

**THE GLASGOW
SCHOOL OF ART**



***The Glasgow
School of Art***

***Estates Options
Appraisal
DRAFT***

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- 1.1 Glasgow School of Art is an internationally renowned higher education institution. With around 1,600 students it is relatively small when compared to most higher education institutions. However the School's substantial worldwide reputation belies its small physical scale. It is in part this small scale that keeps academic focus, attracts excellent staff and students, and achieves high quality results. Many prospective students are drawn to the idea of a creative and collaborative, close-knit community.
- 1.2 Nevertheless being relatively small does have some disadvantages. The most significant disadvantage maybe financial since the School carries some of the overheads of a larger institution. Recent changes to funding regimes have sought to address the problems of small-scale institutions. Yet historically, before the control of the present board of governors and executive team, it would appear that the School has often laboured under tight financial constraints. One of the more significant overheads has been the relatively large number of buildings operated by the School. As a result the estate has not always received sufficient attention or investment.
- 1.3 The present management team consider that they have inherited an estate that not only has suffered due to a lack of maintenance, but contains buildings that are difficult to keep in good order. Problems with the estate are not only the perception of those who work within the buildings; they are a matter of record contained within recent reports. In 2004 RMJM architects conducted a survey analysing fitness for purpose and concluded that most existing structures were partly or wholly inadequate for their use. In addition a report prepared by Summers Inman, building surveyors and property consultants, found a backlog in recommended maintenance work with an estimated cost, at 2003 prices, of £18.46 million (£578 for every square metre of the existing estate). RMJM concluded that:

“The sum of money now required to repair [the] estate to a serviceable level is substantial and, if spent, would deliver few utilisation improvements or running cost benefits. It would in our view result in an estate substantially unfit for its purpose and would represent poor value for money”.
- 1.4 Accordingly the School has commissioned Bond Bryan, architects specialising in education, to prepare an appraisal of a wide range of options for the future of the estate. Bond Bryan has substantial experience of both developing projects for construction and offering strategic advice, and has worked with over 50 higher and further education institutions over the last 14 years. This document is our (Bond Bryan's) report to the governors and the executive of Glasgow School of Art. It has also been prepared for the use of the Scottish Higher Education Funding Council, which has funded this study, and the Scottish Executive.
- 1.5 We must also recognise the considerable assistance of the staff and students of Glasgow School of Art in the development of this study. In addition we received support and advice from GVA Grimley, property consultants, Turner and Townsend, construction cost consultants, and Ben Spencer an independent consultant working for Glasgow School of Art.
- 1.6 It should be noted that two relatively small elements of the existing estate are excluded from analysis in this study. The first is Margaret Macdonald House, the residential block owned and operated by the School. The second, the Digital Design Studio, currently using leased accommodation within the 'House for an Art Lover' in Bellahouston Park. This is the subject of a relocation proposal; the School's ambition being to relocate this facility to the Digital Media Campus at Pacific Quay.

- 1.7 This study, therefore, has focussed upon the existing academic estate of the School at Garnethill, an area close to Glasgow city centre.
- 1.8 During the course of this study we have:
- Considered the **strategic context** within which Glasgow School of Art operates
 - Examined the performance of **the existing estate**
 - Identified **key objectives** for the future estate
 - Considered the **future space requirements** of the School
 - Researched **opportunities** available to the School
 - Identified the **ideal physical characteristics** of the future estate
 - Developed **a range of options** for consideration
 - Made an **assessment of the options**
 - Identified a **preferred solution**
 - Identified **risks** relating to the preferred solution
 - Identified important **next steps** following completion of this study
- 1.9 Accordingly the remainder of this document is structured so that each of the above points is considered in a separate section.
- 1.10 This report then, identifies a preferred strategic direction for the estate of Glasgow School of Art. As such it may be regarded as the School's Property Strategy. It is not a full business case for a clearly defined project. However, it sets out clear objectives, and demonstrates, in outline, a scenario for change together with approximate costs and timescales.

- 2.1 The following is a brief overview of key strategic issues in so far as they affect the School's estate.

Glasgow School of Art's declared vision statement is:

To provide world-class creative education and research in architecture, design and fine art which makes a significant cultural, social and economic contribution.

The three major academic 'sub-schools' are therefore:

- The Mackintosh School of Architecture
- The School of Design
- The School of Fine Art

- 2.2 The vision statement is modern in tone and yet would not have been out totally of place a century ago. Although, over time, the challenges may vary, it has always been the School's position that creative people have significant contributions to make towards society.

- 2.3 The School is recognised, both in Scotland and internationally, for the quality of its education, for the success of its graduates, and for its developing research profile. The School believes that two of the key strengths of its approach are the employment of excellent staff and its studio-based system. Almost all students are offered dedicated studio space and this has been recognised as a significant factor in most students' decision to apply to the School (see: 3.44).

- 2.4 However the School is not complacent and knows that the studio system alone does not guarantee success. The School's Strategic Plan (2004-2008) sets out a framework for further development.

- 2.5 This Strategic Plan indicates a strong degree of self-confidence. This confidence appears well placed given the current increasing demand for a limited number of places. The School considers that this is due to cultural and economic shifts both within the United Kingdom and abroad. The Strategic Plan states:

"Creative industries are now recognised as a major force in the UK economy. The Scottish Enterprise Creative Industries Strategy acknowledges the key role of education and training in delivering two of its main objectives: the expansion of the talent and skills base: and stimulating innovation through research and commercialisation."

The plan also states:

"To support creative industries we also need to make more seamless transition from study to work. We are doing this by continuing to embed core and transferable skills firmly and explicitly into our project-based curriculum... we have highly skilled and knowledgeable academic and technical staff who could continue to support graduates as they establish themselves as new creative business and cultural ventures."

- 2.6 The School argues that creativity is now a considerable source of competitive advantage, and that over the longer term, in almost every industry in today's fast changing world, the winners will be those who can create and keep creating.
- 2.7 The School's ambition, therefore, is to further enhance this national and international reputation in education and research and, in particular, develop its postgraduate provision. This implies some growth in student numbers.
- 2.8 Growth in activity would also allow the School to continue to offer excellent opportunities to students within the United Kingdom and the European Community whilst utilising its reputation to market to more students worldwide. Again this is consistent with the School's strategic planning and would also provide much needed long-term financial stability.
- 2.9 In essence the academic ambition to develop and grow matches the need for a more sustainable financial future. The School has already developed an outline academic and financial model that reflects these objectives. This model will be subject to review but at present implies an increase in actual on-site student activity of around 27% by 2011. Most particularly, the school targets significant growth in postgraduate student numbers so that postgraduates will represent 20% of the enlarged student population (as opposed to the current 7%).
- 2.10 However the school considers that the estates problems outlined in the introduction (see: 1.3) are considerable and left unremedied will thwart the School's ambitions in forthcoming years. The scale of these problems is highlighted later. There are many examples of international 'competitor organisations' with estates that are far superior to the School's. Indeed, in our [Bond Bryan's] extensive experience the greater majority of Higher Education Estates in the United Kingdom are of a better quality than the School's. Furthermore, given increasing commitments to investment, both in Scotland and the remainder of the United Kingdom, an increasing proportion of the Further Education sector and the Secondary Education sector might be considered to be of a higher quality.
- 2.11 The school considers that in order to fulfil its mission and deliver a sustainable future, it needs to provide high quality buildings and facilities, not only to attract students, but also to provide the best possible environment for academic achievement. The existing estate appears to fall well short of the required standard.
- 2.12 At this point it is relevant to reflect upon the very noticeable exception to the last remark: the Mackintosh Building. The Mackintosh Building is described briefly in the next section: The Existing Estate. However the existence of the Mackintosh building and its significance, although only providing around 25% of overall floor space, requires special consideration as a key strategic matter. The Mackintosh Building (commenced in 1899), designed by Charles Rennie Mackintosh, is an exceptional building, a universally recognised design icon, and a very central part of the School's identity. Despite being the school's oldest building RMJM's aforementioned study recognised it as the best within the estate. Yet its significance to the School is much greater than that.



- 2.13 The Mackintosh Building stands as a symbol of an enduring central philosophy that has existed within the School since its early years: that artists and designers have relevant contributions to make in all aspects of life, and that students should be taught in a manner that will allow them to become successful practitioners once formal education is complete. Charles Rennie Mackintosh was a former student of the School and the building displays many of the ideas and art of that early 20th century artistic movement known as 'The Glasgow School'; most of whose members were once Glasgow School of Art students. The building is recognised as the finest work of one of the 20th Century's great architects, not only for its striking and beautiful looks both inside and out, but for its technical and aesthetic innovation, its integration of decoration and structure, its spatial organisation, and its delivery of highly practical studio spaces with high ceilings and excellent north lighting.
- 2.14 The School finds it difficult to conceive of a future that would not include the Mackintosh Building. As a result a submission has already been made to the Heritage Lottery Fund for a fund to conserve and refurbish this building and its contents whilst improving facilities for public access. However an important part of this proposal is that the building should retain its primary purpose, that of working art school.
- 2.15 The relevance of this building is not lost on prospective art and design students or prospective members of staff. As shall be indicated later, many students make reference to the Mackintosh Building as one of the reasons for applying to Glasgow School of Art (See: 3.48). Indeed, in the past, some international students have arrived and been disappointed having incorrectly assumed use of a Mackintosh Building studio.
- 2.16 This serves to demonstrate the power that excellent environments can have in marketing any education institution, but particularly an art and design school where prospective students have a natural disposition toward seeking out good design.

2.17 Certainly empirical evidence suggests that the continued development of the School's excellent reputation over the last 100 years is due in part to its strong association with the Mackintosh Building. It is perhaps fortunate that the other buildings within the estate are less well known; the next section describes the whole estate.



- 3.1 As already indicated this options study has been confined to the academic buildings at Garnethill. Nevertheless it should be noted that Margaret Macdonald House, a residential block with about 100 bed-spaces, is also located at Garnethill (only one to two minutes walk away from most other buildings- this block is indicated on the site plan as existing. Therefore any decision to move away from Garnethill may effect the suitability, and hence viability, of Margaret Macdonald House. However it has been agreed that this issue should not have a major influence on future decision-making and this is the last direct mention of it within this report.
- 3.2 Garnethill is not a name that is found on all maps, yet it worthy of identification as an area with its own unique character. Garnethill is located so that Glasgow's main central shopping area is immediately to the South East. It does not, of course, have fixed boundaries, but that area identified by most of those who work there would measure no more than 500 metres by 300 metres.
- 3.3 Garnethill itself is, at heart, a small inner-city residential district, centred upon a hill that slopes away in all directions. To the east of Garnethill is a rather mixed 'transition zone' of 'edge of city centre retail', offices and small businesses. To the north and west Glasgow's urban Motorway (M8) bounds the area; as a result the far reaches of the hill's northern and western slopes are less attractive. Sauchiehall Street, a major road running west out of the city centre and underneath the urban motorway, effectively defines the southern edge of Garnethill. At its City Centre end, Sauchiehall Street is dominated by city centre shopping with some major stores. However before Sauchiehall Street has stretched past Garnethill to meet the motorway a mix of small shops, bars and nightclubs predominates, noteworthy exceptions are; the Maclellan Art Gallery, the Dental Hospital and Glasgow Film Theatre.
- 3.4 The local residential accommodation varies considerably in quality and price but this adds to an appealing sense of variety. Notable exceptions to the residential label are the three different education institutions. Stow College, on the northern slope and close to the M8 motorway, is a General Further Education College accommodated within a large monolithic building constructed in the 1930's. St Aloysius College is a Roman Catholic School providing both Primary and Secondary Education. The College has a number of buildings, old and new, mostly located in the centre of Garnethill. Finally Glasgow School of Art itself has two clusters of academic accommodation on Renfrew Street (on the southern side of the hill) plus two further buildings (on the north eastern part of the hill). The Mackintosh Building itself is on Renfrew Street.
- 3.5 Also on Renfrew Street, between the two clusters of buildings belonging to the School, in what were once tall early Victorian houses, is a string of privately owned hotels. Renfrew Street is one of the nearest streets to the city centre to provide properties suitable for conversion to small-scale private hotels, so this use is not surprising. This activity is clearly boosted by the Mackintosh Building's status as a popular tourist destination.
- 3.6 Despite the rolling topography a gridiron street pattern was applied and this lends an ordered, open and pleasant atmosphere allowing the larger academic buildings to sit quite comfortably alongside the residential accommodation.



- 3.7 The easy going atmosphere that the mix of uses generates seems to sit very well with most students we have consulted (see: 3.47). The overall impression is of an attractive yet quiet neighbourhood, with very easy access to city centre shopping of all kinds, places to eat and drink, and cultural facilities. Furthermore Garnethill affords opportunities for students to live in the immediate vicinity, whilst those who do not live locally can make use of good public transport links in Sauchiehall Street or Cowcaddens and Charing Cross Stations. A point that is often overlooked is that there is no other equivalent location within Glasgow that could provide this range of benefits.
- 3.8 As already indicated, the majority of the School's accommodation is on Renfrew Street. **The first, and most significant cluster is that group of buildings around The Mackintosh Building.** The other buildings in this group are the Bourdon Building, the Assembly Building, the Newbery Tower and the Foulis Building. The scale of these buildings together with the Mackintosh is significant; together they supply around 71% of the total gross internal floor area.

- 3.9 The strategic significance of the **Mackintosh Building** has already been noted (see: 2.12). The building was constructed in two phases (1889 and 1909). External Walls are a mixture of stone and rendered brickwork. Roofs are a mixture of slate and some low pitched roofs finished with lead or asphalt. Floors are mostly concrete supported on steel beams. The building's predominant uses are for Fine Art and also administration. Although many maintenance issues require attention, the overall immediate impression is of a building kept in reasonable order. Although the building would be difficult to adapt, its large, tall studio spaces continue to offer a good working environment for artists. However a disadvantage at present is that access for disabled users onto the main ground floor level, and to certain intermediate levels is limited.
- 3.10 A description of the Town Planning Context is provided in section 6. However it is worth mentioning here that the Mackintosh Building is a Category A listed building. Category A means that the building is of 'national or international importance, or a fine example of a period, style or building type'. This listing makes alteration difficult and can make repairs expensive. Fortunately the building is suited to its present use and if the Heritage Lottery Fund bid is successful this will ease the maintenance burden.
- 3.11 The **Bourdon Building** was constructed in the early 1970's and is a cast in-situ concrete structure. Roofs are flat and finished in asphalt or felt. The building spans over Renfrew Street and as such it has considerable visual presence that could be said to border on the oppressive. Designed in what was known as the 'brutalist' style, today most observers would say its weathered raw concrete appearance is a little too brutal. In the years following its completion the Bourdon suffered from cracking and other signs of movement. However in recent years tests suggest that the building would appear to have stabilised. The building accommodates the Mackintosh School of Architecture and also the Library. This is the only example of an entire sub-school occupying its own building (the Library has its own entrance). Despite gloomy and unwelcoming entrances and stairwells the upper floors do provide flexible open plan studio space. Unfortunately the library, sited within what was originally designed as an assembly hall, is not at all successful as the layout is highly constrained by the restricted space.
- 3.12 The **Foulis Building** was constructed in 1966 using a concrete structure with a mixture of lightweight cladding panels and brickwork. In 1997 the building underwent a 'refit' and was extended with an extra floor added. The School of Design, in particular Product Design, Engineering and Visual Communication, uses this building. The upgrade to this building in 1997 means that it has a better internal environment than most.





- 3.13 The **Newbery Tower** was constructed in the early 1970's and is a nine storey concrete tower partially clad with copper panels. Internal floors appear to be constructed from concrete. Again this building appears very run down and needs refurbishment to its external fabric. Its small-scale floor plates mean that that some related departments and facilities are spread over a number of floors creating some operational difficulties.
- 3.14 The **Assembly Building**, constructed around 1930, has solid masonry external walls and a slate roof. Internal floors appear to be constructed from concrete. This building feels very rundown and provides a number of large, yet rather inflexible, spaces for the Students Union. In addition this building has poor access arrangements for users with mobility difficulties with no passenger lift.
- 3.15 The buildings described above are arranged in a tight cluster on Renfrew Street on the corners of Dalhousie Street and Scott Street.
- 3.16 The **Second group of two buildings**, described below provide 11% of the overall floor space and are arranged on a steep plot of land bordered by Renfrew Street, Garnett Street and Hill Street.
- 3.17 The **Richmond Building**, on the corner of Renfrew Street and Garnet Street was constructed using traditional techniques in around 1880. Apparently originally built as a large dwelling house, external walls are of load-bearing stonework or rendered brickwork. Roofs are mostly of slate. The immediate impression is one of considerable dilapidation. The external facades are mostly filthy and interior spaces are rather gloomy. This property was never meant for its current use and the building is highly inflexible being composed of mostly small spaces with load bearing cross-walls between them. Access to the building for disabled users from the principal entrance on Renfrew Street is poor. Once inside circulation is domestic in nature and again arrangements for disabled users are very poor.
- 3.18 Connected to the Richmond Building at two levels, the **JD Kelly Building** has many of the unfortunate drawbacks of its neighbour. Constructed on the corner of Garnet Street and Hill Street in around 1898 as a hospital building, its designer chose a rather domestic appearance, no doubt to fit in with elegant terraced housing already in existence in Hill Street. Yet the building is somewhat dilapidated and all the restrictions on flexibility and access also apply here.
- 3.19 The final pair of buildings, or the "outlying buildings", situated on the North East Corner of the Garnethill, provides the remaining 18% of the overall floor space.

- 3.20 The **Haldane Building** on the corner of Hill Street and Rose Street was constructed in around 1884 as an Army Drill Hall. The two-storey building is of a traditional construction with massive external masonry walls. An interesting feature is the large slate roof laid upon a timber and cast iron truss structure that spans across the entire width of the building. This allowed the original (36 metres by 30 metres) main drill hall to be column free. However this space has long since filled up with a labyrinth of studio spaces and workshops mostly belonging to the ceramics department. Much of the accommodation appears tired and in need of repair.
- 3.21 Finally the **Barnes building** is on West Graham Road. This is a late Victorian building with an ugly 1960's extension. The first building is constructed of brick and stone. Roofs are finished with slate. The second building has an exposed concrete structural frame with a flat roof. These buildings are used by Fine Art. The layout is confusing and the environment is generally very rundown. Furthermore traffic noise on West Graham Road and less than inspiring neighbouring buildings means that this peripheral location has a much less attractive setting. These mediocre surroundings, together with the steep steps that lead to the Barnes' entryway, give the building a sense of being quite remote from the main group of buildings at Renfrew Street (even though on plan the distance is no more than 250 metres). The Victorian element of the Barnes building is the only part of the estate, other than the Mackintosh Building, to be listed. It has a category B listing.



3.22 RMJM architects completed their review of fitness for purpose in January 2004.

This was a thorough review involving the questioning of building users together with estates staff as well as assessment by RMJM. The Review made separate assessments for each building in each of the following criterion:

- Location
- Age
- Space (Quality of)
- Teaching Environment (Quality of)
- Amenities
- Adaptability
- Accessibility
- Research Use
- Overall Effectiveness

There overall conclusions were as follows:

Generally acceptable: *an even number inadequate and good assessments.*

- The Mackintosh Building

Generally less than acceptable: *more inadequate than good assessments.*

- The Foulis Building

Generally inadequate: *the majority of assessments were considered inadequate.*

- The Bourdon Building
- The Newbery Tower
- The Assembly Building
- The Haldane Building

Inadequate: *all assessments were considered inadequate.*

- The Barnes Building
- The JD Kelly Building
- The Richmond Building

3.23 Note that all of the above buildings are listed in order of preference. Therefore, for example, the Bourdon building was considered to be a better building than the Haldane Building.

3.24 We would, on the whole, agree with these assessments. It seems clear that the buildings have many faults when measured against the specified criterion. Our only adjustment would be to suggest the Bourdon Building is at least as fit for its purpose as the Foulis Building. RMJM's criteria appear to discriminate slightly in favour of the only building to have undergone a recent, mostly cosmetic, refurbishment (The Foulis Building). This may have been entirely justifiable given RMJM's terms of reference. However it is important, in the context of this study, which advances and tests radical options including the replacement of buildings, to recognise the *inherent suitability* of individual structures as opposed to the current cosmetic appearance or general condition. This approach allows us to develop options that will best support the institution over the longer term; a building in poor condition may be considered for

refurbishment and continued use if, following analysis of the intrinsic qualities of its form and structure, it reveals a reasonable degree of inherent suitability.

3.25 Ultimately these are fine judgements that are always, in part, subjective. Many would argue that the appearance of the Bourdon Building should rank it below the altogether less hostile looking Foulis Building. However, on balance we would suggest the large open studio spaces of the Bourdon Building would place it on a par, or slightly above, the Foulis Building. Therefore our [Bond Bryan's] ranking order with regard to *inherent suitability* (as opposed to present condition), from most useful to least, would be as follows:

- The Mackintosh Building
- The Bourdon Building
- The Foulis Building
- The Newbery Tower
- The Assembly Building
- The Haldane Building
- The Barnes Building
- The JD Kelly Building
- The Richmond Building

3.26 Although the JD Kelly and Richmond buildings appear at the bottom of the list most users have agreed that, as the second group of buildings on Renfrew Street, their physical location is better than that of the outlying buildings: the Haldane and Barnes buildings. This is important later when considering sites for reuse via redevelopment.

3.27 However, although it is important to recognise the difference between inherent suitability and condition, an analysis of condition is still important, since it helps to establish the cost of retaining and refurbishing any building. In addition to the fitness for purpose assessment RMJM also commissioned a condition survey, from Summers Inman. The condition survey estimated the total cost, including fees and VAT, of bringing each building up to RICS (Royal Institute of Chartered Surveyors) category B standard: "Serviceable". The table below records the outcomes:

| | £ Millions | m ² | £/m ² |
|-------------------|--------------|----------------|------------------|
| Mackintosh | 3.74 | 7,670 | 487 |
| Bourdon Building | 3.18 | 6,602 | 482 |
| Foulis Building | 1.57 | 3,353 | 469 |
| Newbery Tower | 2.53 | 3,873 | 652 |
| Assembly Building | 0.97 | 1,275 | 758 |
| Haldane Building | 1.75 | 2,828 | 617 |
| Barnes Building | 1.90 | 2,841 | 670 |
| JD Kelly | 1.72 | 2,260 | 763 |
| Richmond Building | 1.10 | 1,241 | 888 |
| | 18.46 | 31,943 | 578 |

3.28 The 'floor area' provided by each building is also indicated. This is the gross internal floor area, measuring across all floor space, dividing walls and structural elements (everything within the inner face of the external walls). At 31,943 square metres this is around 2% higher than has been quoted in most previous reports. This figure has been obtained via precise measurement of computer drafted survey drawings.

- 3.29 The overall cost, at mid 2003 prices, is estimated at £18.46 million. The table then provides the cost per square metre rate calculated for each building and the average for the estate as a whole. At £578 per square metre the average estimated costs of repair are very high; by way of comparison if this rate were estimated for a small family home (around 100 square metres), then the estimated cost of repairs would be £57,800.
- 3.30 Inevitably, costs will vary from those estimated above, and therefore this data only provides an approximate guide as to the relative costs of retaining buildings. Summers Inman's report advises that there is risk attached to any assessment of repair cost. Perhaps most particularly within the Mackintosh Building where costs for some repairs may become inflated due to the Grade A listing; or within the Bourdon Building where essential structural repair is assumed to be minimal.
- 3.31 Analysis of the estimated costs reveals that around 7% relates to improving access for disabled users; around 10% for repairs to the exterior of buildings; 16% for repairs to the interiors; and 67% for repairs to mechanical and electrical systems. This emphasis on Mechanical and Electrical systems is relatively consistent for all buildings. In summary, whilst the buildings are far from suitable for disabled users, and the buildings' fabric is in need of major repairs, the electrical wiring, heating and ventilation systems are both inadequate by modern standards and also at the end of their useful lives. This is a matter for considerable concern since continued reliance on such systems over, say the next 10 to 15 years, may result in regular system failures and users experiencing constant turmoil.
- 3.32 Although the survey work was carried out over the summer of 2003 the School has not stepped up its maintenance programme and has preferred to wait for the conclusions of this study. It has addressed some of the more essential issues for disabled users. However the vast majority of the faults identified have not been corrected; indeed it is likely, given the scale of the School's annual maintenance budget, that some additional deterioration may have occurred.
- 3.33 Given that the above table lists buildings in order of our [Bond Bryan's] assessment of inherent suitability, it reveals a degree of correlation between inherent suitability and costs per square metre of repair. The three buildings at the top of the list also have the lowest rates for repair; the two buildings at the bottom of the list have the highest rates for repair.
- 3.34 Although, when selecting options for consideration, this correlation is helpful, it should be noted that none of the buildings, with the exception of the Mackintosh Building, have been assessed as mostly suitable or in appropriate condition.
- 3.35 The emerging picture is of an institution that has, historically, been neither willing nor able, to pay close attention to estates matters and make appropriate investments in terms of maintenance or acquisition of appropriate buildings. Whilst the present management team has recognised the issue its response has been to seek advice and to develop an appropriate strategic response; clearly this document is an important step.

- 3.36 In the meantime premises costs are set at levels that, whilst subject to close scrutiny, are mostly a matter of established practice within the School. The School's published accounts reveal that premises annual expenditure for the years ending 2002 and 2003 were £1.73 million and £1.69 million respectively. We understand that a small fraction of these costs may relate to those two centres excluded from this study; however even if we overlook this fact then these amounts are not high by comparison to the overall scale of the academic estate at Garnethill. Calculating against the current Gross Floor Area of 31,943 square metres the expenditure is equivalent to £54.28 per square metre for 2002 and £52.94 per square metre for 2003.

Most higher education institutions report total premises costs of between £50 and £75 per square metre. These figures normally include such costs as rates, insurances, energy costs, water and sewerage charges, maintenance, cleaning, security, porters, consultancy fees, and premises management salaries. Given the age, condition and number of sites that the school operates this level of expenditure appears quite low.

- 3.37 Given the low cost per square metre it is possible to hypothesize that the estate, whilst hardly a great asset, is not a major financial burden upon the school. However, a more likely explanation is that established practice excludes proper expenditure on premises costs and most particularly in the area of repair and maintenance.
- 3.38 Summers Inman report that the actual expenditure on repairs and maintenance for the year ending 2002 was £378,748. The published accounts for that period appear to show only £282,000. However it is understood that the larger figure includes for staff employed direct by the School undertaking maintenance activity together with fees charged by external consultants. The higher figure implies an average rate of £11.86 per square metre. A comparison provided within Summers Inman's report, using published estates management statistics, with 11 other comparable higher education institutions in the United Kingdom (in this instance comparable means specialist arts institutions) reveals average of expenditure of £13.74 per square metre. Just four institutions in the sample of twelve spend less per square metre on maintenance.
- 3.39 At the time of preparation of this report the School's estates manager has supplied a provisional figure for maintenance for the year ending of just £324,941 on maintenance (86% of 2002 levels). It would appear that much of the School's current 'maintenance costs' are a mixture of; responses to requests to adapt existing inflexible buildings to changes in requirements to curriculum; adaptations to meet changes in legislation (for example the disability discrimination act) or reactive repairs to damage and breakdowns as they happen. Annual maintenance expenditure is consistently only around 2% of the estimated £18.46 million in backlog maintenance. Long term under expenditure has created this problem and certainly cannot even begin to solve it.
- 3.40 The school recognises that this position is not sustainable in the future. As part of our appraisal it is normal practice to identify the 'do minimum' or 'base case' option. It will be necessary to consider the costs associated with this option including recommended levels of annual expenditure in the future. Having established this data, the costs of alternative options, both in capital project and annual revenue terms, can be compared to this 'base case'. In this instance it seems appropriate that the 'do minimum' base case option should include; the costs of repair to a serviceable condition (as identified by Summers Inman); budgets for adapting the buildings to overcome at least some of the suitability issues; and the establishment of an annual premises maintenance budget likely to create a more stable long term position by keeping buildings in a serviceable condition. Thus by establishing this 'do minimum' option and understanding its full short and long consequences, it becomes the benchmark against which other options can be measured.

- 3.41 A key question remains: what would be an appropriate level of annual maintenance expenditure for the long term given the estate's characteristics and age? Ultimately this would be best established by the devising of a detailed Planned Maintenance Programme designed to keep the buildings in 'serviceable' condition following completion of the works recommended by Summers Inman. At present no such plan exists. RICS advice in this area is that a building owner should consider annual expenditure in the region of 1.5% of the basic cost of reconstruction assumed as part of Insurance Replacement Value. We understand that the Funding Council have advised a rate of 1.3%. These figures would suggest that an appropriate annual budget might be between £585,000 and £675,000. Clearly this is only a rule of thumb method but it is a starting point. The mid point between these two levels would be £630,000 (approximately £300,000 above 2003 levels).
- 3.42 The School or its consultants can amass data but this can only tell part of the story. Ultimately the estate is a resource for use by staff and students; it has no other purpose. Therefore understanding the experiences and perceptions of staff and students is a vital part of the research process. Three days were spent in discussion with various groups: staff and student groups from differing curriculum groups, staff providing cross school support facilities, workshop technicians, and estates staff. Around 100 people joined in the discussions.
- 3.43 Inevitably, given the numbers of people, a wide variety of views were expressed. However a number of themes repeatedly emerged. These are set out below:

3.44 The staff and students succeed despite some working environments.

There appeared to be a wide-ranging degree of dissatisfaction with the buildings. This was particularly strongly held by several international students who were clearly incredulous of conditions and made frequent unfavourable comparisons with facilities abroad. Some students used phrases including "appalling" and "laughable". Generally these phrases referred to conditions in the Richmond, JD Kelly or Barnes buildings. Fortunately most students were happy to stress that good staff did their very best to make up for the environmental deficiencies and that the overall experience was satisfactory. There was also general satisfaction with the concept of dedicated studio space; several students mentioned this was a prime reason for applying to the School since not all institutions offered it. Staff who worked in some buildings stated that they often felt embarrassed by conditions; "the student had arrived from sunny Australia, only to find it rained indoors [in her studio space] as well as out".

3.45 Some people feel isolated from central facilities

Generally those who worked within anything other than that first cluster of buildings around the Mackintosh felt too isolated. Phrases like, "we are in our own little world," and, "feeling cut off," were regularly used. Students also commented on the lack of easy access to the library, students union or refectory facilities.

3.46 Students want to feel that they are part of a creative community

Many students stated that they had chosen Glasgow School of Art because of the relatively small specialist nature of the institution and that they understood that the school aspired to being a close knit creative community. In particular the Architecture students said that they had an expectation that they would be exposed to ideas and even learn interdisciplinary skills from others by attending the School. In essence self-selection means that many who apply to the School are searching for this kind of experience, rather than exposure to one teaching department within a large university setting. However the general view was the buildings militated against this approach.

Too many buildings with too many doorways over too wide an area have a strong negative influence. At some point in the past the school has lost a degree of physical coherence and this is at odds with its philosophy.

3.47 A preference for staying within the City Centre and at Garnethill

Many students, particularly those from the United Kingdom or Northern Europe, expressed a view that before arriving they knew Glasgow was a creative and cultural city. This had been a decisive factor in applying. Students wanted to be close to the centre to participate in the socially diverse and rich cultural life. Furthermore Garnethill was confirmed by most to be a good location being very close to the city centre yet relatively peaceful.

3.48 The Mackintosh Building must be retained

Students confirmed the significance of the Mackintosh Building. Several international students stated that they knew about the Mackintosh long before applying. In marketing speak the 'Mackintosh Brand' is a good one. Most of those who used the building on a daily basis thought it remained a good environment; more than one student who had studio space within the Mackintosh Building used the words "very privileged". Several other students wished they had a view of the building from their own studio spaces.

3.49 In summary, the key points of this section 'the Existing Estate' are as follows:

- Garnethill is a pleasant neighbourhood close to the city centre, transport links, and well suited to Glasgow School of Art.
- Only the Mackintosh building provides genuinely suitable accommodation,
- The next two most useful buildings would be the Bourdon and Foulis Buildings.
- The Bourdon and Foulis Buildings are part of cluster of buildings on Renfrew Street that together with the Mackintosh provides 71% of current floor area.
- Outside this cluster all buildings are highly unsuitable.
- All buildings are in poor condition, although the Mackintosh, Bourdon and Foulis buildings appear better than most.
- In 2003 the backlog maintenance work had an estimated cost of £18.46 million.
- This has been caused by historical under funding.
- Most staff, and in particular students, would like a better quality and cohesive environment ideally based on Garnethill and close to the Mackintosh.

- 4.1 The School has recognised, for some time, that it is important to be as space efficient as is reasonably possible. Space efficiency allows the maximum amount of space to be released from the estate. This can have two positive financial effects: the first is to achieve 'disposal receipts' (income from selling sites); the second benefit is to reduce annual premises costs. Furthermore, when constructing new buildings, space efficiency keeps the development to an appropriate scale and avoids unnecessary capital expenditure.
- 4.2 Nevertheless, the School is also aware that it competes in a national and global market for students and at the highest academic levels. The school also wishes to expand its offer particularly in terms of the number of postgraduate places. Therefore if the quantity of space provided to students falls appreciably short of what might be offered in most other competitor organisations, this could affect reputation and recruitment. It is important for any institution to understand the market within which it operates. This does not mean that the School must match all comers, but it is important to be as fully informed as to the facts as possible before taking decisions.
- 4.3 Consequently, the School has carried out two pieces of research. The first involved commissioning *Stellae*: a nationally renowned consultancy offering advice on space efficiency to education institutions. The second employed consultant Ben Spencer to investigate the amounts of studio space provided by institutions across the United Kingdom and comparable institutions abroad.
- 4.4 *Stellae* carried out a detailed headcount survey; collected by visiting every studio, seminar space, or other student workspace every hour during the daytime period (40 hours over one survey week in May 2003 during the period prior to the final degree shows). *Stellae* reported that they had measured attendance within 13,772 square metres of critical academic space (the remaining floor space, in excess of half the gross floor area, having some alternative use).
- 4.5 A difficulty occurs here in that, at the time, the School's database indicated up to 16,284 square metres of such space, or 15,030 square metres without the library. *Stellae* acknowledged this but stated that; "the survey was specified and organised to capture the numbers of staff and students present in academic studios and academic support areas during the week of the survey". In other words they believed that they had counted the very large majority, if not all, of attendees by focussing on the spaces that really matter.
- 4.6 *Stellae* did go on to acknowledge that, "a number of **smaller support areas** were considered to be an integral part of the specified rooms [so the people within them were counted]. The floor areas of these adjacent support areas need to be added to the total floor area. Similarly, **essential stores and preparation areas** with low usage rates did not form part of the survey..." *Stellae* confirmed that the inclusion of all such spaces would increase the sample size to 14,895 square metres.
- 4.7 Given that the School's database indicated a figure, without the library, of 15,030 square metres this still leaves around 135 square metres unaccounted for. However this is a tiny proportion of the overall sample. This problem is almost certainly caused by the large number of very small ancillary spaces with a range of mixed, and therefore ill defined, uses.

- 4.8 A space audit conducted by Bond Bryan, some 16 months after Stellae's survey, attempted to identify all spaces, large and small, that could be assumed to have some form of so called 'academic use' but **specifically excluded rooms whose prime use appeared to be that of storage**. This audit measured 14,359 square metres of such accommodation.
- 4.9 In any event Stellae's study related to those key academic spaces that, excluding related ancillary spaces, had an overall floor area of 13,772 square metres. This total was further broken down between those spaces understood to perform the role of dedicated studio space (7,313 square metres) and other academic spaces such as lecture theatres, seminar spaces and supporting workshops (6,459 square metres).
- 4.10 It is important to recognise the limitations of a single headcount survey. Analysis of a single week takes no account of varying patterns of use within different months of the year. Therefore results should always be treated with a certain degree of caution.
- 4.11 However, Stellae discovered that the utilisation of dedicated studio space was 22%. That is to say the typical dedicated student space within a studio was occupied 22% of the time. In fact the average studio was at least part occupied 62% of the time. However when in occupation an average of 35% of spaces were occupied. This would be equivalent to a large studio for 20 people being in use for 25 hours of the 40 hour week and, when in use, having an average of 7 people within it.
- 4.12 Whilst the result for dedicated studio space seems modest it is our experience that it is difficult to achieve utilisation rates above 25% within most specialist space in higher education. Furthermore the measurement of daytime activity does include the demand, from many students, to work in the evenings (particularly close to degree shows).
- 4.13 When considering dedicated studio space Stellae acknowledged the importance of it to students. Stellae concluded that, in many ways, dedicated studio space becomes not only a place to work but also a space within which projects, and the ideas they represent, reside and grow. Students' work fills these spaces. Each space becomes not only a store for the artists' or designers' work, but a display space allowing criticism of work and the sharing of ideas, and a reference point where individual students can pick up instantly on their earlier thinking and project development.
- 4.14 Stellae chose to quote a number of ideas advanced by staff and students.

"Access to a studio is not a privilege granted for self-fulfilment. Access to a studio allows links to our own creativity and it gives necessary space for reflection"

"It is not possible for students to share a studio with others. Packing up after a limited time to make room for the next student would be extremely disruptive to the creative process"

"This is because creativity cannot be switched on or off at predetermined times, and it is in itself an odd mixture of work and play".

- 4.15 However Stellae discovered that the utilisation of other academic space (such as lecture theatres, seminar spaces and supporting workshops) was very low at only 14%. Despite the limitations of a one week survey, it would appear that significant reductions in these areas ought to be possible. The School considers that present arrangements, particularly the large number and spread of buildings, means considerable duplication of workshop facilities. Stellae calculated that conducting the same activity in an environment of around 4,240 square metres as opposed to the measured 6,459 square metres would increase utilisation rates to around 24%. Stellae suggested that, given this space is not dedicated to individual students, and even taking into account the diverse and specialist nature of much of the space, such a saving ought to be possible. Bond Bryan would agree with this, in fact, under certain scenarios, higher levels of utilisation and hence savings ought to be possible.
- 4.16 Without any allowance for growth in the number of students, taking the above recommendations; retaining dedicated studio space at around 7,313 square metres; but reducing other academic space to around 4,240 square metres; would create a total academic floor space allowance of around 11,553 square metres.
- 4.17 In addition to the work by Stellae, Ben Spencer has investigated, at a range of relevant institutions, both the prevalence of dedicated studio space and, where it is offered, the typical floor-space per student. Research investigated provision across all the art and architecture schools in Scotland, and a number of competitors in England, Europe, Scandinavia and the USA.
- 4.18 Eighteen institutions responded to the enquiry. Given the wide-ranging nature of those institutions that did respond, the results are similarly diverse and it is difficult to draw specific conclusions. Key findings may however be summarised as follows:
- 4.19 The provision of dedicated studio space varies by discipline: architecture students are likely to have their own space within open studios; design students are likely to share work space in open studios; fine art students are most likely to have their own studio space. However the large majority of institutions say they provide dedicated studio space. Space standards vary hugely from the smallest: 3-4 square metres at Gray's Art School (Robert Gordon University), to a massive 80 square metres in Amsterdam (Rijksakademie).
- 4.20 A new building in Stockholm provides architecture students with 7 square metres each (Royal Institute of Technology: School of Architecture). The response from the Royal College of Art (London) indicates that fine artists typically have 10-15 square metres each. A new development in Helsinki (Academy of Fine Arts) provides 8-15 square metres each. The Haute Ecole d'Arts Appliqués (Geneva) provides around 15 square metres for each student. The Academy of Fine Arts in Vienna typically provides 15 square metres of space. CalArts in Los Angeles provides between 9 and 21 Square metres for a wide range of disciplines.
- 4.21 Taking all the above research into account the school is determined to continue its policy of providing dedicated studio space for each student. However, on the basis of its own research, it is comfortable with an average space standard across all disciplines of around 6 square metres per student. This standard will be varied according to academic discipline, and to undergraduate and postgraduate levels. This will allow a limited number of students up to 15 square metres. The provisional space standards for dedicated studio space are set out overleaf.

| | m ² |
|--|----------------|
| Small Base (Architecture / Design / 1 st year Fine Art) | 4.5 |
| Medium Base (2 nd and 3 rd year Fine Art) | 6.5 |
| Large Base (4 th year Fine Art) | 10.0 |
| Extra Large Base (Master of Fine Art) | 15.0 |

- 4.22 Having completed the research the School began to consider its full space requirements in more detail. Rather than use the oft-employed technique of considering whether each teaching or support department, in turn, has too little or too much space, and then adjusting the total floor space allowance accordingly, the School has determined to create a complete working model of future floor space. This allows the School to rethink its approach to the use of space in the most imaginative and efficient way possible.
- 4.23 Before attempting to establish a new model it is important to consider what the underlying principles of future practice within the School will be, both in say five to ten years time and if possible over the longer term. Thus the property strategy is not just about increasing efficiency or quality in the general sense; it can also create environments that better support changes in practice. New environments might even be agents of change that old environments might not allow.
- 4.24 Having considered the opportunities that new developments might offer, the school considers that the following should be taken into account when establishing a new space model:
- Future education should continue to be 'practice based' and first and foremost delivered through the studio system.
 - This should be underpinned with excellent centralised facilities allowing the effective and often shared delivery of historical and contextual studies across disciplines. This should include both small and large seminar spaces and significant lecture facilities.
 - In the future, information technology will be everywhere. Therefore, although there is some limited requirement for dedicated, most particularly specialist, information technology facilities, most will be absorbed into other areas.
 - New development should encourage greater contact and synergies between academic disciplines.
 - Workshops facilities should, wherever practical, be centralised and shared so as to achieve maximum efficiency.
 - Bespoke facilities must be provided for an expanded research provision.
 - There should be a highly accessible student and learning services centre closely aligned to other learning services, such as the library.
 - High quality accessible social and refectory facilities must be provided together with a significant students union space.
 - New development should contain a range of excellent and accessible facilities so the School can host conferences and exhibitions and also participate in the life of Glasgow.

- The School must allow for its 'Window on the Mackintosh' facilities as envisaged in its 'Heritage Lottery Fund Bid'. This has space requirements both within the Mackintosh Building and facing it.

Future Space Requirements 4.0

- 4.25 Following precise measurement of computer drafted survey drawings and the aforementioned audit of space, Bond Bryan considers that the **total existing floor space** may be summarised below.

| | |
|---|----------------------|
| Floor Space as Existing | m² |
| Academic Facilities (dedicated studios/teaching spaces/workshops) | 14,359 |
| Support Facilities (includes Library) | 8,027 |
| Balance Space (circulation/toilets/plant rooms): 30% of total | 9,556 |
| Gross Floor Area | 31,942 |

- 4.26 The 'Support Facilities' figure normally includes staff spaces, refectory space and storage spaces. In most education institutions this is only around 20% of the total floor area. However in this instance it also includes; the School's library; a thriving students union; spaces within the Mackintosh building no longer used for academic purposes; and art gallery space. The provision of these types of spaces within a relatively small institution has boosted support facilities to 25% of the Gross Floor Area. The retention of these important facilities in the future will, inevitably, place limits on space efficiency.

- 4.27 Nevertheless Bond Bryan has, in conjunction with the School, estimated the **minimum floor area requirement**. This would be on the basis of **existing student numbers** (requiring dedicated studio spaces of between 1,450 and 1,470). This is summarised below.

| | |
|---|----------------------|
| Minimum Floor Area Requirement | m² |
| Academic Facilities (dedicated studios/teaching spaces/workshops) | 11,643 |
| Support Facilities (includes Library) | 6,312 |
| Balance Space (circulation/toilets/plant rooms): 32% of total | 8,529 |
| Gross Floor Area | 26,484 |

- 4.28 This calculation assumes maximum efficiency and, in particular, centralisation meaning a reduction in the number of sites. This reduction in floor space might only be achieved via heavy investment in predominately new flexible accommodation. However it does allow for the retention of the Mackintosh Building and those 'non academic' spaces the building contains. It should be noted that 11,643 square metres is close to the academic floor space allowance of around basic 11,553 square metres suggested by Stellae's calculations. This is despite an increase in the provision of dedicated workplaces since Stellae's survey was undertaken,

- 4.29 The calculation assumes a 'balance' figure of 32% of the total gross floor area. The notion that new flexible accommodation is more efficient, in this respect, than old is a common misconception. Whilst new buildings provide flexible environments allowing efficient design of the key academic and support spaces, they invariably place more circulation space with these key spaces. This is in part due to modern fire regulation demanding greater stair widths and at least two means of escape away from almost all rooms. Failure to recognise this fact at the inception of some other projects has resulted in significant underestimation of scale and hence cost. Bond Bryan's experience suggests that, for city centre multi-storey projects, an allowance of 32% is appropriate at this stage.

Future Space Requirements 4.0

- 4.30 However **the School has ambitions for growth** and hence increasing activity on site. The present provisional academic and financial model would result in an increase in the requirement for dedicated studio spaces of around 27% to a total of 1,860 spaces. Although not all space included within the minimum floor area requirement will need to expand, much of it will. The quantity of studio space declared in the last table will need to increase by 27%. The quantity of support space is calculated as requiring an additional 22% more space. This calculation includes an allowance for the provision of postgraduates' workrooms together with a common room space. It also includes a proposal for dedicated research space; at present the provision of such space is very patchy. The overall consequence is presented in the table below; this represents a 25% rise in gross floor area.

| | |
|---|--------------|
| Further Floor Space Required for Growth | m2 |
| Academic Facilities; 27% increase | 3,123 |
| Support Facilities: 22% increase | 1,391 |
| Balance Space (circulation/toilets/plant rooms): 32% of total | 2,144 |
| Gross Floor Area: 25% increase | 6,658 |

| | |
|---|---------------|
| Revised Total Floor Area Allowing For Growth | m2 |
| Academic Facilities (dedicated studios/teaching spaces/workshops) | 14,766 |
| Support Facilities (includes Library) | 7,703 |
| Balance Space (circulation/toilets/plant rooms): 32% of total | 10,673 |
| Gross Floor Area | 33,142 |

- 4.31 The above calculation is focussed upon providing the most efficient arrangement of mostly existing facilities, albeit expanded for growth. The calculation does not allow for all the principles of future practice identified above (see: 4.21). The table below identifies the additional floor area in order to comply with the School's requirements for future practice.

| | |
|---|--------------|
| Additional Requirements For Future Practice | m2 |
| Large Lecture Theatre | 500 |
| Academic Facilities Total: | 500 |
| Heritage Lottery Fund Tour Requirements | 415 |
| Visiting Artists/Academics | 170 |
| Student and Learning Services Area | 75 |
| Stores associated with all of the above | 81 |
| Support Facilities Total: | 740 |
| Balance Space (circulation/toilets/plant rooms): 32% of total | 1,089 |
| Gross Floor Area | 1,829 |

- 4.32 The above table allows for enhanced facilities that would encourage best practice. A large lecture theatre would reduce the School's dependency on hiring Glasgow Film Theatre for regular large meetings, lectures and presentations. Furthermore, a purpose built venue with good audiovisual facilities, would allow the School to provide highly effective lectures relating to the historical and critical studies course that is provided to most disciplines.
- 4.33 The development of additional parts of the Mackintosh building primarily for visitor use and a new visitor centre facing the Mackintosh Building are key components of the Heritage Lottery Fund Bid (HLF). Therefore if these facilities are to be provided, and funded by the HLF, the area floor area calculations must make an allowance for them.

Future Space Requirements **4.0**

- 4.44 The school wishes to encourage more artists and academics from around the world to visit and work at the school on a temporary basis. Within overseas institutions this is invariably facilitated by the provision of residential accommodation on campus. The support facilities allowance includes for two small (85 square metre) apartments for this purpose.
- 4.45 Finally the school wishes to provide students with additional and more accessible advice and Guidance within a purpose-designed space.

If these additional allowances are added to previous allowances then the final summary of space is as the table below.

| | |
|---|---------------|
| Final Floor Area Requirement | m2 |
| Academic Facilities (dedicated studios/teaching spaces/workshops) | 15,266 |
| Support Facilities (includes Library) | 8,443 |
| Balance Space (circulation/toilets/plant rooms): 32% of total | 11,262 |
| Gross Floor Area | 34,972 |

- 4.46 A description of all proposed space within this final total is provided within Annex A. This description is the first serious attempt to estimate future space requirements in detail. Inevitably some revision would occur throughout the development of any future project. However the School is satisfied that slightly less than 35,000 square metres is a good overall allowance. Therefore growth of 27% in 'on site' activity could be accommodated within a range of buildings with a gross floor area no more than 9.5% greater than the existing estate.
- 4.48 This allowance assumes a highly centralised environment with a bias toward the provision of much of the accommodation in flexible new buildings. Inevitably this figure will vary depending on the characteristics of each option under consideration. Potential variation will be considered later in this report where the options under consideration are presented.

Key Objectives for the Estate 5.0

5.1 At this point it is helpful to confirm the key objectives for the future development of the estate. These are then established as criteria against which the relative performance of differing options can be measured. So far, from our researches, we know that:

- The School's ambition is to enhance its national and international reputation further and, in particular, develop its postgraduate provision.
- Growth in activity would provide greater financial stability.
- The School has developed in outline a curriculum model, a financial model, and now a space model that matches its ambitions; this last model suggests a gross floor area of just less than 35,000 square metres, the precise amount being partially dependant on the characteristics of any proposal.
- Most of the existing estate is not suitable and of poor quality and does not support the above objectives in any way; in fact its retention may seriously threaten existing income levels.
- In 2003 the backlog maintenance work had an estimated cost of £18.46 million and this has been caused by historical under funding.
- The existing buildings and their locations militate against the intention to maintain a close-knit creative community; this frustrates some students.
- The Mackintosh building is, however, a major strategic asset.
- Students appreciate the current setting close to the City Centre.

5.2 Finally one further key objective that has not been directly identified so far, is the provision of an environmentally responsible and sustainable solution. The Mackintosh School of Architecture has a research department focussing upon this major issue for the future. Consequently the School of Architecture will wish to regard any developments within the estate as significant opportunities for research. Sustainability is not merely about limiting harmful emissions, vital though this is; it is about creating healthy environments that support users' physical and psychological well-being. It is also about creating buildings that, because they are sufficiently robust externally, and flexible internally, are likely to have an extended life thus avoiding the environmental damage caused by a regular 30-year cycle of replacement. At this strategic stage, it is necessary to ensure that any proposals ensure that individual sites are not overdeveloped: overdevelopment tends to leave human beings in rooms without good daylight or ventilation. The other important objective will be to ensure that budgets for construction are reasonable and allow for the construction of robust solutions.

5.3 Taking all the above into account the following general criteria are proposed:

The School is highly ambitious to achieve its targets for growth in activity and hence income. The School will remain, by comparison to most institutions, a small specialist institution; this, in many ways, is a real strength. However increased income will protect the long-term position of the school. Therefore the first criterion against which any option should be assessed is its **ability to accommodate growth**.

The second selected criterion against which performance is measured is the extent to which an option creates opportunities for **maximising integration**. Integration assists in the creation of a close-knit community, leaves no one isolated from central facilities, supports academic synergies and opportunities for interdisciplinary work and creates maximum opportunity for the efficient delivery of supporting services.

The third criterion will be: the extent to which each option is likely to create **excellent internal environments**. Such environments should not only look and feel good but also be easy to use and be accessible. In the future, as students' expectations continue to rise, high quality environments are likely to be essential, and the preservation of the School's good reputation relies on creating them.

The fourth criteria will be: **flexibility in use**. Environments should be flexible in their daily use and capable of adaptation to a variety of alternative departmental uses over the long term. This will guarantee that the environments have a prolonged life.

Finally, although **limiting disruption** (during construction or refurbishment projects) has not been an concern within this document so far, it is nevertheless an important fifth criteria. Wherever possible, options should be capable of execution without seriously affecting the smooth running of the school.

- 5.4 Most of the above general criteria have been selected as a response to both the School's strategic ambition, and to conditions within the existing estate. However, they might still seem slightly non-specific. It was decided, following the consultations with staff and students, and following a workshop with the School's board of governors, to consider each option's performance by also asking following specific questions.

Does the option allow most students to continue to work in a **central location**?

To what extent does the option make good use of **'the Mackintosh brand'**?

Is the option likely to allow the development of an **excellent urban design**? More specifically will the design sit well in its surroundings and encourage users to make positive use of the spaces and streets between the buildings? Again, given the market within which the School competes, an excellent solution is highly desirable.

- 5.5 Therefore in summary, the key criteria against which options may be assessed are:

General Criteria

- Accommodating Growth
- Maximising Integration
- Providing an Excellent Internal Environment
- Flexibility in Use
- Limiting Disruption

Environmental Criteria

- City Centre Location
- Use of the Mackintosh Brand
- Excellent Urban Design

This does not preclude strategic solutions that do not particularly address the 'Environmental Criteria'. However, in order to be favoured, such solutions would have to provide a very good response to the 'General Criteria'.

- 6.1 Before selecting options for development it is clearly important to understand the key objectives for the estate (see previous section). However, it is also important to recognise the physical, economic, and political context that will both allow and restrict opportunities for change.
- 6.2 Town Planning matters are always important when contemplating significant change in any estate. As Town Planning is both a complex technical and political process no guarantees of success for any particular solution are available. It is, however, possible to conduct a planning review based upon published documentation, and to consult with senior officers within the local authority.
- 6.3 GVA Grimley has conducted a planning review. The key conclusions are as follows.
- The statutory development plans covering the Garnethill area; the Glasgow & Clyde Joint Structure Plan (2000) and the Glasgow City Local Plan (2002) are both relatively up to date. The Local Plan was only recently adopted (August 2003) and should be regarded as of primary importance. This plan recognises that tertiary education plays a key role in the economic, social and physical development of the city centre.
 - The city plan states that the council will encourage tertiary education institutions to prepare campus development plans. Garnethill is identified as a largely residential area, but such areas may contain education facilities and public buildings.
 - All the buildings within the School's Garnethill estate lie within the Central Conservation Area. Within conservation areas development control is generally tighter and development should seek to enhance the character of that area.
 - Two of the School's buildings are listed (as already advised within section 3). The Mackintosh Building (Category A) and part of the Barnes Building (Category B). In addition a significant number of other properties on Garnethill are listed. This includes several properties very close or adjacent to the School's buildings; also yet another Category A listing (St Aloysius Church on the corner if Hill Street and Rose Street). Development likely to affect the character and setting of an existing listed building undergoes additional scrutiny in the form of a 'listed building application'.
 - There is an automatic presumption in favour of the retention and preservation of listed buildings. In addition listing can affect interior details of buildings as well as the exterior. Applications to demolish existing listed buildings will be rejected unless it can be demonstrated that every effort has been made to keep them (detailed arguments regarding economic obsolescence and/or structural decay must to be prepared).
- 6.4 These points have a number of implications.

Firstly obtaining consents for new development on Garnethill within a conservation area and adjacent to a number of listed buildings can never be a straightforward process. Nevertheless the council should be open to the consideration of applications for good quality modern solutions. This may, however, have abnormal cost implications.

Secondly, it will be important to demonstrate a fully considered approach to the future of all existing sites as part of any application. Given the status and character of the local area and the number of listings to date, it is not beyond the bounds of possibility that at some point in the future further listings could be considered, particularly in relation to some of the School's older properties. In the event that a fresh listing might make the School's preferred development plan less workable, it will be important to demonstrate that each site for development is part of an overall proposal that will lead to significant improvement. In this respect, one officer has informally noted that any set of proposals that included the removal of the Bourdon Building might have the greatest chance of success.

- 6.5 Therefore it is reasonable to assume that the School has an **opportunity to redevelop existing sites**. However, should a large quantity of new floor area be required, then a constraint to this approach will be the need to build in several sequential phases.

- 6.6 Setting aside the planning process, one of the more significant hurdles to developing existing sites will be the potential requirement to provide temporary space, so that existing buildings can be demolished. Grimley have indicated that prevailing market conditions mean that there a number of **opportunities to provide temporary space** within rented accommodation in central Glasgow or in nearby districts. However occupation of this kind of space can be quite expensive; rents, rates and service charges can often exceed £300 per square metre per annum, in addition landlords invariably require a minimum stay of 3-5 years. Therefore a 5-year agreement to lease 1,000 square metres might cost at least £1.5 million pounds.

- 6.7 There may be other opportunities to acquire temporary space at lower cost, most particularly within the education sector. One potential site might be the existing Stow College Building. Stow College is currently debating a potential move to new accommodation and in many ways this building, given its overall scale (in excess of 10,000 square metres), large classrooms spaces, and nearby location, is ideal. However Stow College's project is, at present, little more advanced than the School's. Therefore this building, which we are advised is reasonably well utilised, may not be available for use in conjunction with the initial phases of the School's development.

- 6.8 Also adjacent Garnethill, the city council's museums department has indicated that the McLellan Art Galleries might be available in around two years time. The future use of these galleries is uncertain. Ultimately, all opportunities to find temporary space requires regular review, and it will be necessary to look closely at a range of options once a defined project is under development.

- 6.9 Alternatively the school may wish to consider **refurbishment of existing buildings** and there is little, from a Town Planning perspective to stop this happening. However the inherent unsuitability of many of the existing structures means that this is unlikely to be the preferred option. It should be noted that the scale of refurbishment, together with necessary alterations to improve internal layouts and overall suitability, might, just like redevelopment solutions, require use of temporary accommodation.

- 6.10 The school has the **opportunity to sell some or all of its existing sites**. Given the character of Garnethill, and the Town Planning context, the sale of the sites for alternative residential use would appear to be the most likely outcome. We have not, as yet, had formal confirmation that there are no restrictive legal covenants that might affect the sale of any site. However we understand that the existence of restrictions is thought to be unlikely. Given the condition of much of the existing accommodation, selling sites reduces the maintenance burden and realises a cash receipt that will part fund capital projects.

6.11 Grimley have not completed formal valuations but have suggested a range of potential values on the basis of residential reuse. The mid point of this range for each site (excluding the Mackintosh) is indicated below. These prices are essentially cautious assessments and should be considered as set at 2004/5 levels.

| | £m |
|-----------------------------|-----------|
| Barnes Building | 0.94 |
| Haldane Building | 0.64 |
| Richmond Building | 0.50 |
| JD Kelly Building | 0.44 |
| Bourdon Building | 2.44 |
| Assembly / Newbery / Foulis | 1.90 |

6.12 Finally it is important to consider **opportunities for the acquisition of sites**. In the first instance, given the School's affinity with the Garnethill area, and the difficulties associated with redevelopment of existing sites, it is sensible to consider opportunities close to the Mackintosh Building and across Garnethill generally.

6.13 Opportunities at Garnethill appear to be scarce. There are no empty plots on Garnethill with the exception of two small plots that we understand are earmarked for development. Neither of these plots, given their size and location, is particularly suitable.

6.14 With Grimley's assistance, we have considered each of the sites adjacent the Schools main cluster of buildings.

6.15 Those buildings fronting onto Sauchiehall Street to the south of the Mackintosh Building are mostly recently refurbished and appear to be put to profitable use. Grimley advises that there is no realistic chance of occupation given the long leases offered to a number of commercial tenants.

6.16 To the west of the Bourdon Building, on the south side of Renfrew Street, is the Dental Hospital. The hospital, having undergone its own analysis, has recently scrapped potential plans to move and is understood to be assuming an indefinite stay. To the west of the Bourdon Building and north of Renfrew Street is a private hotel. This small early Victorian building is not appropriate for School use and has a Category B listing. Its recent extension to the rear and smart appearance indicates successful economic use and therefore the chances of both acquiring the site and achieving a demolition are negligible.

6.17 At the Eastern end of the Mackintosh Building on Dalhousie Street are a number of small dwellings assumed to be in multiple ownership. The scale of these plots makes them of little interest to the School. The plots back onto the McLellan Galleries, which is a listed building.

6.18 To the North of the School is part of St Aloysius College: the Catholic Primary and Secondary School. These linked buildings are also listed (Category B) although examination of the listing suggests that only one building may be of real value. St Aloysius College also owns the open yard on the corner of Renfrew Street and Dalhousie Street and diagonally opposite the Mackintosh Building. The college has indicated a willingness to talk with the school about potential acquisition of part of its land for development, most particularly part of the yard. These talks are at an extremely early stage. The Colleges' willingness to talk is motivated by interest in the Haldane Building's site for a sports development.

- 6.19 Finally the School must consider **opportunities for development on alternative locations away from Garnethill**. It will be appreciated that, on the basis of research and thinking carried out to date, a move away from Garnethill does not appear to be the preferred option. Nevertheless it would confer some advantages and requires proper investigation. The School has considered a wide variety of potential locations suggested by Grimley. The most sensible locations would appear to be the Glasgow Harbour Area. Alternatively the School could consider the Finneiston or Pacific Quay areas. Grimley have advised that land remains available within these areas and a sensible budget allowance for Glasgow Harbour is understood to be half a million pounds per acre. We have estimated that the school would need around seven and a half acres resulting in a budget cost of £3.75 million.

Ideal Physical Characteristics of the Future Estate **7.0**

7.1 Following the completion of our research phase, and having considered both the objectives and the real opportunities, it is helpful to identify the ideal characteristics of the future estate. This avoids a 'scatter gun' approach to options development as options that do not, in some way, make some progress towards the ideal should be discarded or at least treated with caution.

7.2 Some fundamental Characteristics are highlighted below.

- A high quality flexible environment where spaces can be regularly adapted to a variety of uses.
- Allowing opportunities for developing collaborative/flexible-working arrangements between curriculum areas.
- Allowing flexible timetabling opportunities and improved utilisation of shared spaces.
- Allowing increased access of learning resources and student support together with social facilities.
- A better match between group sizes and room sizes.

The present fragmented, inflexible and dispersed, estate will not provide any of the above characteristics.

7.3 In this case the ideal future maybe characterised by:

- No outlying sites.
- New closely related buildings providing modern purpose made flexible accommodation located very close to the Mackintosh Building.
- Provision of around 35,000 square metres of space within the final development.

7.4 Therefore one of the options should explore the viability of this specific scenario (this option will be known as Option 3B). Other options should explore alternative solutions that make at least a partial response to the above list (these options would be known as Options 2A, 2B and 2C). A full list of options is provided on the next page.

- 8.1 The range of options to be considered is as follows.
- 8.2 Option 1: Do the Minimum/Refurbishment (Base Case Option).**
Includes for repair and some improvement all existing accommodation.
- 8.3 Beyond this base case all options outlined below include some form of new development. The potential purchase and development of part of the St Aloysius yard has a potential role to play in all of them. The extent to which this purchase is merely desirable, or vital, varies with each option. This will be demonstrated on the next pages.
- 8.4 With the exception of the last option (4), all remaining options look at opportunities at Garnethill. However, given the lack of attractive opportunities for site acquisition at Garnethill, we have only considered the possible use of St Aloysius college land. All other sites have been discounted.
- 8.5 The three options set out below include removal and sale of the outlying sites (Barnes and Haldane). All sites having some link with Renfrew Street are retained and have varying quantities of new or refurbished properties. In essence two clusters of accommodation are retained.
- 8.6 Option 2A: New and Refurbished Property (32% New)**
The Richmond and JD Kelly sites are redeveloped. Buildings close to the Mackintosh are retained.
- 8.7 Option 2B: New and Refurbished Property (39% New)**
The Richmond, JD Kelly and Assembly buildings' sites are redeveloped. The remaining buildings are retained.
- 8.8 Option 2C: New and Refurbished Property (60% New)**
All sites are redeveloped with the exception of the Mackintosh and the Bourdon Building which are both retained.
- 8.9 The options outlined above explore the potential benefits or drawbacks of retaining parts of the existing estate alongside the Mackintosh Building. **All the options outlined below retain the Mackintosh Building only.**
- 8.10 Option 3A: Rebuild (Single Cluster Model – 78% new)**
This option models a complete rebuild on sites around the Mackintosh. As such it is that option that attempts to model ideal physical characteristics of the estate identified in the previous section.
- 8.11 Option 3B: Rebuild (Two Cluster Model – 78% new)**
This option models a complete rebuild on sites around the Mackintosh and on the Richmond/JD Kelly site. This would allow for a lower, and less dense development than option 3A.
- 8.12 Option 3C: Rebuild (Expanded Single Cluster Model – 78% new)**
This option models a complete rebuild on sites around the Mackintosh and, should it become available, a greater quantity of St Aloysius land than the yard. This has the benefit of keeping all accommodation within one cluster whilst, like option 3B, allowing for a lower less dense development than option 3A.

- 8.13 Finally the School has considered retaining the Mackintosh Building but moving the remainder of the School to an alternative location. This is described below.
- 8.14 Option 4: Rebuild (New Site – 79% new)**
The school has not settled upon a particular site but considers that the best alternatives would appear to be the Glasgow Harbour Area. Alternatively the School could consider the Finneiston or Pacific Quay areas. This option has not been drawn, but has been modelled financially.
- 8.15 The following pages describe each option with sketches and budget cost and area summaries. Brief indications of key advantages and disadvantages of each option are also included. A fuller assessment of each option is included later (in section 9).
- 8.16 The following assumptions have been made when compiling the area and financial data for each option.
- 8.17 The target gross floor area for the most space efficient solutions (assumed to be Options 3A and 3C) has been assumed to be 34,977 square metres. Where both the Richmond/JD Kelly site and the sites surrounding the Mackintosh have been utilised then the target is assumed to rise by 300 square metres to 35,277 Square metres. This is due to the potential need to replicate some workshop facilities. Furthermore, the target area for option 4 is assumed to increase by a further 200 square metres to 35,477 Square metres. This is due to the need to replicate some supporting facilities such as the library and the refectory.
- 8.18 When assessing the capacity of each option studies have been conducted to establish the maximum redevelopment potential of each site. Given that the studies tend to focus upon the maximum likely to be achieved, any option not providing sufficient floor space has been costed on the basis of what is likely to be achieved. Therefore some options are assumed not to provide all the space required for growth.
- 8.19 Turner and Townsend have assisted us in setting an assumed average cost for new build at £1,480 per square metre. This cost may be assumed to be at mid 2005 tender prices. Inevitably costs are still highly provisional at this stage.
- 8.20 Some may regard the costs as towards the higher end of expectations. This is deliberate given the School's ambition to achieve reasonable level of specification, the desire for sustainable solution, and Town Planning constraints in relation to the Garnethill area. In addition, the demands of art studios mean that the average floor-to-floor height across all new buildings is assumed to be at least 4 metres. The rate has been lowered for option 4 (away from Garnethill), to £1,400 per square metre.
- 8.21 Under each option the costs of backlog maintenance has been included for all retained buildings. Costs that are understood to be met by the HLF project are excluded from the calculations. Therefore, although backlog maintenance costs have been updated to 2005 prices, costs for the Mackintosh Building are lowered. The HLF bid works assume the removal of relatively modern mezzanine levels at the Mackintosh Buildings basement level. Therefore the gross floor area that the Mackintosh Building is assumed to supply by has been lowered 270 square metres.
- 8.22 Option costs are as comprehensive as possible. As well new build costs and backlog maintenance they include an allowance for improvements to each retained buildings' efficiency and suitability. All options contain a suitable allowance for temporary accommodation and a fixed allowance of £2.3 million for re-equipping and furnishing heavily refurbished areas. Where appropriate, demolition costs have also been identified together with an allowance for the purchase of the St Aloysius yard.

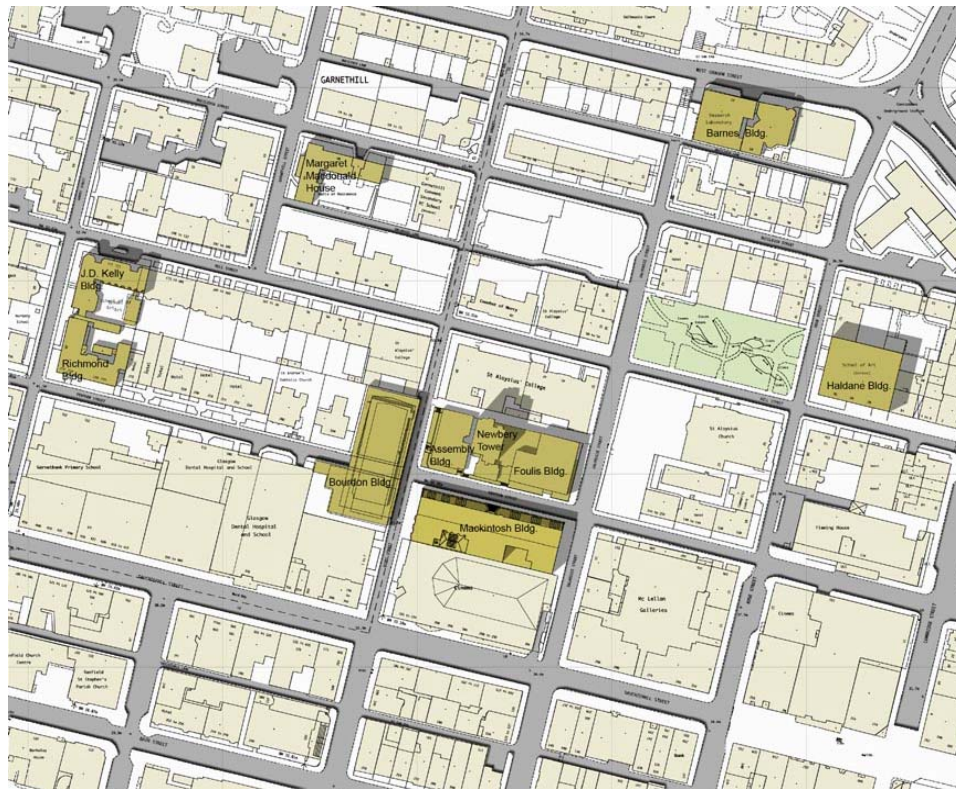
Option 1: Do the Minimum/Refurbishment (Base Case Option).

Includes for repair and some improvement of all existing accommodation.

| Gross Floor Area Summary | m2 |
|--|---------------|
| Existing Buildings Retained | |
| Mackintosh Building | 7,400 |
| Bourdon Building | 6,602 |
| Assembly/Newbery/Foulis | 8,501 |
| Barnes | 2,841 |
| Haldane | 2,828 |
| JD Kelly/Richmond | 3,501 |
| | |
| New Buildings Gross Floor Area | 0 |
| New Building funded by HLF bid | 200 |
| | |
| Total Gross Floor Area Provided | 31,873 |

Standard Cost Summary

| | |
|---|--------------|
| <i>Assumed new build rate £/m2</i> | - |
| <i>Quantity of New Build (m2)</i> | - |
| | |
| New Build Construction Cost (£m) exc. HLF bid | - |
| Professional/Local Authority Fees at 12% | - |
| VAT on above (£m) | - |
| Total new Build Cost (£m) | - |
| | |
| Additional Costs (Expressed as Gross Costs) | |
| Demolition Costs | - |
| Equipment and Removal Costs | 2.30 |
| Backlog Maintenance (2005 prices) | 18.33 |
| Additional alterations/improvements | 3.17 |
| Site Acquisition Costs | - |
| Temporary Accommodation | 1.15 |
| | |
| Total Estimated Costs (£m) | 24.95 |



This option refurbishes existing buildings, addressing backlog maintenance and including an amount of alteration work. This is not regarded as satisfactory option, but is benchmark against which the performance of alternative options may be measured.

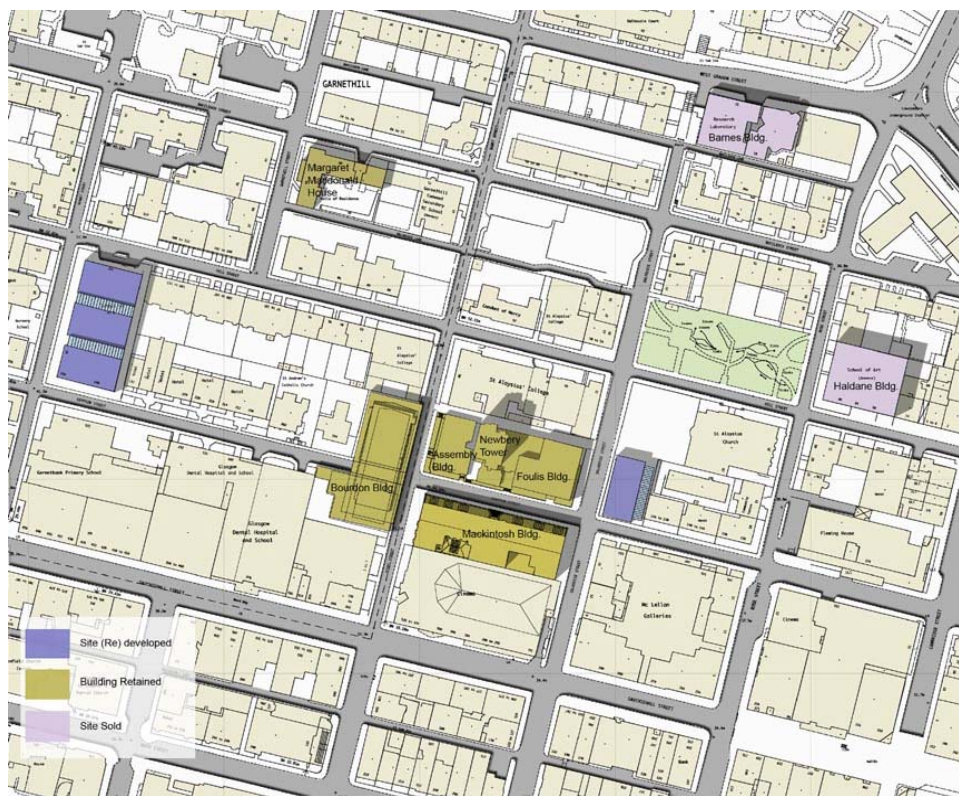
Option 2A: New and Refurbished Property (32% New Build)

The Richmond and JD Kelly sites are redeveloped. Buildings close to the Mackintosh are retained.

| | |
|--|---------------|
| Gross Floor Area Summary | m2 |
| Existing Buildings Retained | |
| Mackintosh Building | 7,400 |
| Bourdon Building | 6,602 |
| Assembly/Newbery/Foulis | 8,501 |
| New Buildings Gross Floor Area | 10,790 |
| New Building funded by HLF bid | 200 |
| Total Gross Floor Area Provided | 33,493 |

Standard Cost Summary

| | |
|---|--------------|
| <i>Assumed new build rate £/m2</i> | 1,480 |
| <i>Quantity of New Build (m2)</i> | 10,790 |
| New Build Construction Cost (£m) exc. HLF bid | 15.97 |
| Professional/Local Authority Fees at 12% | 1.92 |
| VAT on above (£m) | 3.13 |
| Total new Build Cost (£m) | 21.02 |
| Additional Costs (Expressed as Gross Costs) | |
| Demolition Costs | 0.35 |
| Equipment and Removal Costs | 2.30 |
| Backlog Maintenance (2005 prices) | 11.20 |
| Additional alterations/improvements | 9.00 |
| Site Acquisition Costs | 0.50 |
| Temporary Accommodation | 2.30 |
| Total Estimated Costs (£m) | 46.67 |



This option disposes of the Barnes and Haldane Buildings, redevelops the Richmond / JD Kelly site with new buildings and refurbishes retained buildings. Setting aside questions over quality this option appears to be of insufficient scale to accommodate planned growth. The school's sites remain split.

Note that this, and following options, include for the potential use of the St Aloysius yard.

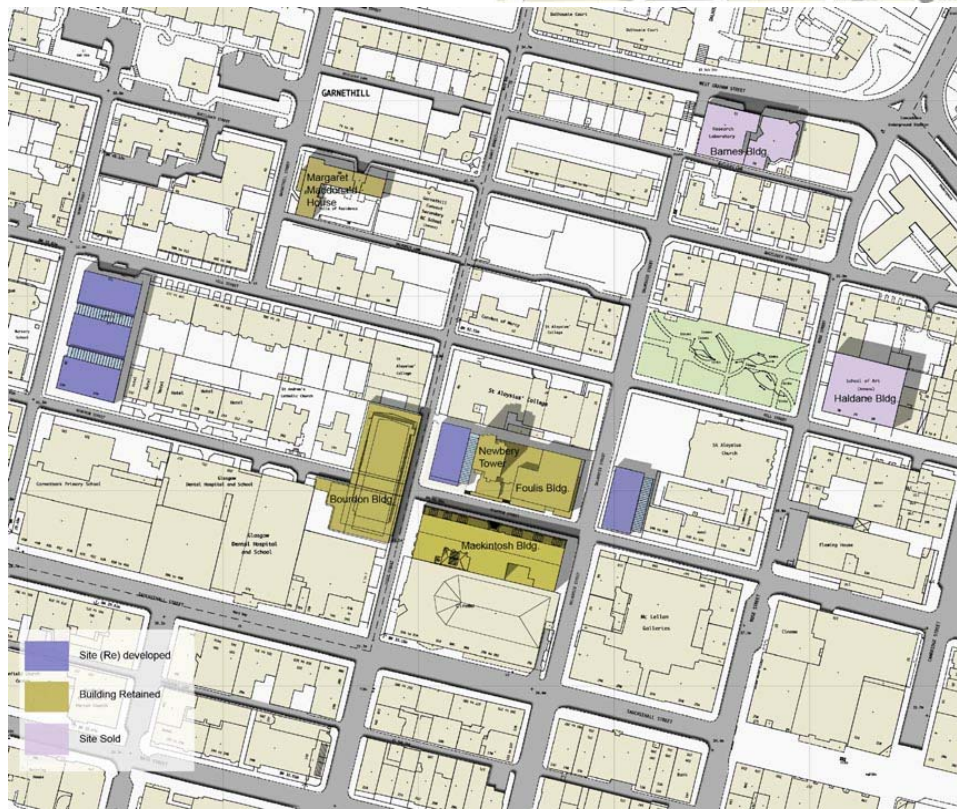
Option 2B: New and Refurbished Property (39% New Build)

The Richmond, JD Kelly and Assembly buildings' sites are redeveloped. The remaining buildings are retained.

| | |
|--|---------------|
| Gross Floor Area Summary | m2 |
| Existing Buildings Retained | |
| Mackintosh Building | 7,400 |
| Bourdon Building | 6,602 |
| Assembly/Newbery/Foulis | 7,226 |
| New Buildings Gross Floor Area | 13,590 |
| New Building funded by HLF bid | 200 |
| Total Gross Floor Area Provided | 35,018 |

Standard Cost Summary

| | |
|---|--------------|
| <i>Assumed new build rate £/m2</i> | 1,480 |
| <i>Quantity of New Build (m2)</i> | 13,590 |
| New Build Construction Cost (£m) exc. HLF bid | 20.11 |
| Professional/Local Authority Fees at 12% | 2.41 |
| VAT on above (£m) | 3.94 |
| Total new Build Cost (£m) | 26.47 |
| Additional Costs (Expressed as Gross Costs) | |
| Demolition Costs | 0.48 |
| Equipment and Removal Costs | 2.30 |
| Backlog Maintenance (2005 prices) | 10.14 |
| Additional alterations/improvements | 8.49 |
| Site Acquisition Costs | 0.50 |
| Temporary Accommodation | 2.30 |
| Total Estimated Costs (£m) | 50.68 |



This option is very similar to option 2A. However, given the issues relating to accommodating growth with option 2A, this option assumes replacement of the Assembly Building. As the Assembly Building has only 2 full floor levels plus a basement, it is possible to at least double the accommodation on this site with a new building, thereby boosting the scale of the accommodation.

However issues regarding quality and overall capacity remain. In addition the School remains split across two locations.

Option 2C: New and Refurbished Property (60% New Build)

All sites are redeveloped with the exception of the Mackintosh and the Bourdon Building, which are both retained.

| | |
|--|---------------|
| Gross Floor Area Summary | m2 |
| Existing Buildings Retained | |
| Mackintosh Building | 7,400 |
| Bourdon Building | 6,602 |
| New Buildings Gross Floor Area | 21,075 |
| New Building funded by HLF bid | 200 |
| Total Gross Floor Area Provided | 35,277 |

Standard Cost Summary

| | |
|---|--------------|
| <i>Assumed new build rate £/m2</i> | 1,480 |
| <i>Quantity of New Build (m2)</i> | 21,075 |
| New Build Construction Cost (£m) exc. HLF bid | 31.19 |
| Professional/Local Authority Fees at 12% | 3.74 |
| VAT on above (£m) | 6.11 |
| Total new Build Cost (£m) | 41.05 |
| Additional Costs (Expressed as Gross Costs) | |
| Demolition Costs | 1.20 |
| Equipment and Removal Costs | 2.30 |
| Backlog Maintenance (2005 prices) | 5.63 |
| Additional alterations/improvements | 5.60 |
| Site Acquisition Costs | 0.50 |
| Temporary Accommodation | 2.30 |
| Total Estimated Costs (£m) | 58.58 |



This option replaces all buildings other than the Mackintosh Building and the Bourdon Building. This is the first option that appears to provide sufficient floor space to accommodate growth.

However the School remains split across two locations.

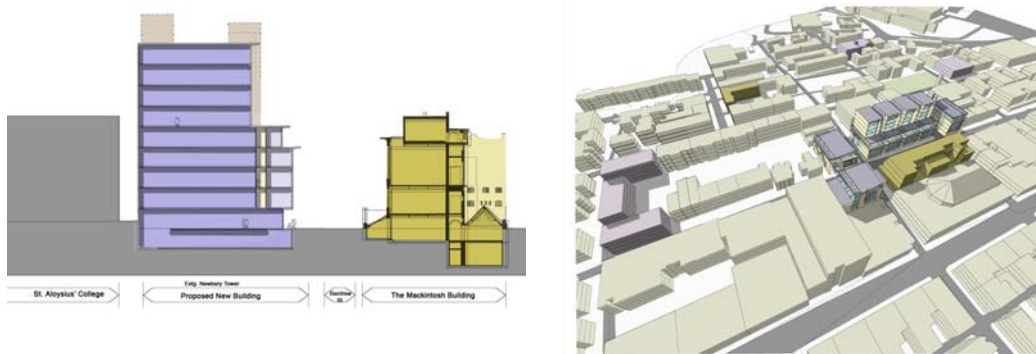
Option 3A: Rebuild (Single Cluster Model – 78% New Build)

This option models a complete rebuild on sites around the Mackintosh. As such it is that option that attempts to model ideal physical characteristics of the estate identified in the previous section.

| | |
|--|---------------|
| Gross Floor Area Summary | m2 |
| Existing Buildings Retained | |
| Mackintosh Building | 7,400 |
| New Buildings Gross Floor Area | 27,377 |
| New Building funded by HLF bid | 200 |
| Total Gross Floor Area Provided | 34,977 |

Standard Cost Summary

| | |
|---|--------------|
| <i>Assumed new build rate £/m2</i> | 1,480 |
| <i>Quantity of New Build (m2)</i> | 27,377 |
| New Build Construction Cost (£m) exc. HLF bid | 40.52 |
| Professional/Local Authority Fees at 12% | 4.86 |
| VAT on above (£m) | 7.94 |
| Total new Build Cost (£m) | 53.32 |
| Additional Costs (Expressed as Gross Costs) | |
| Demolition Costs | 1.51 |
| Equipment and Removal Costs | 2.30 |
| Backlog Maintenance (2005 prices) | 2.13 |
| Additional alterations/improvements | 0.56 |
| Site Acquisition Costs | 0.50 |
| Temporary Accommodation | 3.45 |
| Total Estimated Costs (£m) | 63.77 |



All previous options so far have supplied at least two groups, or clusters, of accommodation. This option explores the possibility of placing all accommodation around the Mackintosh Building. As such it provides the most integrated solution giving staff and students easy access to all facilities.

However, much of the development would need to be 9 storeys tall to create sufficient space and this may overwhelm the Mackintosh Building (see the section through Renfrew Street).

Such a tall building may create problems and be inconvenient to use. Staff and students become isolated from the Street and the Mackintosh Building.

The Range of Options – Option 3B 8.0

Option 3B: Rebuild (Two Cluster Model – 78% New Build)

This option models a complete rebuild on sites around the Mackintosh and on the Richmond/JD Kelly site. This would allow for a lower, and less dense development than option 3A.

| | |
|--------------------------|----|
| Gross Floor Area Summary | m2 |
|--------------------------|----|

| | |
|-----------------------------|--|
| Existing Buildings Retained | |
|-----------------------------|--|

| | |
|---------------------|-------|
| Mackintosh Building | 7,400 |
|---------------------|-------|

| | |
|--------------------------------|--------|
| New Buildings Gross Floor Area | 27,677 |
|--------------------------------|--------|

| | |
|--------------------------------|-----|
| New Building funded by HLF bid | 200 |
|--------------------------------|-----|

| | |
|--|---------------|
| Total Gross Floor Area Provided | 35,277 |
|--|---------------|

Standard Cost Summary

| | |
|-----------------------------|-------|
| Assumed new build rate £/m2 | 1,480 |
|-----------------------------|-------|

| | |
|----------------------------|--------|
| Quantity of New Build (m2) | 27,677 |
|----------------------------|--------|

| | |
|---|-------|
| New Build Construction Cost (£m) exc. HLF bid | 40.96 |
|---|-------|

| | |
|--|------|
| Professional/Local Authority Fees at 12% | 4.92 |
|--|------|

| | |
|-------------------|------|
| VAT on above (£m) | 8.03 |
|-------------------|------|

| | |
|----------------------------------|--------------|
| Total new Build Cost (£m) | 53.91 |
|----------------------------------|--------------|

| | |
|---|--|
| Additional Costs (Expressed as Gross Costs) | |
|---|--|

| | |
|------------------|------|
| Demolition Costs | 1.86 |
|------------------|------|

| | |
|-----------------------------|------|
| Equipment and Removal Costs | 2.30 |
|-----------------------------|------|

| | |
|-----------------------------------|------|
| Backlog Maintenance (2005 prices) | 2.13 |
|-----------------------------------|------|

| | |
|-------------------------------------|------|
| Additional alterations/improvements | 0.56 |
|-------------------------------------|------|

| | |
|------------------------|------|
| Site Acquisition Costs | 0.50 |
|------------------------|------|

| | |
|-------------------------|------|
| Temporary Accommodation | 3.45 |
|-------------------------|------|

| | |
|-----------------------------------|--------------|
| Total Estimated Costs (£m) | 64.71 |
|-----------------------------------|--------------|

The Range of Options – Option 3B 8.0



In response to the difficulties raised by Option 3A, this option provides new accommodation on both the sites around the Mackintosh Building and the Richmond / JD Kelly site. This allows a building on a more sympathetic scale around the Mackintosh Building yet provides an adequate quantity of space. However the School would be split into two groups of clusters of accommodation.

Option 3C: Rebuild (Expanded Single Cluster Model – 78% New Build)

This option models a complete rebuild on sites around the Mackintosh and, should it become available, a greater quantity of St Aloysius land than the yard. This has the benefit of keeping all accommodation within one cluster whilst, like option 3B, allowing for a lower less dense development than option 3A.

| | |
|--|---------------|
| Gross Floor Area Summary | m2 |
| Existing Buildings Retained | |
| Mackintosh Building | 7,400 |
| New Buildings Gross Floor Area | 27,377 |
| New Building funded by HLF bid | 200 |
| Total Gross Floor Area Provided | 34,977 |

Standard Cost Summary

| | |
|---|--------------|
| <i>Assumed new build rate £/m2</i> | 1,480 |
| <i>Quantity of New Build (m2)</i> | 27,377 |
| New Build Construction Cost (£m) exc. HLF bid | 40.52 |
| Professional/Local Authority Fees at 12% | 4.86 |
| VAT on above (£m) | 7.94 |
| Total new Build Cost (£m) | 53.32 |
| Additional Costs (Expressed as Gross Costs) | |
| Demolition Costs | 1.51 |
| Equipment and Removal Costs | 2.30 |
| Backlog Maintenance (2005 prices) | 2.13 |
| Additional alterations/improvements | 0.56 |
| Site Acquisition Costs | 10.00 |
| Temporary Accommodation | 3.45 |
| Total Estimated Costs (£m) | 73.27 |



Option 3C attempts to address the problems of the height of option 3A, and the split site nature of option 3B, by assuming purchase of land immediately to the north of the School, currently belonging to St Aloysius College. This allows an integrated 'single cluster' solution of a more appropriate height than option 3A.

This option, in many ways, could provide an excellent solution but has many difficulties associated with it. (see Section 9). Before the School could demolish buildings on the St Aloysius College land, the College would have to construct a new building on an yard already in its ownership and then relocate to it.

Option 4: Rebuild (New Site: 79% New Build)

The school has not settled upon a particular site but considers that the best alternatives would appear to be the Glasgow Harbour Area. Alternatively the School could consider the Finneiston or Pacific Quay areas. This option has not been drawn, but has been modelled financially.

| | |
|--|---------------|
| Gross Floor Area Summary | m2 |
| Existing Buildings Retained | |
| Mackintosh Building | 7,400 |
| New Buildings Gross Floor Area | 27,877 |
| New Building funded by HLF bid | 200 |
| Total Gross Floor Area Provided | 35,477 |

Standard Cost Summary

| | |
|---|--------------|
| <i>Assumed new build rate £/m2</i> | 1,400 |
| <i>Quantity of New Build (m2)</i> | 27,877 |
| New Build Construction Cost (£m) exc. HLF bid | 39.03 |
| Professional/Local Authority Fees at 12% | 4.68 |
| VAT on above (£m) | 7.65 |
| Total new Build Cost (£m) | 51.36 |
| Additional Costs (Expressed as Gross Costs) | |
| Demolition Costs | - |
| Equipment and Removal Costs | 2.30 |
| Backlog Maintenance (2005 prices) | 2.13 |
| Additional alterations/improvements | 0.56 |
| Site Acquisition Costs | 3.75 |
| Temporary Accommodation | - |
| Total Estimated Costs (£m) | 60.10 |

The Range of Options – Option 4 **8.0**



The School has assumed that it would retain the Mackintosh Building as its sale would be both inappropriate and, given the building's listing and nature, unlikely to yield a significant sales receipt. Therefore option 4 would relocate the majority of the School away from the Mackintosh Building and most probably away from Glasgow City Centre.

Grimley have conducted a site search and have found no appropriate and suitably scaled sites close to the City Centre.

- 9.1 Once the options had been assembled the School mounted a weeklong exhibition available to all staff and students. The school considers that this was a vital part of its research since understanding staff and students' attitudes are vital to long-term success.
- 9.2 Copies of the display boards are included within Annex B to this report, together with a questionnaire that was also provided. The exhibition avoided presenting costs and asked visitors to consider the qualitative issues and the relative merits of the options. Due to its sensitive nature option 3C, utilising a significant part of St Aloysius College's land, could not be included within the display.
- 9.3 Reference to Annex B demonstrates that the exhibition contained a number of complex issues that would take the first time observer some time to appreciate. Of the estimated 200-300 people who attended the exhibition just 87 people stayed to complete a form containing 22 questions.
- 9.4 Not everyone answered every question. Nevertheless the sample size is sufficiently large to draw some conclusions. A selection of key questions and answers are provided below.
- 9.5 The questionnaire first asked people to recall why they chose to come to the School. People had a range of responses that they could select in response to pre-prepared statements. The table below indicates the proportion of respondents choosing to "agree" or "agree strongly" with a series of statements. As can be seen, the general positive response to these statements serves to bolster the conclusions of earlier research. Environmental factors do play a part and although the lowest score relates to the Mackintosh Building it is still noteworthy that the decision making of 63% was affected by a building that regularly serves only around 20% of the student population. Academic managers will no doubt be pleased to note, however, that nothing out scores good reputation, course content, and the studio based system.

| <i>I chose to come to GSA because of...</i> | <i>Agree/agree strongly rating</i> |
|--|---|
| the good reputation of the school | 94% |
| recommendations by others | 79% |
| particular course content | 84% |
| the studio based system | 80% |
| its focus as a specialist institution | 72% |
| Glasgow's reputation as a cultural city | 76% |
| the city centre location | 71% |
| the Mackintosh Building | 63% |

9.6 The next set of questions relates to potential change. The first two questions relate to the quality of the environment and facilities and, again, the responses strongly support earlier research. Note that the support for dedicated studio space is stronger than the support for the studio based system within the first set of questions. It would appear that experience of this system increases support for it. Responses to the final three questions appear to lend support to the view that Garnethill is a favoured location, and those less central alternative locations are not favoured.

I think that...

| | |
|--|-----|
| we must improve the general quality of GSA buildings | 95% |
| we need a better range of quality facilities | 89% |
| we must retain dedicated studio space | 93% |
| GSA should remain at Garnethill | 81% |
| we should consolidate around the Mackintosh | 79% |
| we should relocate to another less central location | 9% |

9.7 The final question asked people to identify their first and second choice options. A noteworthy point is that although few respondents stated that they favoured a less central location, option 4 received as many “first choice” votes as options 1, 2A and 2B combined. In addition option 4 received 15% of the “second choice” votes. Although this is hardly a groundswell of support it would appear that, given a choice between projects based around retaining a proportion of the existing buildings, and creating a new environment in a less than ideal location, some would go for the new environment. Perhaps the simple underlying message in all of this is that the large majority of respondents believe that things cannot be allowed to continue as they are (certainly that was the tone of many of the handwritten comments).

| Preferred Option | <i>first choice</i> | <i>second choice</i> |
|-------------------------|----------------------------|-----------------------------|
| Option 1 | 1% | 0% |
| Option 2a | 3% | 4% |
| Option 2b | 3% | 6% |
| Option 2c | 19% | 24% |
| Option 3a | 12% | 29% |
| Option 3b | 56% | 22% |
| Option 4 | 7% | 15% |

9.8 The favoured first choice was, however, option 3b. To an extent, the exhibition, in an attempt to explain the value of option 3b, could be accused of ‘leading the witness’. Nevertheless with over half the “first choice” votes 3b appears to be a clear winner. Although not a popular first choice, the “second choice” favourite was option 3a. This appears to imply that although people see drawbacks in terms of its scale, option 3A is appreciated for its proposal to bring the School together. Therefore although option 3c was not available for scrutiny, it may well have performed very well had it been displayed.

9.9 Finally it should be acknowledged that option 2c had the second highest number of votes in both polls. As far as many staff and students are concerned, the decision to consider the retention of the Bourdon Building ahead of all other buildings appears to be a reasonable one.

- 9.10 Encouraging as the responses are, the sample size was relatively small by comparison to the total numbers eligible to respond. In order to complete our qualitative assessment of the options, performance has been gauged against the criteria established at 5.5. The table on the next page awards points according to an assessment of performance. Points are awarded in accordance with a scoring system that allows up to 10 points for most items. However, given that the difficulties, that may be experienced, in finding sufficient space for growth within the tightly controlled environment of Garnethill, up to 30 points are awarded for items one and two. This ensures that options more likely to deliver on this fundamental requirement receive greater attention.
- 9.11 Essentially, the School wishes to become more integrated, on sites close to the Mackintosh, releasing inappropriate buildings and yet increasing capacity. Within the Garnethill setting this is a difficult challenge, but by no means unachievable.
- 9.12 Items one and two allow an assessment of potential capacity both with and without the support of St Aloysius College with its land. The initial sketches provided with the options tend to reflect the apparent total sensible capacity of development plots. When projects undergo design development, and when further consultation with the planning authority occurs, it is possible that not every development plot will achieve its assumed potential capacity. Conversely it might be possible to greatly exceed the assumed capacity on one or more plot with a taller structure. The important message here is that the School will remain exposed to a degree risk for some time. Only when detailed planning consents are obtained will true capacity have been established. For these reasons, a high degree of caution is required and as a result the scoring system places great emphasis on the ability to accommodate the fundamental requirement of the institution: to grow.
- 9.13 For items one (with support from St Aloysius) and two (without support), where initial sketches indicate a sensible capacity in excess of the requirement, 15 marks are awarded. Where the sketches indicate at least 95% of the requirement, then 10 marks are awarded. Where sketches indicate 90-95% capacity, then 5 marks are awarded. Less than 90% capacity achieves no marks.
- 9.14 So options 1, 2A and 2B have fundamental capacity problems. In addition they continue to rely on buildings that have been declared as inherently unsuitable. As a result they tend to score poorly when assessed against the remaining items. Option 2B, redeveloping the Richmond/JD Kelly and Assembly buildings sites, has the best overall score (40) of these three options. However its continued reliance upon the Foulis building and Newbery tower, as well as the Bourdon Building, means that the option scores modestly in terms of integration, internal environment, flexibility, use of the 'Mackintosh Brand' and urban design. Furthermore without the use of the St Aloysius yard, the option will almost certainly fail to provide sufficient capacity.
- 9.15 Option 2C has a much higher overall score (70) retaining only the Bourdon Building alongside the Mackintosh Building. It is likely to provide better internal environments together with much greater flexibility than the preceding options. However, there is a real question as to the option's capacity if the St Aloysius yard is not available for development. In addition keeping the Bourdon Building, albeit heavily refurbished, has implications in terms of the urban design and the overall town planning process.

Assessment of Options 9.0

| Options Qualitative Assessment | | weighting | 1 | 2a | 2b | 2c | 3a | 3b | 3c | 4 |
|---------------------------------|-------------------------------------|------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1 | Accommodating Growth (With Support) | 15 | 0 | 5 | 10 | 15 | 15 | 15 | 15 | 15 |
| 2 | Accommodating Growth (No Support) | 15 | 0 | 0 | 5 | 10 | 5 | 15 | 0 | 15 |
| 3 | Maximum Integration | 10 | 0 | 5 | 5 | 5 | 10 | 5 | 10 | 0 |
| 4 | Excellent Internal Environment | 10 | 0 | 5 | 5 | 10 | 5 | 10 | 10 | 10 |
| 5 | Flexibility in Use | 10 | 0 | 0 | 0 | 10 | 10 | 10 | 10 | 5 |
| 6 | Limiting Disruption | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 10 |
| 7 | City Centre Location | 10 | 0 | 10 | 10 | 10 | 10 | 10 | 10 | 0 |
| 8 | Use of 'Mackintosh Brand' | 10 | 0 | 0 | 0 | 5 | 5 | 5 | 10 | 0 |
| 9 | Excellent Urban Design | 10 | 0 | 0 | 5 | 5 | 0 | 10 | 10 | 5 |
| Qualitative Scores (out of 100) | | 100 | 0 | 25 | 40 | 70 | 60 | 80 | 80 | 60 |

- 9.16 At the opposite end of the scale, option 4, setting aside the difficulties that procuring a good site may bring, is assumed to provide all the floor area that the School might require. Therefore it scores maximum points, with or without assistance from St Aloysius, in terms of accommodating growth. However, whilst the options should provide an excellent internal environment, there are serious concerns in terms of splitting the school and the lack of integration and long-term flexibility this might bring. Further serious concerns relate to the probable out of town setting, possible poor public transport links and separation from the Mackintosh Building. Uniquely, however, the option causes little disruption to students during its execution and may be completed as swiftly as site purchase and the availability of funds for construction will allow.
- 9.17 The remaining options are 3A, 3B and 3C. All of these options allow for the complete reconstruction of the school whilst retaining the Mackintosh.
- 9.18 Option 3A, as a “single cluster solution” is that option which attempts to model the ideal characteristics described at 5.5. As such, it scores well in terms of integration, flexibility, and location; it certainly deserves careful consideration. However, in this instance, only by allowing the initial sketches to depict a solution that exceeds what we would consider to be sensible, has sufficient capacity for growth been accommodated. Even then, the relevant capacity can only be achieved by using the St Aloysius yard. The drawbacks of this proposal have already been described under the description of the option. As a result the option scores poorly in terms of internal environment, in terms of issues surrounding the Mackintosh Building, and in terms of urban design. It is possible that any attempt to develop option 3A, as fully designed scheme, would lead to very real difficulties in obtaining planning consent.
- 9.19 Option 3C is another “single cluster solution” and attempts to combat the drawbacks of the preceding option by assuming the purchase of a greater proportion of St Aloysius College’s land. This allows for a lower, less dense, solution and as such matches the “ideal Characteristics” described at 5.5 within a more sensible proposal. Of course option 3C will not work without the comprehensive assistance of St Aloysius College and so scores no points against item 2. This aside the option appears to represent a good response to all of the School’s requirements and despite item 2 scores 80 points (joint first position).

- 9.20 The difficulty here is that this option carries particularly high levels of risk. It relies on St Aloysius College's complete support and also requires the College to construct its own project before part of the site can be released. Furthermore, due to the sensitivity of this solution, the initial sketches have not been shared with the planning authority (informal comments have been received on other options). The proposal requires part demolition of a building that is technically listed (category B). It would appear that the motivation for the listing applies to that part of the building that would be retained. Therefore, the proposed demolition cannot be completely ruled out, although it would be contentious.
- 9.21 Option 3B attempts to resolve these difficulties by adopting a "two cluster model": this is a complete rebuild alongside the Mackintosh Building but also reusing the Richmond/JD Kelly site for about one quarter of the development. This option is the joint highest scorer on the assessment table. It is that option at Garnethill most likely to provide sufficient capacity for growth with or without the St Aloysius yard. As a "two cluster model" it will not be as integrated as other solutions nor will it draw all site users around the Mackintosh. Crucially this proposal raises a difficult question: what goes where? How does the School adapt its integrated space model to fit two locations? As yet the answers are not clear but would be partly dictated by the phasing and decanting strategy.
- 9.22 Yet the proposal to provide new developments, each including good access on to Renfrew Street, this should improve communications. The two locations are in fact, no more than 120 metres apart and the sense of psychological separation might be significantly reduced by the demolition of the existing Bourdon Building.
- 9.23 Furthermore the two-cluster model has some advantages; the construction of a new building on the site of the Richmond and JD Kelly Buildings, would cause only limited disruption to the ongoing work of the school. The new building may provide more than double the floor space than that achieved by the sites current occupants, and would greatly increase floor capacity in the early phases of the rebuild, assisting the decanting strategy.
- 9.24 Option 3B would provide the excellent internal environment that the School needs in order to ensure the continued implementation of its mission and business plan. It would provide greater flexibility than present, retain the city centre presence and place most users very close to the Mackintosh Building. From the Town Planning perspective, the removal of the Bourdon Building and good quality development improving two locations on Garnethill, might be appreciated more than the proposals presented under option 3C.
- 9.25 Therefore at the end of the qualitative assessment, the following can be confirmed:
- Generally, the options assuming higher investment perform better than options 1, 2A or 2B.
 - Yet the School has serious concerns about: the quality of environment likely to be created by option 3A, and the probable locations of option 4.
 - Options 3B and 3C are the better performing options.
 - Option 3C may produce a better environment more supportive of the integration objective, however execution of this option is at risk from a number of sources.
 - Option 3B offers broad support to the objectives of the School and maybe much easier to execute.

- 9.26 Having concluded the assessment of quality, an analysis of quantitative data should be conducted. The table overleaf contains key data in relation to all the options. On line one, the capacity of each option is provided (in terms of gross floor area). As previously discussed Options 1, 2a, and by a small margin option 2b, are below target capacity (as a two cluster model the target for option 2b is 35,277 square metres). For option 2b this assessment assumes construction on the St Aloysius yard. All remaining options are assumed to provide sufficient capacity for growth (although some may need to rely on St Aloysius yard to achieve this).
- 9.27 Line two indicates the proportion of new build accommodation provided within the completed proposal. This rises from zero (option 1) to 79% (option 4).
- 9.28 Line Three indicates the assumed capital cost, at 2005 prices for each option. At present costs are clearly only approximate. However, on the basis of past and most recent experience they may be assumed to be sensible budgets at this stage. It is possible that the greatest risk at this stage is construction inflation, which, for projects of this nature has exceeded the level of general inflation for several years. Whilst many within the industry consider this unsustainable, cost consultants continue to predict at least a 6% rise for the next year. Given that all options, with the possible exception of option 4, may need to be designed and constructed over 6-10 year period, risk from construction inflation is unknown but may be a real concern.
- 9.29 It should be noted that, over the short term, costs in relation to option 3C are at greatest risk of change. St Aloysius College has agreed to consider the merits of this option. They have stated that, the price for the additional land to be paid to them by the School would need to at least match the cost of the College's replacement buildings, to be constructed on existing playgrounds already in their ownership. At the time of writing St Aloysius College has given no clear indication of what that value might be. A figure of £10 million has been added to the estimated costs of this option. This will be subject to review.
- 9.30 Line Four indicates the typical level of receipt from disposal sites likely to be available under each option. Again this varies from zero under option 1, to £6.8 million under option 4 where all sites at Garnethill, with the exception of the Mackintosh, are sold. After option 4, the greatest disposals should be achieved under options 3a and 3c, which dispose of the Richmond/JD Kelly sites.
- 9.31 Line five indicates the capital cost minus the likely disposal receipt leaving a "balance to pay" at 2005 prices. This reveals some substantial sums ranging from £24.9 million to £70.8 million. The School understands that it will have to make contributions to any sum, most probably through a mixture of building up reserves and public appeals. However the School would wish to apply to the Funding Council for substantial support once an option has been accepted for development.
- 9.32 Of course a number of the options require three or even four building phases. This might allow the Funding Council to accept an option in principle and offer firm commitments to funding early phases using known council infrastructure budgets. A full commitment to funding the entire range of projects may need to be delayed until the Funding Council has established budgets for the relevant years in which later projects fall.

| Options Assessment | 1 | 2a | 2b | 2c | 3a | 3b | 3c | 4 |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 31,873 | 33,493 | 35,018 | 35,277 | 34,977 | 35,277 | 34,977 | 35,477 |
| 1 Gross Floor Area m2 | | | | | | | | |
| 2 New Build % | 0% | 32% | 39% | 60% | 78% | 78% | 78% | 79% |
| | | | | | | | | |
| 3 Capital Cost (2005) £m | 24.9 | 46.7 | 50.7 | 58.6 | 63.8 | 64.7 | 73.3 | 60.1 |
| 4 Disposal Receipt £m | 0.0 | 1.6 | 1.6 | 1.6 | 2.5 | 1.6 | 2.5 | 6.8 |
| 5 Balance to Pay £m | 24.9 | 45.1 | 49.1 | 57.0 | 61.3 | 63.1 | 70.8 | 53.3 |
| | | | | | | | | |
| Investment Assumptions | | | | | | | | |
| 6 yr 10 Add. Income £m | -0.5 | 1.4 | 1.5 | 2.1 | 2.6 | 2.6 | 2.6 | 1.3 |
| 7 yr 10 Add. Costs £m | 0.1 | 1.0 | 1.0 | 1.2 | 1.5 | 1.5 | 1.5 | 0.8 |
| 8 yr 20 Net Present Value | -22.0 | -23.1 | -22.5 | -21.7 | -19.3 | -20.5 | -24.3 | -20.7 |

- 9.33 Investment assumptions are used to calculate the financial return to the public sector for each option. This has been expressed in terms of a net present value (npv) with a test discount rate of 3.5%. Under the higher cost options no account has been taken of the wider economic benefits of educating more students and this should be born in mind when considering options with similar net present values (npvs). The appraisal is taken over 20 years and includes the remaining, or 'residual', value of the investment at year 20. The lifespan of investments are assumed to range from 40 years (option 1) to 100 years for the higher cost options. Each option's npv calculation has been completed on a spreadsheet and these are included in Annex... For transparencies sake, all inputs are assumed to represent change from the present position (or last published accounts).
- 9.34 The shifts in income level indicated on line six are, therefore, estimated shifts from the present position. If the school were to realise its plans for an increase of 250 postgraduate students and an increase in 150 overseas undergraduate students, then income should rise by an estimated £2.6 million. Consequently costs will also rise in order support the increased activity; the additional costs have been estimated at £1.5 million. These last two figures are used under options 3A, 3B, and 3C.
- 9.35 Under other options, lower rates of income have been assumed. Given that, in this case, income (with related costs) is the second most significant factor in establishing the npv (after capital cost), the lower rates of income are depressing certain npvs quite significantly. The varying income assessments for the options are, in part, subjective. Not all options, given likely planning restrictions at Garnethill, have sufficient floor space, let alone quality, to support the School's planned growth. Other options, for example option 4, would have sufficient floor space but are assumed, given their lack of attraction to students, to be at risk of failing to meet planned income targets. In this case the lower rate of income is a reflection of the risk associated with a particular option.
- 9.36 Under all options the increased costs allow for premises costs above the present low levels. These are included to model responsible estates management including levels of maintenance designed to ensure prolonged life of the new estate. However, some savings within specific areas, for example energy costs, are anticipated.

- 9.37 In all cases, the npvs are negative. Therefore the best return will be provided by the least negative npv. Given the number of estimates within each calculation these cannot be considered to be precise calculations. Therefore the range of npv from -£19.3 million to -£24.3 million is in fact very narrow, and just a small reconsideration of potential income levels will affect outcomes.
- 9.38 In the npv analysis option 1 appears to perform adequately. Nevertheless selection of option 1 would be a high risk strategy leaving the School exposed to competition for students and the high quality staff needed to teach them; threatening its abilities, performance and reputation over the longer term. Option 1, is in effect, an option to accept the preservation of unsuitable accommodation, albeit in improved form, and, potentially, downsize in complete contradiction to the School's strategic plan. It could be that the drop in income of around £0.5 million over the longer-term is an underestimation (this is less than 4% of present income).
- 9.39 The least negative npv is for option 3A; followed by 3B; then option 4; and then option 2A. From the perspective of financial investment, given the npvs narrow margins, any of these four options could be considered an appropriate. Note that option 3C seems less successful as it has higher capital costs and no financial benefit over 3B (other than slightly increased disposal receipts).

The Preferred Solution 10.0

The table below indicates Key Qualitative and Quantitative Assessments.

| Order | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th |
|---|------------|------------|------------|------------|------------|------------|------------|------------|
| Staff / Student Survey (1 st choice) * | 3B | 2C | 3A | 4 | 2B | 2A | 1 | - |
| Qualitative Assessment | 3B / 3C | | 2C | 3A / 4 | | 2B | 2A | 1 |
| Financial Return (npv) | 3A | 3B | 4 | 2C | 1 | 2B | 2A | 3C |

* 3C not offered for comment.

THIS DRAFT REPORT FINISHES HERE.

A RECOMMENDATION WILL BE MADE FOLLOWING CONSULTATION WITH GOVERNORS.