation and expression with these topics that the general learning areas would not support.

The staff retreat is located at the entry into the collaborative zone providing a strong connection with the learning street and with surveillance over the entire learning pod. The staff area has an adjacent resource room for storage. The amenities are also located at the entry of the buildings for easy monitoring by staff.

Learning areas/spaces as a rule need to provide sufficient floor area for flexibility and a variety of learning modalities, pedagogies and activities to be undertaken. 'L' shaped spaces are seen to support this approach.

In total there are six learning pods. The pods are in groups of three with one group providing small learning communities and home and learning bases for years 7 and 8 students. Some distinction in plan was seen as necessary to better support the year 7 and 8 pods. There is a requirement for individual student storage, which can be met by the provision of personal 'bag boxes'. These will be provided in groups of 25 and located around the pod in appropriate spaces.

The second group of three pods is similar in design, but with some specific variations in provision, reflecting the fact that they are to be the home base and general learning areas for the year 9 and 10 cohort of students.

A significant difference in the plan for the year 9 and 10 student pods is that each student needs to be provided with a personal work and secure storage space. It is proposed that an appropriate solution to this is to provide for a work station for each student, which has a secure locker incorporated as part of the design.

It is proposed that the year 9 and 10 students move to purpose built specialist facilities for the majority of their practical and applied learning. Therefore the year 9 and 10 pods are not seen to require the same practical activity space as is proposed for the year 7 and 8 pods.

### **Specific Functional and Learning Spaces**

Specific functional and learning spaces are to be provided to cater for various activities as follows:

- science, materials, design and technology
- visual and performing arts
- food, catering
- fitness, health and sport
- global learning centre
- administration, and
- staff accommodation.

The specialist teaching and learning spaces are located in discreet buildings in close proximity and accessible to the learning pods.

Each of the year 7 and 8 pods will have specialist learning areas located within the pod; one focusing on creative design, one focusing on discovery, and the third focusing on technology, in particular textiles.

#### **1. Design, Discovery and Technology Building (DDT)**

The Design, Discovery and Technology building is the first building seen from the approach along Kingston View Drive. The building like all the other speciality facilities retains the shape of an ellipse, with its longer façade facing the street front. The building is sited in close proximity to the year 9 and 10 learning pods. These year levels will spend more time in the speciality buildings in order to take advantage of to the self-directed learning options.

A corridor with entry from both the north and south ends of the ellipse divides the DDT building into two zones. The southern part of the building provides the base for the Discovery Studio. These are dedicated specialist science rooms providing high end science facilities.

The northern half of the DDT building is dedicated to the creation of “clean” and “dirty” studios supported by a centrally located ICT design centre. These studios will facilitate a multi-disciplinary approach to the delivery of the technology subjects by providing an open floor plan where a variety of activities such as Wood, Metal, Ceramics and Plastics can occur in one studio at a number of different stations, so that students can engage in technology with a more holistic approach. The “clean” studio has the ability to offer technology subjects such as Electronics and Fabrics, in an environment where the whole studio can function as a multi-disciplinary unit with a series of movable partitions to create group learning areas.

Staff facilities are located in the heart of this building providing good student supervision and access to facilities.

Specifically, the following facilities will be provided.

## Science

- provision for 2 science rooms (discovery rooms), each of which will have perimeter serviced benches with gas, power, and water readily accessible. The centre of the room is free from fixed furniture and carpeted
- adequate preparation room and appropriate storage rooms to provide for materials, equipment and consumables, including the provision of at least one fume cabinet
- secure staff work area.

## Design, Discovery and Technology

- provision for adequate dual workshop area to accommodate woodwork, metalwork, plastics, electronics, power technology, automotive studies and emerging technologies for multiple groups of students at one time. The layout of these spaces must facilitate teacher supervision of student safety
- adequate learning areas suitable for 'design and make' practical activities incorporating features such as a wet area, sinks and workbenches
- project storage areas
- materials breakdown and storage areas
- adequate services including dust and fume control and power distribution
- access for the delivery of bulk materials and covered external, secure storage and work area, to support a range of activities, and
- secure staff work area.

## Art

- two creative studios for art, graphics, pottery, kiln, and multiple groups
- adequate utility areas for wash – down
- storage for student work in progress
- storage of equipment and materials, and
- secure staff work area.

## **2. Performance and Food Technology Building**

The Performance and Food Technology Building is sited close to Kingston View Drive. With its elliptical form, the building has the opportunity to provide a series of flexible arrangements in both areas of Performance and Food Technology.

The facility will be multi-functional and provide for an auditorium / performance area with capacity for the whole school population as well as housing the teaching and learning areas for music, drama, dance, multi-media, and foods. It is proposed that this facility will enjoy a high level of community use and after-hours access for a variety of purposes. This building will have its own amenities.

It is envisaged that the main auditorium space will interconnect to other facilities to optimise the type and number of activities that can take place at any one time, and to increase the flexibility.

The food technology kitchens have been located on the south eastern section of the ellipse. Both kitchens have connection to the dining area for theory or catering purposes, and the shared use of the dining area with the canteen also provides the opportunity for an indoor servery and cafeteria type facility. A storeroom has been

located to the rear of the kitchens providing an acoustic buffer between the two distinct spaces.

A large outdoor dining deck allows for the outdoor servery space for the canteen, as well as providing potential for outdoor engagement with the dining room. A corridor links the auditorium and the dining room to maximise the potential for the space to provide a function facility.

The music and practice areas are located to the southern part of the ellipse. A combination of four smaller and one larger practice room is provided with provision for staff rooms immediately adjacent. The music practice area has connection to the Production room to allow for back stage entry for music performances and a large zone for events such as band practice.

Specifically the following facilities will be provided

#### Auditorium/Performance

- fixed stage
- moveable and fixed tiered seating
- acoustic and lighting controls
- multiple entry points, including after hours access for community use, and
- storage of equipment and materials.

#### Dance / Drama

- two teaching studios (one within auditorium).
- access to the multi-media studio, and
- secure staff work area.

#### Music

- one large music studio capable of accommodating multiple groups of students including groups with instruments seated in a band formation.
- a multi-media mixing studio
- four smaller soundproofed practice rooms capable of accommodating small groups of 1 to 3, and 10 people and instruments.
- instrument storage including wet areas, and
- secure staff work area.

#### Food, Catering, Canteen

The facilities providing for food, catering and canteen are to be incorporated as part of the performance centre referred to above. Such provision is seen as potentially compatible with the functions of the centre in terms of catering and student enterprise.

The main spaces will interconnect to optimise the type and number of activities that can take place at any one time, and to reduce complications with supervision.

The design includes:

- two teaching and learning areas to enable the delivery of a complete range of food studies curriculum, incorporating food preparation, cooking and serving areas, with both a practical/capability for both domestic and vocational catering /commercial emphasis

- space for serving food, student enterprise and quasi-commercial activities
- secure staff work area
- pantry, cool storage and general storage facilities, and
- laundry.

### **3. Administration and Global Learning Centre**

The Administration building is co-located with the Global Learning Centre (GLC), also known as Resource Centre, being sited at the heart of the campus entry from Kingston View Drive. The intention for the design of this building is to communicate a sense of transparency and invitation to the site.

The GLC enjoys the opportunity for good diffused south day lighting and also presents the school precinct to the community as a centre for learning. The GLC houses an ICT/ silent learning and careers / multi-media studio. These provide the opportunity for self-directed learning and exploration to occur in a space in which information and ICT are of extreme importance.

The connection with the world via technology is becoming more and more digitalised and the ability to tap into resources through this medium is vital. It is envisaged that the GLC will be the hub for IT for the school where equipment will allow the user to source information from anywhere in the world through the use of information technology. This will be the centre through which all the resources in the school are electronically managed. Student resource and special needs areas will be adjacent to the GLC.

The school administration facilities will be in the other half of the ellipse. The Reception is the first point of call off Kingston View Drive with visitor parking provided via a short walk from the main street front. Offices are provided for administration staff as well as provision for the school uniform shop. These are all located in close proximity to the main reception desk for surveillance and control.

The Principal's office is located on the north western side of the ellipse, being closest to the heart of the school and in close connection to the front office. To the south and closest to the learning pods is located the main staff social room. Located adjacent is the conference area, which can be separated from the main space in the event of Council meetings or seminars, or opened up to provide a much larger gathering space. The staff social area and the GLC have their own amenities, allowing both spaces to have an out-of-hours function.

The sick bay has been strategically located close to the Assistant Principal's office for ease of access and surveillance of sick students.

Several storage facilities have been located around the administration space to cater for the various requirements.

The school administration area will be easily recognised by and accessible to students, staff, parents and members of the community entering the site and provide a welcoming entry and access for those with special needs and circumstances.

There is sufficient floor area and facility to showcase school achievements and student work.

Separate student access is provided to a 'student services' reception area that is separate from the public reception contact area.

Specifically the following facilities will be provided:

#### Administration

- an open reception area/foyer including a display facility and waiting area
- general office for administrative staff, including a separate space for the senior executive officer (SEO)
- boardroom/meeting/interview rooms
- adequate offices for the Principal and Assistant Principals
- vocational and alternative learning and support facilities
- first aid facility / sick bay
- staff utility work area
- staff lounge
- ICT administration including a server/workroom and small office
- general storage for records and consumables
- uniform shop / parent centre
- provision for adequate security from the public and potentially threatening or dangerous situations, and accessible toilet facilities for staff and school visitors.

#### Global Learning Centre

storage for a variety of resource materials

- study and work area for individuals and groups
- recreational reading
- a control area/desk
- office / workroom
- book display and storage areas
- internet and research access areas
- resource areas
- reading areas, and
- study areas.

#### **4. Fitness Health and Sport**

As there is already significant sporting infrastructure next to the school site, the opportunity to share and collaborate on use of compatible existing facilities to support the delivery of education programs is recognised and acknowledged. The school will require access to a dedicated sports hall/gymnasium during school hours. There is a real opportunity to 'partner' with Kingborough Council on integration and sharing of facilities.

Negotiation with Kingborough Council and the community is taking place under the framework of the 'Heads of Agreement' document.

It is envisaged that the Gymnasium will be accessible and potentially managed by the Kingborough Sports Centre after school hours. Siting and detail need to reflect and

support this intention. The gymnasium design optimises the type and number of activities that can take place at any one time, and includes:-

- a court area adequate for school and community use for a range of activities including netball, basketball, volleyball, tennis, and badminton
- toilets and change rooms for staff and students, including people with disabilities
- adequate separate supporting space for a range of activities such as aerobics, weights, electronic machines and equipment and/or for use as a general learning/tutorial area in relation to the above. Use of existing spaces within the Kingborough Sports Centre may be negotiated for these purposes
- direct access to outdoor sporting and recreation facilities including grassed ovals, netball/tennis and hard play spaces
- secure staff work area
- access to technology for students and staff
- secure storage for large sporting equipment e.g. kayaks, bikes, athletic equipment, and
- general storage.

#### Student Amenities

The accommodation design allows for distinctive character spaces that foster student socialisation and interaction. Provision for key student areas has considered the following:

- a central student common room and cafeteria
- outdoor shaded recreation, hard play and seating areas
- toilets regularly distributed throughout the buildings and provided in accordance with the requirements of the BCA, and
- provision of amenities for high need students and students with disabilities including shower, toilet, change.

#### Linkages between functional areas

Linkages between functional areas are critical to optimising the utilisation of teaching and learning spaces. Students and staff will be engaged in transdisciplinary project based learning, necessitating access to a range of facilities, variety of learning spaces/resources and movement from one learning area to another.

Relationships between functional areas within the school to maximise opportunities for integration of access, for flexible use of spaces and for expansion into adjoining spaces to support diverse and interdisciplinary learning programs and projects have been developed.

Functional area relationships are provided between the following:

- Car and bus lay-bys, parking, main entry, administration, senior staff (principal, etc), meeting spaces
- Sporting facilities (gymnasium, gymnastics (existing and proposed) and external playing fields)
- Carparking, community and out of hours access to performing arts and catering facilities (music, dance, drama, catering)
- Food preparation, canteen and student common areas, both internal and external

- Food preparation and catering, performing arts
- Resource area central to whole school
- Outdoor learning spaces connected to internal learning spaces.

#### Storage, Service Areas and Plant Rooms

Storage and low occupancy functions will be located where they do not restrict physical access, the level of natural light or outlook to other spaces.

Storage of equipment within learning areas is maximised rather than providing dedicated store rooms with under-utilised circulation area and lack of visual supervision.

Storage devices such as cubicles with roller shutter doors in workshops or built in cupboards in learning areas, both with appropriate security measures, may allow double use of the floor area required to access stored materials.

Access for delivery of large items will need to be adequately planned. A staff workshop and secure storage facility will include a wet area. Secure undercover parking for a small/medium bus and trailer will be provided. A bulk delivery and storage space easily accessible to the main administration area has been included.

#### Area Schedule

Area Schedule - 7 April 08			
Space Type	No	Area m2	Total m2
<b>7/8 General Learning Pod</b>			
GLP 1	1	75.2	75.2
GLP 2	1	76.5	76.5
GLP 3	1	71.7	71.7
GLP 4	1	72.0	72.0
GLP 5	1	78.8	78.8
Collaborative Zone	1	140.1	140.1
Art & Science	1	78.4	78.4
Group Meeting	1	41.3	41.3
Staff	1	32.7	32.7
Small Meeting	1	10.3	10.3
Small meeting	1	10.3	10.3
Store	1	11.0	11.0
Store	1	11.0	11.0
Store	1	7.1	7.1
Store	1	1.5	1.5
Store	1	4.2	4.2
Store/Print	1	7.9	7.9
M	1	11.2	11.2
F	1	11.1	11.1
Unisex	1	2.4	2.4
Disabled	1	5.1	5.1
		Sub Total	759.8
<b>3 Student Learning Pods</b>	<b>3</b>	<b>Total</b>	<b>2279.5</b>

9/10 General Learning Pod			
GLP 1	1	75.2	75.2
GLP 2	1	76.5	76.5
GLP 3	1	72.0	72.0
GLP 4	1	72.0	72.0
GLP 5	1	78.8	78.8
Collaborative Zone	1	152.6	152.6
Group Meeting	1	40.8	40.8
Staff	1	31.7	31.7
Small Meeting	1	10.3	10.3
Small Meeting	1	10.3	10.3
Store	1	11.0	11.0
Store	1	1.6	1.6
Store	1	11.0	11.0
Store	1	7.7	7.7
Store	1	7.0	7.0
Store	1	4.2	4.2
M	1	11.1	11.1
F	1	11.1	11.1
Disabled	1	5.1	5.1
Unisex	1	2.4	2.4
		Sub Total	692.5
<b>3 Student Learning Pods</b>	<b>3</b>	<b>Total</b>	<b>2077.4</b>
Admin/ GLC			
Principal	1	20.2	20.2
Assistant Principal	1	14.2	14.2
Staff	1	17.0	17.0
Staff	1	110.5	110.5
Admin Manager	1	10.4	10.4
Office	1	8.7	8.7
Office	1	10.1	10.1
Office	1	10.0	10.0
Tech. Office/Server	1	15.1	15.1
Conference	1	23.3	23.3
Global Learning Centre	1	211.4	211.4
Student Support	1	21.7	21.7
Careers Multimedia Studio	1	35.5	35.5
ICT/ Silent Learning	1	35.7	35.7
Special Needs	1	36.5	36.5
Admin Lobby	1	21.2	21.2
Reception/Office	1	33.2	33.2
Sick Bay	1	6.2	6.2
Sick Bay	1	5.9	5.9
Work/Printers	1	21.6	21.6
Store	1	26.7	26.7
Uniform Store	1	9.3	9.3
Store	1	2.0	2.0
Store	1	6.0	6.0

Store	1	7.5	7.5
DB Room	1	15.7	15.7
MSB Room	1	10.5	10.5
Cleaner	1	3.2	3.2
F.I.P. Airlock	1	8.2	8.2
Air Lock	1	5.1	5.1
Circulation	1	52.9	52.9
F	1	7.0	7.0
F	1	9.6	9.6
M	1	7.2	7.2
M	1	8.4	8.4
Unisex	1	1.9	1.9
Disabled	1	11.1	11.1
		<b>Sub Total</b>	<b>860.6</b>
Performance - Music, Drama, Production, Food Tech, Café			
Music Practice 1	1	108.95m2	108.95m2
Music Practice 2	1	23.88m2	23.88m2
Music Practice 3	1	22.71m2	22.71m2
Music Practice 4	1	22.44m2	22.44m2
Music Practice 5	1	12.17m2	12.17m2
Staff	1	19.89m2	19.89m2
Circulation	1	8.98m2	8.98m2
Music Store	1	24.49m2	24.49m2
Circulation	1	6.53m2	6.53m2
Circulation	1	34.72m2	34.72m2
Production	1	43.66m2	43.66m2
A/V	1	10.79m2	10.79m2
Staff/ Dis.	1	5.43m2	5.43m2
Staff	1	3.31m2	3.31m2
Cleaner	1	3.13m2	3.13m2
Laundry	1	8.68m2	8.68m2
Food Tech 2	1	100.60m2	100.60m2
Food Tech Store	1	35.64m2	35.64m2
Circulation	1	9.64m2	9.64m2
Circulation	1	104.82m2	104.82m2
Performance Store	1	32.66m2	32.66m2
Drama/Dance	1	79.00m2	79.00m2
Airlock	1	9.20m2	9.20m2
Auditorium *	1	430.78m2	430.78m2
Change Rooms	1	14.38m2	14.38m2
Change Rooms	1	14.38m2	14.38m2
Food Tech 1	1	95.38m2	95.38m2
F	1	18.07m2	18.07m2
M	1	12.71m2	12.71m2
Store	1	1.37m2	1.37m2

Circulation	1	12.74m2	12.74m2
Dining	1	79.60m2	79.60m2
Servery	1	20.34m2	20.34m2
Kitchen	1	30.93m2	30.93m2
Kitchen Store	1	8.30m2	8.30m2
Bins	1	4.07m2	4.07m2
Cleaner	1	7.14m2	7.14m2
DB Room	1	3.52m2	3.52m2
Comms C'Board	1	5.81m2	5.81m2
Air Lock	1	8.94m2	8.94m2
*Auditorium- 202 m2 in addition to original brief- part of negotiation with council			
		<b>Sub Total</b>	<b>1499.8</b>
Material Design & Technology			
Design Tech Studio I	1	164.8	164.8
Design Tech Studio II	1	187.0	187.0
Design Tech Main Store	1	77.6	77.6
Design Tech Store	1	35.4	35.4
Design Tech Store	1	28.7	28.7
Wood Project Store	1	22.9	22.9
Spray Box	1	12.8	12.8
Creative Studio I	1	83.1	83.1
Creative Studio II	1	76.9	76.9
Kiln Room	1	7.5	7.5
Store	1	15.7	15.7
Store	1	8.9	8.9
Store	1	7.6	7.6
Discovery Studio	1	110.8	110.8
Discovery Studio	1	118.6	118.6
Prep./ Store	1	58.8	58.8
Gas Cylinder Room	1	1.1	1.1
Gas Cylinder Room	1	0.7	0.7
I.C.T.	1	87.0	87.0
F	1	10.7	10.7
M	1	9.0	9.0
Unisex	1	2.3	2.3
Unisex Dis.	1	5.0	5.0
Hall	1	61.4	61.4
Display Cabinets	1	1.5	1.5
Display Cabinets	1	1.5	1.5
Staff	1	33.8	33.8
Comms Room	1	8.7	8.7
Cleaner	1	4.3	4.3
		<b>Sub Total</b>	<b>1244.4</b>
<b>Total Area Allocated</b>			<b>7961.6</b>

## **Engineering Services**

### **Mechanical Services**

In general, a philosophy of natural ventilation will be employed as far as possible with air conditioning and exhaust ventilation systems incorporated where required to achieve the BCA. The mechanical services scope of works will include air conditioning, heating, ventilation and a control system to the project. A building management system will be provided for the buildings and shall monitor and control all plant and equipment associated with the mechanical services. It will also provide for recording of energy consumed by electrical, mechanical and hydraulics.

### **Electrical Services**

The electrical services works include the substation, switchboards, general light and power, emergency and exit lighting, external landscape lighting, voice and data cabling, public address system, MATV and Security Access Control system.

The incoming electrical supply to the buildings will originate from the existing high voltage underground reticulation network of the local distribution company. A new kiosk type external substation shall be provided to the site.

Fluorescent lighting will generally be utilised throughout. General illuminating of external pathways and circulation areas will be provided with strategically placed bollards. All external light fittings shall be vandal proof and weather resistant. Generally all building and car park lighting will be provided with automatic control lighting systems.

### **Security and Access Control**

The Access Control and intruder detection system will comprise proximity card readers, electric/magnetic locks, door status monitoring devices, push to exit buttons and break glass units. CCTV Monitoring and proximity card readers will be provided for perimeter doors. PIR sensors will be provided to selected areas for intruder detection.

A centrally controlled public address system integrated with the occupant warning system shall be provided to all buildings with zone control. There will be the facility for local control on each building and the facility for generating and broadcasting of a "Clock Bell" signal.

### **Hydraulic Services**

The scope of works for the hydraulic services will include the following: property sewer, sanitary plumbing and vent piping systems, trade waste drainage, roof drainage piping system, discharge from mechanical equipment, domestic hot and cold water piping system. The systems will be designed with the capability to allow future modifications with minimum cost impact.

### **Fire Protection Services**

The following Fire Protection systems have been included in the design:

- fire hydrant system will be installed throughout the development
- fire hose reel system shall be provided to BCA
- portable fire extinguishers

- fire detection system, and
- occupant warning system.

The new hydrant system will comprise of a new tapping in the existing town's main water supply, with new underground pipework and new hydrant installed to meet the requirements of the relevant standards.

### **ECOLOGICALLY SUSTAINABLE DEVELOPMENT (ESD) STRATEGY**

The ESD strategy for the project has been developed to meet the following objectives:

- a comfortable, healthy and productive learning environment for the students and staff of the school
- efficient use of energy
- efficient use of water
- outdoor spaces for learning
- environmentally responsive outdoor spaces.

To achieve these objectives, the ESD strategy is structured around the eight categories assessed under the 2007 Green Star Education Pilot Tool. These are:

- management
- indoor environment
- energy
- transport
- water
- materials
- ecology
- emissions

The ESD strategies are targeted to achieve a Green Star rating of 5 stars. The ESD features of the project have been assessed against the tool as currently published by the Green Building Council of Australia. The final version of this tool is scheduled for release in mid 2008, and may change from its current form. Therefore, it may be necessary to revise parts of the ESD concepts for this development in order to maintain the requirements for a 5 star Green Star education facility. Due to the pilot nature of this tool, the ESD options have been selected to ensure a buffer of 15% is targeted in the case that this tool is altered significantly at its formal launch.

The current Green Star Education pilot tool and credit summary is provided hereunder.

# Green Star - Education PILOT

Credit Summary for:

Kingston High School

Category	Title	Credit No.	Points Available	Points Achieved	Points to be Confirmed
<b>Management</b>					
	Green Star Accredited Professional	Man-1	2	2	0
	Commissioning - Clauses	Man-2	2	2	0
	Commissioning - Building Tuning	Man-3	1	1	0
	Commissioning - Commissioning Agent	Man-4	1	1	0
	Building Users' Guide	Man-5	1	1	0
	Environmental Management	Man-6	2	2	0
	Waste Management	Man-7	2	2	0
	Learning Resource	Man-8	1	1	0
	Maintainability	Man-9	1	1	0
	<b>TOTAL</b>		<b>13</b>	<b>13</b>	<b>0</b>
<b>Indoor Environment Quality</b>					
	Ventilation Rates	IEQ-1	3	3	0
	Air Change Effectiveness	IEQ-2	2	2	0
	Carbon Dioxide and VOC Monitoring and Control	IEQ-3	1	1	0
	Daylight	IEQ-4	3	0	1
	Daylight Glare Control	IEQ-5	1	0	0
	High Frequency Ballasts	IEQ-6	1	1	0
	Electric Lighting Levels	IEQ-7	1	0	0
	External Views	IEQ-8	1	0	1
	Thermal Comfort	IEQ-9	3	0	0
	Hazardous Materials	IEQ-10	0	NA	NA
	Internal Noise Levels	IEQ-11	2	1	1
	Volatile Organic Compounds	IEQ-12	4	2	2
	Formaldehyde Minimisation	IEQ-13	1	1	0
	Mould Prevention	IEQ-14	1	1	0
	<b>TOTAL</b>		<b>25</b>	<b>12</b>	<b>6</b>
<b>Energy</b>					
	Ene-Conditional Requirement		Conditional Requirement	Yes	0
	Energy Improvement	Ene-1	15	6	2
	Electrical Sub-metering	Ene-2	1	0	0
	Peak Energy Demand Reduction	Ene-3	2	2	0
	Stairs	Ene-4	1	1	0
	Unoccupied Areas	Ene-5	1	1	0
	Lighting Zoning and Control	Ene-6	1	1	0
	Efficient External Lighting	Ene-7	1	1	0
	Car Park Ventilation	Ene-8	0	NA	0
	Centralised Energy Systems	Ene-9	1	0	0
	<b>TOTAL</b>		<b>23</b>	<b>12</b>	<b>2</b>
<b>Transport</b>					
	Car Park Minimisation	Tra-1	na	na	na
	Fuel Efficient Transport	Tra-2	1	1	0
	Cyclist Facilities	Tra-3	4	1	1
	Commuting Mass Transport	Tra-4	5	0	2
	Pedestrian Routes	Tra-5	1	1	0
	<b>TOTAL</b>		<b>11</b>	<b>4</b>	<b>4</b>
<b>Water</b>					
	Occupant Amenity Potable Water Efficiency	Wat-1	5	5	0
	Water Meters	Wat-2	1	1	0
	Landscape Irrigation Water Efficiency	Wat-3	3	3	0
	Heat Rejection Water Consumption	Wat-4	4	4	0
	Fire System Water Consumption	Wat-5	1	1	0
	Potable Water Use in Laboratories	Wat-6	2	2	0
	<b>TOTAL</b>		<b>16</b>	<b>16</b>	<b>0</b>
<b>Materials</b>					
	Recycling Waste Storage	Mat-1	1	1	0
	Reuse of Façade	Mat-2	0	NA	NA
	Reuse of Structure	Mat-3	0	NA	NA
	Recycled Content of Concrete	Mat-4	3	1	0
	Recycled Content of Steel	Mat-5	2	0	2
	PVC Minimisation	Mat-6	2	2	0
	Sustainable Timber	Mat-7	2	0	0
	Flooring	Mat-8	3	0	2
	Joinery	Mat-9	2	1	0
	Loose Furniture	Mat-10	3	0	3
	Recycled-Content & Reused Products and Materials	Mat-11	1	1	0
	Disassembly / Deconstruction	Mat-12	1	0	0
	<b>TOTAL</b>		<b>20</b>	<b>6</b>	<b>7</b>
<b>Land Use &amp; Ecology</b>					
	Ecological Value of Site	Eco-1	Conditional Requirement	0	0
	Reuse of Land	Eco-2	1	0	0
	Reclaimed Contaminated Land	Eco-3	2	0	0
	Change of Ecological Value	Eco-4	4	2	1
	Topsoil and Fill Removal from Site	Eco-5	1	1	0
	<b>TOTAL</b>		<b>8</b>	<b>3</b>	<b>1</b>
<b>Emissions</b>					
	Ozone Depletion Potential	Emi-1	1	1	0
	Refrigerant GWP	Emi-2	2	0	0
	Refrigerant Leak Detection and Recovery	Emi-3	1	1	0
	Watercourse Pollution	Emi-4	2	2	0
	Reduced Flow to Sewer	Emi-5	2	0	0
	Light Pollution	Emi-6	1	1	0
	Legionella	Emi-7	1	1	0
	<b>TOTAL</b>		<b>10</b>	<b>6</b>	<b>0</b>
<b>Sub-total weighted points:</b>				<b>59</b>	<b>15</b>
<b>Innovation</b>					
	Innovative Strategies & Technologies	Inn-1		0	0
	Exceeding Green Star Benchmarks	Inn-2	5 points in total for Inn-1,2&3	0	0
	Environmental Design Initiatives	Inn-3		0	0
	<b>TOTAL</b>		<b>5</b>	<b>0</b>	<b>0</b>
<b>Total weighted points:</b>				<b>59</b>	<b>15</b>

## **1. Internal Environment Quality**

### **Ventilation**

In both heating and cooling modes, air will be supplied to the space naturally through operable windows and doors. The number and area of these openings will be designed to comply with AS 1668.2 : 2002. Both high level and low level windows are included to facilitate cross flow and to achieve a good level of thermal comfort for the occupants. Internal louvers between smaller rooms in the specialty areas will be installed to achieve flow through to larger spaces. The buildings in this school will be naturally ventilated, eliminating the need to provide carbon dioxide sensors.

### **Daylight**

With floor to ceiling windows and the current over hang depth, there will be a considerable level of daylight to the learning pods. The level of daylight will achieve the required points under the Green Star Education Pilot Tool.

Glazed windows and doors are to be installed around the perimeter of all the learning pods and specialty buildings to provide access to daylight and external views. Overhangs have been installed on all the facades of the general learning pods to optimise natural sunlight while reducing solar gains in the spaces.

Overhead skylights will improve the access of daylight into the deeper spaces within the leaning pods and specialty buildings.

Sun shading will be fitted provided by the use of overhangs around the north and west facades on the learning pods. It is recommended to install automated blinds to reduce the glare throughout the year

### **External Views**

The buildings have been designed to provide maximum access to external views. Where possible, storage and sanitary facilities have been located towards the centre of the specialty buildings to improve the access to external views.

### **Material Selection**

The material selection for construction of the school campus buildings will achieve good thermal comfort levels for the building occupants:

- Wall: reverse brick veneer, wall construction
- Floor: concrete slab to ground, floor construction
- Ceiling/roof: metal clad roof with ceiling void, ceiling construction.

### **Heating and Cooling**

It is proposed to heat all school zones via under floor slab heating. The underfloor heating will be achieved through the installation of a series of underfloor coils. Internal air temperatures will be sensed in each zone and the supply of heat will be regulated to the under-floor system to provide optimum occupant comfort.

Cooling of the learning pods and specialty areas will be achieved by a natural ventilation strategy. High level windows will be operable and may be opened manually by the occupants.

To enhance the cooling performance of the naturally ventilated spaces, it is proposed to add an automated window opening function. When the temperature within the internal zones exceeds a certain level these windows will automatically open to enhance the flow of air across the space.

Included in this strategy is a night time heat purging function. The motorised windows will open during the night time periods to purge the internal spaces of the heat accumulated throughout the daytime operation. These windows will remain open only until a set internal temperature is achieved, preventing the spaces from becoming too cool overnight. This feature is designed to ensure open windows do not pose a security risk.

Manually activated ceiling fans will be fitted throughout these zones, which will improve the comfort of building occupants during cooling periods.

Air conditioning will provide heating and cooling to the small meeting rooms in each of the learning pods and to the ICT room in the design and development specialty area.

#### Performing Arts Auditorium

Heating and cooling of the auditorium will be distributed by an under-floor distribution system installed below the seating. On occasions of low occupancy the amount of outside air will be reduced and the remainder of the air inside the space will be recirculated to maintain conditions.

#### Internal Noise Levels

The building services for the space will be designed to achieve a noise level in accordance with AS/NZS 2107:2000.

Sound levels in the overall building will be in accordance with AS/NZS 2107:2000, with partitioning between each functional space and classroom.

#### Volatile Organic Compounds

The use of low Volatile Organic Compounds will be targeted for all painted surfaces, carpets and floor finishes, sealants and adhesives and loose furnishings.

#### Formaldehyde Minimisation

Where possible the use of composite wood product will be restricted. If recommended to install a low emission formaldehyde product (E0) will be utilised.

## **2. Energy**

Minimisation of energy consumption is proposed in the selection of the following services:

#### Heating and Cooling

Heating will be achieved by an air base heat pump. This type of heating plant reduces energy consumption by an approximate factor of 3 compared to conventional radiant heaters. The addition of energy recovery ventilators retrieves up to 75% of energy from exhaust air reducing the energy required to heat the outside air.

It is proposed to implement a natural ventilation strategy to achieve the outside air requirements for other spaces. Cooling will be achieved through natural ventilation elements as described in section 1 of the ESD strategy.

#### Lighting

High frequency electronic ballast is to be installed reducing lighting power losses. All distinct and enclosed spaces will have access to individual light switches. These lighting zones will not extend beyond 100m<sup>2</sup>. High pressure sodium will be utilised for external lighting achieving an efficacy of 50 lumens per Watt. PE sensors will be used to switch lighting off during periods with adequate daylight.

#### Electrical Sub-metering

Sub metering will be installed for the lighting, general power and heating of each learning pod.

#### Peak Energy Demand Reduction

Reducing the peak energy demand of the site has been considered in the proposed natural ventilation strategy.

#### Stairs

With the exception of the auditorium, all zones have been designed as single floor buildings. Access across the different levels of the site is to be achieved by ramps and stairs.

#### Unoccupied Zones

Occupancy sensors will be implemented for each separate and enclosed space throughout the campus. These occupancy sensors will be used to automatically shut down or set back the heating and cooling and activate lighting.

### **3. Transport**

A minimum of 75 student and 3 staff secure bicycle storage spaces will be constructed. Change facilities and lockers will be provided as part of the staff facilities with a single accessible shower. Both student and staff bicycle storage will be undercover and located within the school grounds, visible from the staff areas.

The school site is not currently serviced by existing public transport. There will be a dedicated bus network to the campus at peak school drop off and pick up times.

Pedestrian routes on and off the campus will be provided with safe night time lighting.

### **4. Water**

#### Occupant Potable Water Efficiency

A minimum 5 star rated tap-ware and cisterns will be installed on site. In addition to this waterless urinals are to be installed throughout the campus. A rainwater tank is to be installed and the water collected is to be reticulated for toilet flushing and irrigation. Water meters are to be installed for each building.

## Landscape Irrigation and Water Efficiency

Rain and storm water will be directed from the roofs and paved surfaces via a central pipe and collected in a terrace rain garden on the north-eastern section of the site. The possibility of collecting storm water from Kingston View Drive is being reviewed. The rain gardens will act as a form of bio-filter treating the water prior to draining it into a detention tank for resupply to the site for toilet flushing and irrigation. Further reuse of water may be implemented through a clearly labeled tap fitted to each building for cleaning purposes.

Sub-soil drip systems will be installed to deliver irrigated water to the landscaped areas of the site. Consideration into species selection will be given to reduced water consumption and the green roofs on the north facing pods will be self irrigating.

## **5. Materials and Waste**

An area dedicated to the storage and separation of recycling will be made available near the entrance to the campus for easy access for the campus' occupants and collection. All paper, glass, plastics, metals and organic materials will be collected at this location.

Reclaimed aggregate will be used in the concrete mix for use in the sub-base to road and building pavements. PVC has been minimised for the major service elements.

Reasonable efforts will be exerted to source a supplier of re-cycled or Forest Stewardship Council certified timber. However, a source of recycled timber locally in Tasmania is yet to be identified.

Flooring materials will be sourced for reduced environmental impact. Modular design and easily disassembled joinery will be targeted for all new joinery installed in this development. Loose furniture will be selected for reduced environmental impact.

Wherever possible, fittings from the current Kingston High School campus will be reused at the new development.

## **6. Land Use and Ecology**

### Ecological Value of Site

The proposed site is neither prime agricultural land or located within 100m of a wetland of international or Australian importance. The external landscaping of the site provides opportunities to improve the ecological value of the site.

Rainwater gardens will be constructed on the north-eastern border of the site for collection and treatment of storm and rain water run off for reuse in irrigation and toilet flushing and to increase the bio-diversity of the area.

North oriented learning pods will have landscaped roof tops (Green Roofs) to provide additional landscaping of the site. Generally, native species will be planted as part of the landscaping strategy, with the exception of productive and botanic gardens still to be determined.

The topsoil excavated from the site will be reused for fill on the down slope buildings.

## 7. Emissions

All refrigerants and thermal insulants will be specified to contain zero ozone depleting potential.

Storm water will be collected and treated onsite by a series of rain garden terraces. All roof and pavement surfaces will be collected into an overflow rain garden facility at the bottom of the site for a 1 in 10 year storm.

Stored water will be pumped back to the top of the site for use in landscape irrigation and toilet flushing. In this way, the detention system can be maintained to always accept water in the event of high flows.

No external lighting is to be directed beyond the site boundaries or upwards except for the explicit purpose of illuminating that surface. All lighting design is to comply with AS4282-1997 Control of the Obtrusive Effect of Outdoor Lighting.

### **PROJECT BUDGET**

The composition of the cost estimate is as follows:

Item	\$
Construction estimate, including contingency	23,221,677
Furniture and equipment	1,800,000
Professional Fees	1,955,492
ICT Allowance (Equipment)	1,200,000
Art in Public Buildings	80,000
Project Administration and Resourcing	590,000
Statutory Fees and Charges	75,000
School Relocation Costs	300,000
Post Occupancy Contingency	738,718
Total	29,960,887

Cost Estimates

The details of the cost estimate are as follows:

## SECTION SUMMARY

## WT PARTNERSHIP

Kingston Education Project  Cost Plan B	Job No.	: 7282CPB2
	Cost Base Date	: Jan08
	GFA (m2)	: 9,657
	Date Printed	: Thu 10 Apr 2008

	SECTION	Unit	Qty	Rate	\$/m2 GFA	Cost \$
000	<u>Kingston Education Project</u>					
001	Project Information					
002	Demolition & Site Clearance				22	209,500
	Sub Total				22	209,500
100	<u>Year 7 &amp; 8 Learning Pod</u>					
101	Substructure				41	392,340
102	Columns				3	27,840
103	Roof				93	898,240
104	External Walls				34	331,420
105	External Windows				20	193,960
106	External Doors				2	15,800
107	Internal Walls				38	368,140
108	Internal Screens & Borrowed Light				9	82,440
109	Internal Doors				8	74,250
110	Wall Finishes					2,160
111	Floor Finishes				12	120,038
112	Ceiling Finishes				17	160,770
113	Fitments & Fittings				4	40,440
114	Sanitary Fixtures					
115	Hydraulic Services				26	247,200
116	Gas Services					
117	Mechanical Services				57	548,014
118	Fire Protection Services				1	6,952
119	Electrical Lighting & Power				38	368,837
120	Security Services					
121	External Works				8	75,800
	Sub Total				409	3,952,031

SECTION SUMMARY TOTAL (Carried Forward)

4,161,531

## SECTION SUMMARY

## WT PARTNERSHIP

Kingston Education Project  Cost Plan B	Job No.	: 7282CPB2
	Cost Base Date	: Jan08
	GFA (m2)	: 9,657
	Date Printed	: Thu 10 Apr 2008

	SECTION	Unit	Qty	Rate	\$/m2 GFA	Cost \$
200	<u>Year 9 &amp; 10 Learning Pod</u>					
201	Substructure				57	551,828
202	Columns				3	27,840
203	Roof				99	951,360
204	External Walls				34	332,424
205	External Windows				17	160,650
206	External Doors				2	15,800
207	Internal Walls				35	335,315
208	Internal Screens & Borrowed Light				9	83,560
209	Internal Doors				7	70,500
210	Wall Finishes					2,160
211	Floor Finishes				12	115,253
212	Ceiling Finishes				15	144,830
213	Fitments & Fittings				4	40,440
214	Sanitary Fixtures					
215	Hydraulic Services				26	247,200
216	Gas Services					
217	Mechanical Services				48	461,373
218	Fire Protection Services				1	8,952
219	Electrical Lighting & Power				34	331,557
220	Security Services					
221	External Works				8	78,300
	Sub Total				410	3,955,142
300	<u>GLC &amp; Administration Speciality</u>					
301	Substructure				11	107,384
302	Columns				4	35,900
303	Roof				29	280,800

SECTION SUMMARY TOTAL (Carried Forward)

8,540,757

## SECTION SUMMARY

## WT PARTNERSHIP

Kingston Education Project  Cost Plan B	Job No.	: 7282CPB2
	Cost Base Date	: Jan08
	GFA (m2)	: 9,657
	Date Printed	: Thu 10 Apr 2008

	SECTION	Unit	Qty	Rate	\$/m2 GFA	Cost \$
304	External Walls				10	93,328
305	External Windows				6	58,950
306	External Doors				1	12,100
307	Internal Walls				20	188,565
308	Internal Screens & Borrowed Light				4	39,160
309	Internal Doors				6	61,050
310	Wall Finishes					1,040
311	Floor Finishes				5	44,389
312	Ceiling Finishes				5	52,180
313	Fitments & Fittings				2	14,660
314	Sanitary Fixtures					
315	Hydraulic Services				8	77,250
316	Gas Services					
317	Mechanical Services				11	107,325
318	Fire Protection Services					4,316
319	Electrical Lighting & Power				14	131,634
320	Security Services					
321	External Works				5	45,100
	Sub Total				140	1,355,131
400	<u>Design &amp; Discovery Speciality</u>					
401	Substructure				16	156,240
402	Columns				4	35,900
403	Roof				39	381,200
404	External Walls				12	117,578
405	External Windows				5	46,800
406	External Doors				3	33,700
407	Internal Walls				20	193,305
408	Internal Screens & Borrowed Light				3	28,240
409	Internal Doors				5	52,050

SECTION SUMMARY TOTAL (Carried Forward)

10,516,817

## SECTION SUMMARY

## WT PARTNERSHIP

Kingston Education Project  Cost Plan B	Job No.	: 7282CPB2
	Cost Base Date	: Jan08
	GFA (m2)	: 9,657
	Date Printed	: Thu 10 Apr 2008

	SECTION	Unit	Qty	Rate	\$/m2 GFA	Cost \$
410	Wall Finishes					880
411	Floor Finishes				5	45,369
412	Ceiling Finishes				10	97,290
413	Fitments & Fittings				1	11,010
414	Sanitary Fixtures					
415	Hydraulic Services				6	56,650
416	Gas Services					
417	Mechanical Services				48	461,709
418	Fire Protection Services					3,968
419	Security Services					
420	Electrical Lighting & Power				18	170,774
421	External Works				5	44,800
	Sub Total				201	1,937,463
500	<u>Performance Speciality</u>					
501	Substructure				25	240,984
502	Columns				4	39,100
503	Roof				47	458,000
504	External Walls				24	227,124
505	External Windows				4	34,200
506	External Doors				2	20,050
507	Internal Walls				37	353,070
508	Internal Screens & Borrowed Light				1	12,840
509	Internal Doors				6	55,900
510	Wall Finishes					1,200
511	Floor Finishes				12	115,770
512	Ceiling Finishes				11	107,790
513	Fitments & Fittings				25	236,740
514	Kitchen Joinery Equipment				16	150,000
515	Sanitary Fixtures					

SECTION SUMMARY TOTAL (Carried Forward)

13,462,035

## SECTION SUMMARY

## WT PARTNERSHIP

Kingston Education Project  Cost Plan B	Job No.	: 7282CPB2
	Cost Base Date	: Jan08
	GFA (m2)	: 9,657
	Date Printed	: Thu 10 Apr 2008

	SECTION	Unit	Qty	Rate	\$/m2 GFA	Cost \$
516	Hydraulic Services				10	97,850
517	Gas Services					
518	Mechanical Services				32	313,838
519	Fire Protection Services				1	7,756
520	Security Services					
521	Electrical Lighting & Power				21	201,674
522	External Works				6	60,500
523	Additional Area to Auditorium				-41	-397,668
	Sub Total				242	2,336,718
600	Preliminaries and Margin				199	1,924,438
601	Contingency				49	470,113
	Sub Total				248	2,394,551
	TOTAL CONSTRUCTION COST				1,671	16,140,536
700	<u>Other</u>					
701	Green Roof System				44	423,360
702	Gymnasium				114	1,100,000
703	Lifts					
704	External Services / Infrastructure				98	949,060
705	Site Works				173	1,672,888
706	Landscaping				39	379,480
707	Preliminaries and Margin				35	342,479
708	Contingency				12	113,018
	Sub Total				516	4,980,285
	TOTAL CONSTRUCTION COST				2,187	21,120,821

SECTION SUMMARY TOTAL (Carried Forward)

21,120,821

## SECTION SUMMARY

## WT PARTNERSHIP

Kingston Education Project	Job No.	: 7282CPB2
Cost Plan B	Cost Base Date	: Jan08
	GFA (m2)	: 9,657
	Date Printed	: Thu 10 Apr 2008

	SECTION	Unit	Qty	Rate	\$/m2 GFA	Cost \$
800	<u>Miscellaneous Costs</u>					
801	Art Allowance				8	80,000
802	ESD Allowance				101	979,356
803	Maintenance costs after DLP				2	21,500
804	Escalation				114	1,100,000
	TOTAL CONSTRUCTION COST				2,413	23,301,677
900	<u>Escalation &amp; Department / School / Council Costs</u>					
901	Professional Fees				202	1,955,492
902	ICT Allowance (Equipment)				124	1,200,000
903	Furniture, Fittings & Equipment				186	1,800,000
904	Administration & Resourcing				52	500,000
905	School / Education Consultant				9	90,000
906	Co-location contribution costs				26	250,000
907	Cost of Relocation of School				5	50,000
908	Statutory Fees & Charges				8	75,000
909	Post Occupancy Contingency				76	738,718

<b>SECTION SUMMARY TOTAL</b>		<b>GFA(m2)</b>	<b>9,657</b>	<b>\$ 3,103</b>	<b>\$ 29,960,887</b>
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7282CPB2

Summary 6

## **EVIDENCE**

The Committee commenced its inquiry on Monday, 5 May last. Accompanied by Officers of the Education Department and the consultants, the Committee was conducted on site inspections of the existing school and of the proposed works.

Following the site inspections the Committee reconvened in Committee Room2, Parliament House, Hobart. The following witnesses were called, made the Statutory Declaration and examined by the Committee in public:-

- Greg Glass, Deputy Secretary - Corporate Services, Department of Education
- Helen Gourley, Principal - Kingston High School
- Dr Graham Bury, Mayor - Kingborough Council
- Phillip Groom, Parent representative – Kingston High School
- Paul Katsieris, Principal - Hassell Ltd (architects)
- Neal Mackintosh, Director – JAWS Architects
- Julie Taylor, Resident
- David Grace, Councillor - Kingborough Council

## **Background**

Mr Glass provided the Committee with the following overview of the project:-

*The project had its genesis in the 2005-06 State Budget when the State Government announced a feasibility study to consider the potential for developing a new educational facility in Kingston. In doing that, the Government recognised that Kingston was at that stage and still is one of the fastest-growing municipalities in Tasmania. The then Minister for Education, Paula Wriedt, convened a special task force to report on the implications of closing Kingston High School and establishing a new high school and senior secondary college on a greenfield site adjacent to the Kingston Sports Centre. The task force was duly convened and investigated the demand outlook for both secondary schooling - that is years 7 to 10 - and also post-compulsory services, which is years 11 and 12, in the Kingborough and Huon local government areas. Also as part of its work it considered the adequacy and the appropriateness of the currently available education facilities within the area to meet the demand for, I suppose, the medium and long-term in terms of educational delivery within the region.*

*As part of the work of the task force it also considered opportunities for the establishment of a college of creative and contemporary arts at the Hobart College site on Mount Nelson. The feasibility study was then undertaken over a period of some months and it highlighted, I suppose, three key things.*

*Firstly, it identified that there was a demand for additional high school enrolments over the next 15 years within the Municipality*

*of Kingborough. Secondly, it highlighted that the location of the current Kingston High School site was critical to the further development of commercial growth within the commercial centre of Kingston and you will no doubt hear in due course from Mayor Bury that the council's medium and long-term plan for developing the main commercial area of Kingston is dependent on the release of land in and adjacent to the current commercial precinct and obviously that involves the current Kingston High School site.*

*The third thing that came out of the feasibility study was that the proposal to establish a specialist creative arts college in Hobart was not supported. Whilst it was considered desirable, the viability of operating such a facility, a purpose-orientated facility, in terms of its successful operation was not going to be considered viable in the current and existing arts market within southern Tasmania. So overall that proposal was not supported. That is the overall background to the project.*

*In the 2006-07 Budget the State Government announced an allocation of \$30 million over a number of years for the construction of a new secondary educational facility at Kingston, obviously to replace the existing high school. Since the budget announcement the Department of Education has undertaken a substantial body of work in engaging with the school and particularly the school community on all aspects of planning for the new school and working with the consultants in exploring innovations in the provision of educational services and in the design of educational facilities, and Paul will take us through that shortly.*

*We also established a working group of key learning practitioners to develop an educational concept brief for the new school. Over the past 12 months or so we have engaged heavily with Kingborough Council and council officers regarding issues such as procurement of site for the new school and a range of planning aspects, particularly for the collaborative use of facilities in the precinct.*

*We have engaged consultants to undertake surveys and investigations of the preferred site in Kingston View Drive and that includes things such as appraisal of site, flora and fauna, heritage considerations and also looking at existing and future services and engineering infrastructure. I suppose the most important thing that we have done in recent times is engage Hassell in association with JAWS Architects here in Tasmania as the consulting architects to the project and they have been doing a power of work, particularly with the school and its community, to get the project to this stage.*

*As we have heard, the new high school will accommodate approximately 700 students and provide state-of-the-art general and specialist teaching and learning facilities and, subject to the approval of this committee, it is anticipated that construction will commence late in 2008, with a view to having the school completed and ready for the 2011 school year.*

## **Design**

Mr Katsieris provided a computer generated graphics presentation to the Committee which he addressed as follows:-

*... The school is collocated next to the Kingborough Sports Centre and that synergy of the school being adjacent to the Kingborough Sports Centre is one of the foundation principles of this school, having this collocation ability.*

*The site has fabulous views to the river and to the hills beyond to the south, and one of the key principles during the design phase has been to orient the school so it makes very good use of the solar orientations to the north.*

*One of the philosophical drivers for the site plan has been this sine wave, as it tracks its way across the site. The site has a gentle slope in two directions, it slopes from the west to the east, as it does from the north to the south, so there is an amphitheatre effect and one of the principles of the master plan is that there is a mathematical symbol that traces the route and organises the built elements of the school as well as the open space elements of the school.*

*Some of the other master plan issues are to orient the buildings to maximise those river views, again orienting the building so that we have maximum solar access to the north.*

*We propose that there be a central spine, which we are calling the learning street, which is covered, as the primary organisation and circulation device for the school, with a series of entry points from the entrance street.*

*The school is proposed to contain six learning pods. Three of those will be years 9 and 10, and three will be for years 7 and 8. Then there is proposed to be three elliptical buildings of various sizes. Each one houses a range of special functions, so these are the specialty buildings. The first one, and being the closest and most adjacent to the existing sports centre, is the performing arts and food technology building, which will contain a 480-person auditorium. In the middle is the administration and global learning centre building and then at the side is the design, discovery and technology centre, which is probably the largest of*

*the elliptical buildings, on the top side of the site. The master plan has been organised to cater for future expansion. If in the future there is to be a year 11 and 12 perhaps added onto the school, then the site is generous enough to accommodate two more learning pods. That is what is shown in the outline, in a similar fashion so that they wouldn't look in any way not part of the wider idea - the same geometry, the same form and the same ability to plug onto the learning stream.*

*Community interface is very important so we have attempted to create these streetscape elements and ensure that the topside buildings are not high so that the residents to the north can still see over the buildings and down to the Derwent River. We are also looking to maintain that handsome line of trees on Kingston View Drive. We have put some focus and energy into further community interface issues to ensure good accessibility and linkage between the existing sports centre, the existing ovals and some new hard court areas proposed for the school, and linkage onto existing elements such as the croquet lawn. There is a very comprehensive water strategy for the site. The roofs will capture rainwater and the rainwater is envisaged to be channeled down into a precinct and then used for watering the green areas.*

*We are going to have a closer look now at the year 7 and 8 learning pods, which are highlighted in the master plan. Basically we have been working with the school community and Dr Julia Aitken, as our pedagogical consultant, to try to imagine these buildings from the inside out and to ensure that they accord with the latest pedagogical thinking and that the school provides the new thinking that is happening in western education as much as possible. The spaces are seen as being highly flexible; each learning pod can accommodate of the order of 117 to perhaps 125 students. There is a system of operable walls that can semi-enclose some of the spaces to allow a variety of learning modes to occur from a central spine that also has a skylight.*

*Looking at the year 9 and 10 learning pods, they are very similar. There is one main difference. The year 7 and 8 learning pods have been designed to have another area adjacent to the wider learning community - and that is a multipurpose room for various creative works. The year 9 and 10 learning pods don't have that area, as the 9 and 10 students will be using a lot more of the design and discovery centre and some of the other specialised facilities that exist in the specialty building. Looking at a 9 and 10 learning pod in a 3D view, some of the main areas in the centre are a collaborative zone where all the students can come together, if need be, for a mini assembly. There are a variety of teaching spaces that can be opened up and closed off through the device of operable walls flanking the central collaborative zone. There are meeting zones for more focused work with the students in a variety*

*of conference-type settings. There is a staff area that overviews the main learning street and also the entrance into the learning neighbourhood.*

*One of the fundamental principles of the new school is that toilets will be situated in each learning community so that those children do not need to exit and walk to a remote toilet block, which can sometimes be a source of bullying. These students have access to their own toileting facilities and that is a common paradigm through the entire campus. We have also tried to organise these outdoor spaces so that on days of clement weather the outdoor areas can be used as overflow from the internal learning spaces and be used as an external learning area.*

*A quick closer look at some of the speciality buildings - performance, food and technology. The auditorium will have seating of 480. The council's contribution to this auditorium has allowed it to extend to 480. The original brief design was for 240 students and the school and Kingborough Council are working to achieve this auditorium so that it also has community use and community benefit, which is something that we aspire to. So this building contains the auditorium and then a series of food technology and café areas, as well as music spaces and drama spaces.*

*Again these plans have been worked through with the school community, the teaching staff and the senior cohort. The plans have had many alterations but generally have been a global learning centre and then the administrative facilities are flowing around it with the ability to look at visitors coming in and around from the main entrance.*

*Finally, the design, discovery and technology building is organised around a central suite of information and communications technology hubs with then a series of working areas fulcruming off that space. Once again, toilets male and female, are part of the building. Students do not need to exit the building to visit the toilets. That building contains both science and art facilities so that there is no separation between these two disciplines; they come together.*

*... The differences in level (of the buildings) are being taken up by some stone in the form of gabion walls and the facades being proposed are a reverse brick veneer where the outer part of the skin of the building is lightweight but the inner side is masonry construction, which has very good thermal benefits for this part of the world. At this stage the facades look at a combination of timber cladding, metal cladding and glass, with some metal decking bringing this up to the parapet line and the green roof on three of the pods.*

*The zones forming the main entrances into the campus pedestrian access: we have taken care to ensure that all parts of the school are accessed by the disabled. You will notice no separate pathways for disabled circulation patterns from able-bodied circulation patterns. There are three disabled parking zones in the school. In terms of vehicular circulation, a bus drop-off area for up to seven buses is shown in these white zones, and then two zones of staff and visitor parking, co-shared with the Kingborough Sports Centre - 40 spaces directly off Kingston View Drive and then a further 60 spaces in this car parking area to the south of the existing sports centre.*

*One of the key features of the proposal is that the landscape is as important as the buildings. A lot of work has been done by our landscape architects to ensure that there is a rich and diverse landscape proposition that is also used for pedagogical activities as well as recreational activities. So things such as botanical gardens, vegetable gardens and orchards with native gardens are quite important to the proposal.*

*With the three green roofs that we spoke about before - this is a cross section through a couple of the typical buildings, showing how we propose to work with the lie of the land. Where we cut buildings into the hill, that soil is reused as a fill, so we are looking to balance the cut and fill so that no soil leaves the site.*

*... the buildings sit snugly into the landscape and allow (a) view from the road and beyond. The entire campus is just under 8 000 square metres - 7 961 square metres of built space. We are looking to go to tender with our contract documents in September 2008 and looking to commence construction in November 2008. We are looking to occupy and commence the new school in February 2011.*

The Committee questioned Mr Katsieris as to whether his firm had previously undertaken school design and if so, whether the proposed concept had been previously utilised. Mr Katsieris responded:-

*Yes, we have.*

*... We have employed the concept of the studios, but this is unique in terms of how it looks and the sine wave and the elliptical buildings. The concept of the studios, if I can go back to that plan of a typical learning neighbourhood, is one that we and other architects, in Victoria, other parts of Australia and indeed around the world, have been employing, with the input of pedagogical experts, both Australian and overseas experts. So it is seen to be a mode of learning that allows young people to learn in different ways. It may be different to how we were educated. It is not to say*

*that there is not a place for a teacher and a classroom setting. Contemporary thinking is showing that there are other modes of learning that should be supported in a school, allowing students the ability to cluster in smaller groups, allow peer-to-peer learning, and allowing what are known as campfire modes of learning to occur. Flexibility is one of the key words in contemporary education, so the architecture has to be easily openable, movable and changeable.*

*... The area is same; whether it is a circle or a square or an ellipse, the actual area is the same. We would have had to design, if you like, square buildings that amounted to about 8 000 square metres, so the built space is the same. In fact what we found during the course of the design process is that the elliptical forms and these parabolic-shape pods allow a greater hierarchy of spaces but the spaces are not entirely uniform. You do get those tighter spaces that allow more intimate focused work and then you get the broader expansive spaces. That has been very positively remarked upon by the people who have been working with it - to achieve that hierarchy of spaces.*

*So we imagine that, for more focused work, teachers can pull a smaller group of students, if you like, into this closed arc and have a small amphitheatre-type of clustering, which is good. As well there would exist these larger spaces, then spilling over into the collaborative zone as well.*

### **Vegetative roof**

The Committee asked the witnesses to elaborate upon the proposed installation of a vegetative roof. Mr Katsieris responded:-

*... We are planning and proposing that three of the learning pods have vegetative roofs so it might not be lawn like one's front yard but indeed the prospect is to also form a habit as well.*

*... There will not be a need for a lawn mower. Green roofs have been built both in this State and also in my home State of Victoria. They provide a very good insulation property and allow the space underneath to in fact have a very good ambient temperature with relatively little energy input to control that temperature. Green roofs give an excellent insulation quality to the architecture and we think that it suits this particular context very well because it will allow the architecture to blend in a lot more for viewers, for the residents on the other side or for people coming into the school. We also think it sends a very powerful symbolic message about the green-star credentials of the school and the sustainability aspect of contemporary Tasmanian architecture as well.*

*... There has just been a very successful example of the green roof in Victoria in the town of Torquay so the technology and understanding of these issues is there but we are yet to work through that. We are still in our, if you like, preliminary phases of organising and investigating these.*

Mr Glass added:-

*... climate change and global warming are very topical issues and the State now has the recently-established Tasmanian Climate Change Office. One of the aspects of the green roof is that it will not be too far away when organisations need to look at their carbon emissions. We are working within the department to calculate our carbon footprint and having a green roof like this - and it is really interesting that the question has come up; it is a very astute one - will enable us obviously to have some carbon credits in terms of our overall carbon emissions as a department and I suppose as a State as we move forward, as a State service.*

The Committee asked Mr Katsieris whether such roofs entailed additional costs, he responded:-

*Yes, it does. Our first proposal was to green-roof all of these learning buildings but the advice that we have received with our cost estimators is that it would be really pushing the project budget to do that on all of them. Our cost estimators advised that we could safely propose three of them and we have elected to do the three that are on the top side and to give the effect of a greater blending, if you like, into the terrain.*

*... Under the soil there is a medium that catches water that falls and drains it away. It is like a cellular wafer that captures the rainwater. The green roof itself acts as a filtration device... it catches the rainwater and then it is fed into the reservoir system and then down into a bank.*

*... our proposal is to capture that water and to use it for ... both for toilet flushing and for green areas*

*One of the principles that we have is to make how the building works and how the energy component of the building works transparent to the school community, that in fact it is used as a kind of pedagogical resource. So that is an important principle of the building.*

## **Site**

The Committee put to the witnesses that the reason the decision had been taken to construct a new school on a green field site was to predicated upon a desire to expand the Kingston central business district. Dr Bury responded:-

*It is a reasonable assumption but it's not one that is my understanding of the process. The first I heard, as a councilor, about the move of the school was when Minister Wriedt - and I think all councilors came down at the end of 2004; I can't remember exactly when it was - told of this idea that they were going to build a new Kingston High School. At that time Minister Wriedt said it might also incorporate years 11 and 12. As far as I am aware, that was certainly the first I had ever heard about a new school being developed on a new site. I'm not suggesting for a moment that the move of a new high school doesn't provide the council with some opportunities for that space, but I would certainly not support any suggestion that that has been the driver in the first instance.*

Councilor David Grace made the following submission in relation to the siting of the proposed new school:-

*... I was elected in 2000 as a councilor and it was not long after that - I think it was around 2001 - that this came up about shifting the Kingston High School. We were renewing our planning scheme at the time and I begged our planning officer if any school should have been shifted it should have been the primary school down to the high school site. Then the shopping centre could be built on the top side where you could eventually close off Church Street and build new infrastructure out across Cleburne Street and Denison Street, where council own a block of land, and integrate the two shopping centres together. That did not get a guernsey.*

*I still believe that the new school should be built in Huntingfield and then we could build our infrastructure around that. I heard of seven or eight buses coming up there. I drive school buses and I know what it is like to try to get a big bus in and out of some of these areas and I can see the problems up there at the sports centre. You cannot back a school bus when you have heaps of children running around in a playground. It is impossible. And never ask a kid in the back of the bus to give you directions because they will direct you straight into the back of a car or the front of a car because that is what they think is a bit of fun.*

The Committee asked Councilor Grace whether any land was available at Huntingfield, he replied:-

*The government owns 72 hectares there and it has about the same sort of contour as the sports centre. The design could still quite comfortably work in that particular piece of land. It would then allow council and the government to work together to build a decent road structure through parts of Kingston. Instead of all the buses coming up through the middle of town they will come down Algona Road and straight into Huntingfield rather than have to*

*come up through the main town. With the coach company I drive for - there are 10 coaches - we leave Blackmans Bay within 10 minutes of each other. The problem is early of a morning. We have had problems with the coaches - I used to drive to Kingston High School - getting in and out of there. It is going to be worse trying to get in and out of Summerleas Road.*

## **Traffic issues**

The Committee asked the witnesses whether Summerleas Road was inadequate for the increased traffic that would result from the proposed works and how the proposed Kingston by-pass would assist in the broader issue of traffic management. Dr Bury responded:-

*If I can start with the Kingston bypass, both the acting general manager and I have had a meeting with a representative of the Federal Government and the then Minister for Infrastructure who have both reassured us that the Kingston bypass will go ahead. When we met the minister there was a plan for construction which would be over three years - I am not sure of the exact phrase but work goes on in the summer and I think the intention was that the work would be completed by 2011. So as a council, we have no reason to believe that the Kingston bypass will not go ahead. The vast majority of the preliminary work has been done. I think there are two small areas that the minister showed us where discussions are still going on regarding purchase of land but most of the environmental work has been done so we are certainly expecting the bypass to go ahead.*

*There was a detailed traffic study done by GH&D when this proposal came up. My reading of the about 100-page traffic study is that they do not believe there will be any substantial change or concern about the traffic; in fact most of the traffic, as I understand it, that currently goes down Summerleas Road will now come up Summerleas Road. But they did identify the junction of Summerleas Road with Kingston View Drive as being a problem, which council fully acknowledges and it will have to be dealt with. It is not an expensive project. I think it has been costed out at something of the order of \$300 000 that will be needed but council acknowledges that that has to be dealt with.*

Councilor David Grace made the following submission in respect of traffic issues:-

*There are major traffic issues. Even when the bypass goes in major infrastructure will still be needed. The council have looked at an alternative option from Springfield Farm to take another route to the sports centre. Who is paying for it? The ratepayers? The ratepayers cannot get footpaths and road upgrades in their*

*own municipality now so why should we be paying for something like that?*

Julie Taylor made the following submission to the Committee in relation to traffic issues:-

*I am making a submission as a resident of Kingston but I am also the convenor of the Kingston Bypass Access Group, though I am not officially representing that group today. I do have information about traffic flows on the Channel Highway, especially Summerleas Road, and it has always been a problem. It is a narrow street and there is queuing in the morning because Summerleas Road traffic has to give way to the right. The peak-hour traffic coming from the Channel has to give way to people who do rat runs and come up from the Kingston CBD because these people have right of way to go through the roundabout and into town.*

*With the growth forecast for Kingston in the Summerleas Road area, a large amount of subdivision in this area has now been completed and these lots have been progressively developed and that means more cars on Summerleas Road. The Queens Park subdivision will have 25 lots, and 14 in Willowbend, which is in that area near the sports centre. The Channel Highway from Summerleas Road to Algona Road - Kingston Green estate - has 38 lots to be developed and that is directly on the Channel Highway, just north of the Antarctic Centre. That will impact on traffic on the Channel Highway that is already loaded. In peak hour at the Summerleas Road roundabout the queuing is past my street, which is Dollery Drive - half a kilometre from the Summerleas Road roundabout. They queue further along, nearly to the council depot, which is nearly to the Algona Road roundabout.*

*Coming from Margate they are queuing about half a kilometre from the Algona Road roundabout, sometimes further.*

*... Algona Road was built by the State Government some time ago specifically for Blackmans Bay traffic, because it was not envisaged at that time that Kingborough would expand residentially. Blackmans Bay was virtually the cut-off point. Traffic flow for 1992 had 5 000 cars entering Algona Road from Blackmans Bay off Roslyn Avenue but turning onto the Channel Highway it is 3 900. The discrepancy of 1 100, I feel, is people turning off at a subdivision at Maranoa Heights and doing the rat runs eventually down either to Redwood Road that comes onto the highway or going down Maranoa Road onto the Channel Highway near the CBD because that is where they have right-of-way to go around the roundabout.*

*Getting back to developments, there are 20 lots in my road, which is in the area of the Channel Highway that will be bypassed. There are 20 lots there and there are 38 lots also in that area. In Redwood Road there are 27 lots approved and that makes it about 130 lots in that road. This is extra. I am not against development, I think it is great, but the lack of the bypass is going to put so much stress on when the high school goes up to the sports centre.*

*Apparently at Huntingfield, which is a mix of residential and light industrial, there is also land there reserved for an educational precinct.*

*... At Huntingfield there is land that is reserved for an education precinct. A school is already there and has been there for a number of years and I thought that council or the Education department owned land there so the feeling is that that would be probably a better site for the high school because if the high school is built now before the bypass, the traffic situation will be diabolical. Because we are classed as, I think, rural, schoolchildren have buses to go to and from school. I do not know the number of school buses that come from south of Kingston and will access the Channel Highway and will have to use the Summerleas Road roundabout but it is a lot and when you turn into Summerleas Road from the Channel Highway there is a section that is very narrow. It does not widen until about maybe nearly a kilometre along when it bends and it goes straight up to the high school. In that area school buses passing at peak time, queuing at the roundabout and that sort of thing, adds up to a very unsafe situation.*

The Committee questioned Ms Taylor as to whether she had made any representations directly to the Kingborough Council in relation to the traffic issue, she responded:-

*I have been trying for a number of years. No, I have not directly taken this up with council itself because the Kingston bypass access group are still waiting on the Government to approve the Kingston bypass and there is still work going on about the Summerleas Road underpass and ramps down that will connect to the Southern Outlet. As a group we have not heard. I do not know whether council are having consultation. Initially our group met. We were a key stakeholder in the steering committee. That has since stopped operating and since then we have not had much information about the bypass from council.*

*... The community knows for sure that the Commonwealth Government made a commitment to fund half of it but it doesn't come on line until June 2009. We also have the Catholic high school being built at Huntingfield and the time of the high school being built and the Catholic high school construction phases may overlap. I am concerned that there is going to be a lot of heavy*

*traffic along the Channel Highway in the area that is going to be bypassed before the Kingston bypass is built. Along with all this residential development that is either in the pipeline, approved or being constructed, it is going to add a lot of traffic. The report concentrated on evening and morning peak times but it is also during the day. As an example, a few years ago on an Easter Sunday we waited at the bottom of our street - our street is a no-through road; there is no other access - for 15 minutes and so many seconds to get out of our street. Sunday is usually a particularly heavy day along the Channel Highway. There is more traffic along the Channel Highway than there is on the Huon outlet because since there has been some development, trees have been cut down and we have sight of the Huon Highway and traffic on the Channel Highway is at least half as much as is going up and down the Huon Highway.*

*... How the bypass will overcome traffic difficulties I suppose is an unknown factor but because of the high school proposal and the Catholic high school at the other end, I feel the bypass should be built first to gauge how traffic will settle down and then build the high school after that. If the bypass is left any longer when it is eventually built, the high school being at the sports centre will negate, I feel, any benefit.*

Dr Bury was recalled and made the following submission in relation to traffic concerns:-

*I am not an expert on traffic matters so I would like to table the traffic report from GHD, which was funded by DIER, the Kingborough Council and the Department of Education. It is a report on Kingston View Drive and a traffic assessment for the school.*

*...Council fully supports the notion of a bypass. I understand the focus on that. In fact it is crucial to what we are doing with our plans for residential development and for central Kingston. It is crucial that the bypass goes ahead as well so council has absolutely no issues with that whatsoever. I think most people nowadays agree that education is part of an economic driver in a community. Certainly in the 1980s and early 1990s there was a lot of neglect of capital infrastructure for education - in a lot of countries around the world, so we are no exception. I think last year the Bracks Government said they were going to spend \$600 million on schools.*

*I have read the traffic study, which says that there is to be no or negligible impact along Summerleas Road. As I said earlier, they recommend that there be attention to the junction and council fully accepts that.*

*(That is) The junction of Kingston View Drive with Summerleas Road. The other junction I think DIER has been studying and has put money towards is the Summerleas junction. We as a council have been pressuring them for a long while to do something about it to render it safer.*

*(Regarding the proposed Kingston by-pass) At our last meeting with the Minister for Infrastructure, which was about four to six weeks ago, we went to see him for some confirmation. We were told that it would be constructed over three construction periods and be completed in 2011. They showed us a map of all the preliminary and environmental work and there was only a very small area of land that still had to be dealt with. I think 95 per cent of the land was available and there was just a small proportion where there were still some negotiations going on.*

Mr McIntosh was recalled and submitted as follows:-

*Currently Kingston View Drive is a straight road all the way through. We will have two turning circles and the road will be diverted as a traffic-calming measure so we do not get a lot of vehicles moving quickly through the precinct. This first turning circle facilitates drop-off for the school, so parents can utilise that one if they are coming off Summerleas Road to turn around and then move back out onto Summerleas Road. The second and larger one is designed to facilitate buses and larger vehicles so they can, again, come along this way and turnaround and then exit back out onto Summerleas Road.*

*If this future link road happens then buses can come that way. They probably will not be coming up Summerhill Road from the southern districts. Again, they can utilise the same network of roads there. Diverting the road up to the top there also allows additional carparking outside the sports centre.*

### **Community use of facilities/Consultation**

The Committee questioned Dr Bury as to the view of the Kingborough Council regarding the prospect of community use of the facilities of the proposed new school and the adequacy of public consultation. Dr Bury responded:-

*I think the Minister for Education is on the public record as saying that he encourages community use of school facilities and we have signed a heads of agreement with the Education department to work together for the benefit of the community and the school as the new school develops, and that process is already taking place. Paul Katsieris mentioned the performing arts centre and that is one example of the way in which we have already been cooperating to the advantage of the community. That performing arts centre was originally planned for a seating of 240 which is for*

*the school but we do not have a performing arts centre in the Kingborough municipality so part of the proceeds of the land will be invested in that performing arts centre to enlarge the size to a 480-seat facility which will be available for community use. I use that as one example of the way in which this facility is going to be of great benefit to our community.*

*... The consultation process never seems to suit everybody. I do think that a real effort has been made. There has been consultation throughout this whole process and the public have had the opportunity to make submissions, there have been public meetings at the school. We are talking about the communication and consultation initiated by the Education Department now -*

*... and I would like to make it perfectly clear that the decision to build a new school was a decision of the Education department and certainly once that decision was made council has supported it absolutely. We see it as a great opportunity for not only public education but for the community as whole. So to answer your question, I do think that there has been an extensive consultation process but my experience since I have been in local government is that sometimes it does not seem to be enough. But I do believe that it has been very thorough.*

In relation to the issue of the consultative process, Councilor David Grace made the following submission:-

*... As I have stated, I am not solely and wholly against the building of the new high school but I am concerned as a councilor. I have been deputy mayor and chair of infrastructure for a couple of years at Kingborough and I am very concerned about the infrastructure. Some of the questions raised today have been very valid. My main objection is lack of consultation. When I say 'lack of consultation', for instance council prepared a paper on the new high school - a special edition of the paper - 'Council committed to the new high school relocation' - and it mentions the high school. That was sent out in February 2007. I e-mailed the Mayor, Councilor Bury, regarding some issues and he replied, 'I am not sure what it will take for you to understand that the State Government has yet to confirm that the school is moving'. That is one issue.*

*We get the heads of agreement, which is here. This went up to infrastructure at a committee meeting and then to our last full council meeting. It first came up as Kingston central area master plan, so we were asked to vote on that which contradicts the heads of agreement because they were already saying they were going to build the school anyway. Where is the consultation going to take place? Somebody mentioned, quite rightly, consultation in the head of agreement. I have been assured by our general manager -*

*he is no longer there - that there was always going to be consultation.*

*I also have a document somewhere here that we, as councilors, received just a few weeks ago, which was very disturbing. It is about many issues from the Netball Association and Kingston Blue Netball Club outlining a heap of requests that have not been addressed by council or the Education department. They have some tournament there next year and I am led to believe that it will be somewhere in the order of 800 people that come from statewide, and I think they have it every two years. I have attended one of them and they have a massive crowd of people there, and they are going to be without courts.*

*Most of the questions are about traffic. The first meeting of the working group that was set up to oversee the feasibility and the study of the school was at 11.30 a.m. on Wednesday 10 August. It outlines what they were going to go through - consultation with sporting and recreation organisations. There it is there! Why are we getting such a letter from the Netball Association saying that it has not occurred? They are a big user of the sports centre.*

*The other issue that I have, Mr Chairman, is the fact that again council waited until 22 December 2007 and advertised the disposal of the land. Why wait until Christmas time? Because they did not want any submissions. I presented a submission to the council myself, only to get a letter back from the general manager saying, 'There's nothing you can do now. All you can do is lodge an appeal with the planning resource tribunal under section 178 of the Local Government Act. Lodge an appeal? I pay rates to the Kingborough Council. Other people that put their objection in to the sale of the land got exactly the same dose of medicine, 'We don't want to hear it'.*

*... There are many issues with the road network. If you go down to Kingston of a Saturday morning sometimes you will wait 15 minutes or 20 minutes to get out of the bottom end near McDonalds and Kentucky Fried Chicken. If you want to take your life into your own hands trying to cross the Huon outlet, well do so. None of those issues have been addressed. I have not seen any documentation on it.*

*Also, as a councilor and deputy mayor, I wrote to the minister and outlined a heap of issues, particularly the infrastructure, et cetera, and the minister wrote back and said, "There will be primary negotiations to undertake with officers of the Kingborough Council, elected representatives and other community groups."*

*Where is the minister? The minister has not turned up to anything. I have not seen the minister. The only minister I saw, Mr*

*Chairman, was the minister that strutted into the Council Chambers, sat in a chair and said, 'I want to build a high school up at the Kingston Sports Centre. How about that? That is what happened. She came into our building and did not even walk around the table and say, 'My name is Minister Wriedt'. We knew she was coming to address us. She did not even speak to the councilors; she just walked straight in, sat in the chair and said, 'We're going to build the high school at the sports centre'. That is the consultation we got.*

*I think we are making a grave mistake. I voted pretty well against everything that has come before the table on the grounds that the consultation has not been done.*

*... I believe the council should go back to the drawing board and have public meetings. As I said, there is the parking, the noise and the impact it is going to have on those people in that area. I believe the only consultation they got was a letter sent by council saying that the school might be going there. I do not think the soccer club have had that much consultation. I could be wrong; Mr Wells may have done more with them. But it looks to me that they are going to end up losing their oval. If we go ahead as council and develop the two new football ovals - and we have already spent a massive amount of ratepayers' money collecting fill from the centre and taking it up into that area - they could be in jeopardy. If you look at the reports from the manager of the sports centre, there was no time left in that sports centre. It is to capacity now. We were educated to look at the future of our municipality in the next 20 years. Sometimes I wonder if we look for the next five minutes, but that is another point. What is going to happen in 20 years if we decide to go ahead with the swimming pool? Our residents are putting pressure on us all the time that we should build a swimming pool. That is the best suited place and that was the site set aside where the new swimming pool would go.*

*Regarding the heads of agreement, we have had them before - but the mayor is right, they are being signed, but there is still a long way, Mr Chairman, to go on this. This is just unbelievable for a massive sized school reshift. They talk about consultation in this special edition that was sent out by council, 'Help shape the future of central Kingston'. They talked about two meetings that were held in February - I think on 15 and 16 February. I did not go to that forum because I had other things on with council. I did not get to those forums but I was led to believe by people who went that the Kingston relocation of the high school was not even talked about at that.*

*There was no mention about the high school going up into the Kingston Sports Centre. I attended two meetings at the Kingston High School and, yes, we did get a very good presentation from the*

architects. They were prepared to explain as much as possible to us. I appreciated that as an elected member, but I still think there is a long way to go. I raised with the minister at the time the refurbishment of the existing school because, as I am led to believe - and I could be wrong - the school was designed in 1970 and it could easily have a top storey put on it. I don't know whether that is just rumour but that is what a lot of people in Kingborough are telling me. It was especially designed to have a new top storey.

Dr Bury was recalled and made the following submission:-

*First of all, we have a final draft of the Kingborough Sports Centre master plan, which is a somewhat larger and easier document to look at. That has been endorsed by council but it won't be released until further consultation with all the user groups. There has been a lot of user-group involvement in this - netball as well as all the other users.*

*Mrs Napier asked about soccer pitches. We are moving from two to three soccer pitches. It is not as though the school is at risk of using one that is already used; there will be two first-class soccer pitches. The third one is for the exclusive use of the school during school hours, so we are increasing the number of soccer pitches.*

*Netball currently has six outdoor courts. There are plans for two new indoor courts, so netball will end up with four outdoor courts and two indoor. At the time they have their carnival they will have four indoor courts as well because they use the current sports centre gymnasium. For carnivals, they will end up with four outdoor courts and four indoor courts, which will be a much better situation than they currently have. I am advised by Mr Wells that there have been further consultations with the netball association. The last one was last Thursday with our sports management advisory group. I am told that the netball association went away from that meeting very happy with the arrangements.*

*... We have a space for an aquatic centre. I think an aquatic centre is a bit like the bypass at Kingston. It was on the map, I think, in 1973. We have struggled to get an aquatic centre up and running. They usually lose money for councils. We have a designated space for an aquatic centre, which is currently where the table tennis is. It is an ideal spot. We would move the table tennis centre. We believe that with increased usage with our two new ovals, particularly the new football oval when it comes into play, there will be an increasing need for an aquatic centre. We are hopeful that that will go ahead, but that is certainly for the future.*

## ICT

The Committee questioned the witnesses regarding the ICT strategy for the school, particularly as to whether the wireless network extended into the grounds. Mr Glass responded:-

*That is a very interesting question, Mr Chairman, and the answer to that is we really do not know yet. This is a whole issue that is going to be really challenging for us. As recently as last week a question was asked of me: have we worked out how many desktops and laptop computers we are going to have at the new school? The answer is we do not know that yet because I am not even sure whether we will be just looking at desktop and laptop configurations in 2011.*

*Last week I had the good fortune to see an item of equipment that opens up into a very small keyboard and screen. The item is not a laptop, it is similar to what we probably know around the table as a memory stick, but it can connect with the Internet and it can get e-mails et cetera. That item of equipment is very new and it probably only costs \$300 to \$400. Paul provided a demonstration on that laptop over there. When we come to 2011 we may be in a different technological space than straight-out desktops and laptops...*

*... and we will be looking for that to be as widely used as possible but I have no doubt that we will be looking to facilitate as is, where is, any time access to learning and learning delivery. I'm personally not too worried that we don't have a really detailed ICT plan right at the moment for what is going to be implemented in 2011. Technology is moving so rapidly at the moment, so it is an emerging space. We will be putting some good effort into it over the next year, but we'll be keeping our options open to make sure that whatever goes in is really leading edge.*

*... We should be looking to 2011 where students can access learning ... wherever they want, whenever they want. That's what we're moving to. The kids are doing it now with Facebook and MySpace and a whole range of things. It's challenging for a baby boomer like myself to try to keep up with them.*

Mr Groom added:-

*I work in an ICT area and I have taken an interest in ICT. The school has seen fit to invite me to attend a number of meetings and accept my involvement, which has been wonderful. One of the things that heartened me was a presentation by Mr Trevor Hill, the IT manager for the department. I had heard a couple of teachers saying, 'How many outlets will I have here, how many outlets will I have there?' and that really scared me. Mr Hill said he wasn't*

*interested in ordering or accepting requests for anything until he hears from the teaching staff about how they want to teach and what educational outcomes they want to achieve. Once the teachers get that down pat then he is going to start looking at accepting requests. That was very heartening to hear. The educational outcomes are being thought of first, not just what fancy bit of gear they can get for the money.*

### **Parent involvement**

The Committee questioned the witnesses as to whether provision had been made in the design to encourage parents to become involved. Ms Gourlay responded:-

*We have, over the last few years, really encouraged parent volunteers into the school. We have parents who come and work in the school, help out in the canteen, the library and the grounds, act as tutors, and help the sport teams. In some ways parents are a general component in every part of the school. There are spaces in the front here - for example, the conference room - where parents certainly would be invited to come and meet staff if they needed to. This is a community school where parents are an integral part of everything that happens in the school, whichever building they are in, so having one little space is a fairly artificial way of having parents involved.*

Mr Groom added:-

*In terms of parent access to that building, as part of the consultative group this particular pod was one of the areas that I looked at. Whilst there might be straight rows of library books I know there has been a lot of work done into a lot of the other spaces. You can see there are lots of little boxes in that pod. One of the things that came up was ease of access to office staff for visiting parents - and others - and also access to the principal. A lot of thought went into the positioning, space and design of the special needs area. There are some external entries in the special needs area towards the top so that people can come and go without it being a particularly public thing, so that was thought about to some degree in that pod.*

### **Sports Centre partnership**

The Committee asked for details of the nature of the agreement with the Kingborough Council regarding the use of the Kingborough Sports Centre. Mr Glass responded:-

*It is in the process of being finalised. It will be important for us to have a clear understanding, right upfront before the facilities are finished, of the sharing arrangements in terms of access to facilities and cost-sharing. The general principle would be that during school hours the school will have a call on things such as*

*the new courts that will be built for gymnasium purposes, and for playing fields. Then beyond school hours community use will have a call. We would envisage that there will be very few clashes across times. We will have a full management arrangement which we will need to sign off in consultation with the council. DoE officers have been working with Kingborough Council officers to flesh all of that out.*

*... We need to be careful that we do not disadvantage any existing sporting groups. We will be adding netball and basketball courts via the new gym, as well as there being the sports centre. So we have to look through the scheduling and timetabling to accommodate both the school and community.*

Dr Bury concluded:-

*I would like to confirm what is being said from the point of view of council. The heads of agreement really sets in stone the arrangements that are going to happen. There will be a new two-court gymnasium and the school will have exclusive use. It will be on a hire basis. The school will have exclusive use in school hours of that gymnasium. It is the same with one of the soccer fields. They will have exclusive use of a soccer field in school hours - I presume on a Saturday morning if they wish to use it. I do not have concerns that those potential arrangements are in any way fragile or under threat.*

### **DOCUMENTS TAKEN INTO EVIDENCE**

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

- Kingston Education Project – Construction of a New High School at Kingston View Drive, Kingston – Submission to the Parliamentary Standing Committee on Public Works, April 2008;
- Julie Taylor, submission dated 24 April 2008;
- Bruce Scott, submission dated 25 April 2008;
- David Grace, submission dated 28 April 2008;
- Working Group to oversee the feasibility study of the establishment of a new secondary education complex at the Kingborough Sports Centre site – miscellaneous documents;
- David Grace, Summerleas Road Traffic – Average Weekly Totals;
- Email from Graham Bury to David Grace dated 22 February 2007 covering a copy of the “Kingborough New” – No. 25 February 2007;
- Kingborough Sports Centre Master Plan – Final Draft;
- GHD Report for Kingston View Drive Traffic Impact Assessment February 2008; and
- Email dated 3 June 2008 from Min Harman to the Committee Secretary; and
- Copy of the document entitled “College of Creative & Contemporary Arts – Feasibility Study , October 2005.

## **CONCLUSION AND RECOMMENDATION**

The need for the proposed works was clearly established. The demand outlook for secondary educational services in the Kingborough and Huon local government areas is such that the existing Kingston High School will be inadequate to meet the projected enrolment demand.

The existing school was opened in 1972 and originally provided for a progressive open plan teaching environment, however, the original learning areas have been progressively divided and no longer support emerging teaching methodologies of teamwork, collaboration and inquiry based learning.

The proposed new school will provide an environment appropriate for the contemporary curriculum which reflects the emphasis of engaging students in an environment requiring enhanced thinking and communication skills and which promotes the development of a person who is flexible, adaptable and able to problem solve.

The Committee is satisfied that the proposed site of the new school is appropriate and will promote and support the development of various partnerships and potential for sharing facilities, in particular, community use of the Performance and Cafeteria building of the school and the use of the Kingborough Sports Centre by the school.

The Committee notes the concerns raised in relation to changes in traffic movement that will result from the relocation of the school. The Committee is satisfied that an appropriate study has been undertaken in relation to the changes and that the transport efficiency of the Kingston road network once upgraded to include the Kingston By-Pass will not be adversely affected by the works. Whilst not part of the proposed works, the Committee was particularly concerned with the adequacy of the Summerleas Road/Kingston View Drive intersection and notes the recommendation of the consultant engineers, GHD Ltd., that a junction upgrade be undertaken to address the road grades and sight distances. Such upgrade will address the concerns of the Committee.

Accordingly the Committee recommends the project, in accordance with the documentation submitted, at an estimated total cost of \$30,000,000.

**Parliament House  
HOBART  
5 June 2008**

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