

# ESTATE STRATEGY 2009 – 2018

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# 2.0 EXECUTIVE SUMMARY

#### 1.1 Introduction

This Estate Strategy, the first at the RVC, emerges from the College's Corporate Plan 2009 – 2014. In addition to the specific assessment of the Colleges estate needs, it adopts broad principles to be followed when implementing the Estate Strategy.

## 1.2 Our Vision and Mission

#### Vision

To provide visionary leadership in Veterinary Science and education through innovative scholarship and pioneering clinical activity

#### Mission

We will enhance our *global* reputation as an outstanding independent veterinary college by:

- Delivering excellent education through the best methods and progressive practice;
- Undertaking research of International quality in focused areas of global significance for animal and human health, to inform clinical practice and government policy;
- Improving animal health and welfare by the provision of outstanding clinical activity across animal species.;
- Engaging with the business community and exploiting our novel ideas and unique resource;
- Promoting public health and supporting society through the study of the relationships between people, animals and food.

#### Values

Staff and Students of the Royal Veterinary College will

- Act with integrity, honesty, and informed courage of conviction
- Accept responsibility for their actions
- Show fairness, professional impartiality and diligence
- Value diversity across disciplines, cultures and expertise
- Be explicit and straightforward, compassionate and respectful in their dealings with fellow staff and students, clients and visitors
- Be committed to, and exercise responsibility for, their own personal, academic and professional development
- Accept and take due account of feedback, given in whatever form
- Demonstrate a caring attitude and high ethical standards towards animals
- Respect the College's physical environment and property
- Aim for excellence in educational endeavours

## 1.3 Supporting the Vision (Estates)

#### Aim

*To ensure the delivery of a high quality estate that contributes to the College's vision for excellence* 

#### Objectives

- To develop a robust estate strategy that identifies the estate priorities reflecting the College's corporate aspirations;
- To develop and gain support and approval for campus master plans;
- To ensure effective use of capital funding resources;
- To continue to provide first class facilities management service responding to user requirements;
- To provide as far as possible a proactive maintenance service ensuring that the estate is fit for purpose.

## 1.4 Estate Strategy Goals

The following Estate Strategic Goals (ESG) have been identified through this strategy:

#### 2009

*ESG 2:* The Royal Veterinary College is committed to developing a space charging policy.

*ESG 4:* The Royal Veterinary College and the RVC Student Union Society is committed to developing a Green Travel Plan.

*ESG10:* The Royal Veterinary College is committed to find funding to support a targeted capital development programme for both the Hawkshead and Camden campuses.

*ESG 11:* The Royal Veterinary College is committed to commencing the masterplan process for both the Hawkshead and Camden Campuses.

#### 2011

*ESG 2:* The Royal Veterinary College is committed implementing a space charging policy.

*ESG 4:* The Royal Veterinary College and the RVC Student Union Society is committed to implementing a Green Travel Plan.

#### 2012

*ESG 5:* The Royal Veterinary College is committed to introducing car park charging and investing in new green travel initiatives.

*ESG 7:* The Royal Veterinary College is committed to implement a structured recycling plan across the College.

#### 2013

*ESG 1:* The Royal Veterinary College will aim to allocate a budget for estate maintenance costs at 1.15% of Insurance Replacement Value (IRV).

#### 2014

*ESG 8:* The Royal Veterinary College is committed to reducing water consumption by 25%.

*ESG 9:* The Royal Veterinary College is committed to designing buildings to achieve BREEAM *excellent* rating.

#### 2017

*ESG 8:* The Royal Veterinary College is committed to investigate alternative sustainable sources of water.

#### 2018

*ESG 1:* The Royal Veterinary College will aim to allocate a budget for estate maintenance costs at 1.5% of Insurance Replacement Value (IRV).

*ESG 3:* The Royal Veterinary College is committed to achieving a space utilisation of 25%.

*ESG 6:* The Royal Veterinary College is committed to developing a renewable energy source in order to reduce its greenhouse gas emissions by 20% as a minimum.

# 3.0 INTRODUCTION AND OVERVIEW

## 2.1 Introduction

The two campuses at Camden and Hawkshead are the College's biggest single financial asset and it underpins and supports all areas of activity within the College. This Estate Strategy provides a long term 10 year plan for efficiently and effectively developing and managing the estate in support of the Colleges Corporate Plan (2009 – 2014). It is envisaged that this strategy will be subject to a minor review of achievements in 2011/2012 with a major review at the end of the Corporate Plan period (2014).

The Estate Strategy aims to cover:

- The link between the Estate Strategy and the Corporate Plan, the Financial Strategy and the Human Resource Strategy;
- Analysis of the College's existing estate, its condition and performance;
- Optimising land use;
- The current and future needs of the College:
- The challenges of the estate;
- Opportunities for development and more cost effective use of the buildings;
- The options available to the College, and
- Evaluations resulting in preferred options for the short term.

The Estate Strategy is intended to go beyond the life of the existing Corporate Plan reflecting the necessary planning and development timescales for major capital development works.

It has been prepared though the Estate Strategy Steering Group, chaired by the Principal with the full involvement of the Senior Management Group (SMG), leading academics, researchers and clinicians, lay members of the College Council and the student body. In addition, there has been consultation with the local community and external stakeholders including local and regional authorities.

The Estate Strategy considers the external and internal changes and drivers affecting the College and identifies areas where the estate can facilitate and support change. An important element of the strategy is the ability to respond quickly, flexibly and effectively to the changing demands of the College's activities.

The purpose of this document is to take a strategic overview of the estate needs in order to support the College's Corporate Plan. The management and maintenance of assets and the forward programme of development will all take their lead from this Strategy to ensure an integrated approach to estate development and the most effective use of limited financial resources. It incorporates more detailed financial appraisal of the options as appendices. The Estate Strategy will be monitored on a regular basis as part of the College's business planning cycle with an annual review of implementation. This will in part ensure that any changes to the Strategy and plans are in accordance with the College's long and short term objectives.

## 2.2 Overview

The foundation of The Veterinary College, London, in 1791 marked the establishment of the veterinary profession in this country. The development of the profession can be traced to that single act. In the racing seasons of 1769 and 1770 the racecourses of England were dominated by one horse. That horse was Eclipse, so named because of the solar event on the day of his birth, 1 April 1764. Eclipse was never beaten on the racecourse and, in the absence of any competition he was retired from racing in 1770 and stood at stud until he died in 1789 at the age of 25.

Eclipse was a sufficiently important horse to make it necessary to know not only the cause of his death, but also the secret of his successful life A veterinary opinion was needed, but there was no veterinary school and no qualified veterinarian in the country except the Frenchman Charles Benoit Vial de St Bel. St Bel attended the corpse of the famous racehorse and subsequently published his post-mortem findings.

However, St Bel's chief purpose for being in England was not to attend dead racehorses but to gain support for his plan to establish a veterinary school. He was assisted in this quest by the Odiham Agricultural Society, which consisted of a number of enlightened gentry. These men recognised the need for a better understanding of animal husbandry and disease and had, for some years, been considering how to introduce the veterinary art into this country.

By May 1790 they had realised that this could be best achieved by establishing a veterinary school, and had set up a London committee to further this objective. Vial de St Bel had met one of their number, Granville Penn, the grandson of William Penn who founded Pennsylvania, and Penn had helped him refine the outline of his plans for such a school. The Veterinary College, London, was born in the parish of St Pancras in 1791, on the present-day site of The Royal Veterinary College's. On 4 January 1792, the first four students attended the College to begin a three-year course intended to cover all aspects of the veterinary art. As funds became available the College developed, with facilities that provided a clear benefit to subscribers, such as stabling and an infirmary, taking precedence over a lecture theatre and dissecting rooms.

The College styled itself Royal from 1826 due to the patronage of George IV, but it was not until 1875 that this was substantiated when the College received its first Charter of Incorporation from Queen Victoria.

Significantly, during the first 100 years of its existence the College progressed from a horse infirmary with a handful of students to a science based institution, producing veterinarians and scientists with reputations acknowledged all over the world.

John McFadyean, probably the first modern veterinary scientist in the country, joined The Royal Veterinary College as professor of pathology and bacteriology in 1891. During his time as Principal, from 1894-1927, he established a research institute in animal pathology, in which the commercial production of tuberculin and mallein not only contributed to the eventual eradication of tuberculosis and glanders as major diseases of man and animals, but their sale helped the finances of the College.

McFadyean was succeeded as Principal by Frederick Hobday. Frustrated by the still inadequate College facilities, Hobday launched a mammoth fundraising campaign. The Giant Nosebag Appeal raised a magnificent £135,000 which, together with a government grant of £150,000, enabled the College to buy the freehold of the site at Camden and to initiate a construction programme. The old buildings between the recently erected pathology institute and the Beaumont Animals Hospital which had been built in 1932 as a result of a single legacy were demolished in 1935 and replaced with modern new facilities. The College's association with pioneering female veterinarians such as Aleen Cust, who took a revision course at the College before qualifying as the first woman to hold the MRCVS diploma in 1922, and Olga Uvarov the first woman to become President of the Royal College of Veterinary Surgeons (RCVS) who qualified from The Royal Veterinary College in 1934, reflects our aim to provide equality of education for all.

In 1949 The Royal Veterinary College became a full part of the University of London. Unlike any other University with a veterinary school, London has a federal structure, and so the College retains much of its independence under its own Royal Charter. This includes its own Council and a full time Principal who is appointed by the Council and not the University. Students study for a veterinary medicine degree which is recognised by RCVS. In 1955 the College acquired a country estate in Hertfordshire to provide a new field station, and in 1958 the departments of medicine and surgery moved from their wartime site at Streatley in Berkshire into the new buildings at Hawkshead in Potters Bar, Hertfordshire. In 1956 Her Majesty Queen Elizabeth II granted a new charter to The Royal Veterinary College and formally opened the College's field station in 1959.

Her Majesty Queen Elizabeth The Queen Mother opened the College's Northumberland Hall of Residence in 1965, and accepted election to Fellowship of the College in 1981. In 1982 The Queen Mother became Patron of the College's Animal Care Trust, and in 1986 opened the first phase of the new Queen Mother Hospital for Animals which was built largely as a result of the Trust's work. 1986 also saw the opening of the Sefton Equine Referral Hospital Surgery Wing by HRH The Princess Royal as Chancellor of the University of London. During 1991 the College celebrated its Bicentenary with a range of important events, including a renewed building programme which has involved the opening of a second students' hall of residence, Odiham Hall; the construction of the second phase of The Queen Mother Hospital; and, most recently, the establishment of purpose-built facilities for pathology at Hawkshead in the Mill Reef Pathology Building, which was opened by HRH The Princess Royal in May 1995.

The College has just celebrated 50 years of teaching at the Hawkshead Campus.

#### 2.3 Historical Milestones

- 1791 The foundation of The Veterinary College, London, which later becomes known as The Royal Veterinary College.
- 1792 January 1st. The first four pupils begin their three-year course under the direction of a Frenchman, Professor Charles Vial de St. Bel.
- 1796 John Shipp is the first qualified veterinary surgeon to join the British Army.
- 1844 The Royal College of Veterinary Surgeons is awarded its Royal Charter.
- 1865 RVC Professor James Beart Simonds is appointed as the first Chief Inspector and Veterinary Advisor to the Privy council, with particular regard to cattle plague.
- 1875 The RVC is granted the first Royal Charter. To this day the RVC remains the only veterinary college in the UK to have its own Royal Charter.
- 1879 Establishment of the Cheap Practice Clinic, later known as the Poor People's Out-Patients Clinic. Some veterinary surgeons are concerned that the College was threatening their livelihoods. The College argues that poor people can afford neither the RVC's annual subscription, nor the normal veterinary fee, therefore their animals will go untreated if the Clinic is to be closed.
- 1891 RVC centenary; Foundation of the Students' Union. The first issue of the journal, The Student, is published on November 29th; the second issue, December 11th, is renamed The Students' Record.
- 1895 The RVC acquires its first X-ray machine.
- 1907 Major renovation of the College horse boxes, which have fund-raisers' commemorative shields hung at their doorways.
- 1924 Construction of the Research Institute in Animal Pathology, which is headed by Professor John McFadyean.
- 1927 RVC buildings are officially declared dangerous structures. Nationwide fundraising for the total rebuilding of the College begins under the new Principal, Professor Frederick Hobday.
- 1932 The Beaumont Animals Hospital opens.
- 1937 New RVC buildings are officially opened by King George VI, accompanied by Queen Elizabeth The Queen Mother, on November 9th.

- 1940 The RVC evacuated to Streatley, Berkshire. However, the Beaumont Animals' Hospital remains open at Camden Town throughout the war years.
- 1949 The RVC becomes a school of the University of London
- 1958 The Hawkshead field station is officially opened by Her Majesty Queen Elizabeth II.
- 1982 The Animal Care Trust is launched with the Queen Mother as patron.
- 1986 The Queen Mother Hospital for Animals is opened at Hawkshead by the Queen Mother.

Princess Anne, the Princess Royal and Chancellor of the University of London, opens the surgical wing of the Sefton Equine Referral Hospital.

- 1991 RVC bicentenary. The skeleton of the famous racehorse Eclipse, dissected in 1789 by St. Bel is once more the property of the RVC and has been on display in the Museum at Hawkshead since 2003.
- 2001 The London BioScience Innovation Centre is opened.
- 2003 The Learning Resource Centre (Eclipse Building) is officially opened at Hawkshead by Her Majesty the Queen in October 2003
- 2003 The Large Animal Clinical Centre is officially opened by HRH, Prince Philip The Duke of Edinburgh in October 2003.
- 2005 The Duchess of Cornwall visits the Hawkshead Campus as new Patron of the Royal Veterinary College Animal care Trust.
- 2007 The Centre of Excellence in Teaching and Learning (LIVE Building) at Hawkshead is officially opened by HRH The Princess Royal in February 2007

The Royal Veterinary College was the first to:

- submit a woman for membership of the Royal College of Veterinary Surgeons;
- become an independent veterinary school within a federal university;
- be granted approval by the American Veterinary Medical Association;
- introduce a degree in Veterinary Nursing;
- offer a Masters course in Veterinary Physiotherapy;
- establish a Centre for Lifelong and Independent Veterinary Education as a centre of excellence in teaching and learning.

Today, the RVC is a highly respected, science-based institution, producing veterinarians, para-veterinarians and scientists with international reputations. Its first-class teaching and research staff, experienced in a wide range of disciplines and skills, help talented students to make full use of state-of-the-art clinical facilities and laboratories, maintaining the RVC's long and proud tradition of seminal contributions to both the animal and human sciences.

# 4.0 STRATEGIC OBJECTIVES

## 3.1 General

The College's Corporate Plan (2009 – 2014) identifies some key corporate objectives. Whilst some might be considered aspirational, they influence nevertheless the development of the Estate.

These are identified in detail in that document and are represented here in summary only to provide a framework for this strategy.

The headline facts are that:

- The BVetMed numbers will stabilise at an annual intake of 230 students equivalent to a total of 1,150 students;
- Gateway students will be capped at 30 in total;
- There will be an increase over the next five years the BSc numbers to an annual intake of 100, equivalent to a 3-year total of 300 students, however should the opportunity arise this will increase to an intake of 200 (total 600) and the estate must enable this increase to be accommodated;
- There will be an increase over the next three years to the Veterinary Nursing family of course at an annual intake of 100 across all courses, equivalent to total of 350 students;
- During the life of this strategy the total College undergraduate student population will potentially increase by over 600 students to 2100, an increase of over 25%;
- There will be a net increase of over 414 students at Camden by 2014.

## 3.2 Excellence in the student experience

Improving the quality of the student experience educationally and socially by:

- Developing a balanced portfolio a range of facilities for improved support of the student experience and effective delivery of the Learning, Teaching and Assessment Strategy;
- Optimising the quality of the student experience educationally and socially by providing variety and depth of learning environments and social amenities;
- Recruiting and effectively supporting the most talented applicants to all courses, from all backgrounds.

## 3.3 Excellence in Education

Delivering excellent education through the best methods and progressive practice by:

- Developing and effectively delivering a portfolio of programmes appropriate to the whole veterinary team;
- Offering teaching in basic business skills and an introductory level of entrepreneurship training to all students and members of academic staff;
- Across all programmes, consolidating outcomes based approaches to curricular design, with emphasis on relevance, reliability and variety of assessment;
- Across all programmes, developing teaching and learning approaches in line with Learning Teaching and Assessment Strategy and in support of outcomesbased assessment relevant to modern clinical, scientific and business professionals;
- Disseminating best educational practice through publication of educational research results.

## 3.4 Excellence in Research

Undertaking research of international quality ion focused areas of global significance for animal and human health and promoting public health and supporting society through the study of the relationships between people, animals and food by:

- Providing high performing researchers with time and incentives to lead or participate in multidisciplinary teams in applications for programmes of research such that each research group holds at least one research grant;
- Prioritising multi-disciplinary research programmes that address questions from molecule to the patient or population level and so draw widely on academic expertise across departments of the College;
- Building capacity (through new appointments) in bioinformatics and quantitative biology to develop core support for research within our focused areas of expertise facilitating a 'Systems biology' approach where appropriate;
- Consolidating existing external partnerships and initiating new partnerships complementary to our research strengths, ensuring RVC is an equal in such partnerships;

- Building capacity in animal welfare expertise to ensure this discipline is integrated, where appropriate, into the College's research programmes adding value to the research outputs, promoting these through outreach activity;
- Integrating non-infectious disease (musculoskeletal, cardiovascular and developmental biology) research by developing a multidisciplinary research group focusing on the influence of diet, lifestyle, health and ageing on health and encouraging comparative biomedical approaches;
- Developing research in biodiversity and conservation of species within the existing framework of reproduction research;
- Developing innovative educational research programmes which explore the knowledge economy-based paradigm shift in learning, and set standards and develop model curricula for veterinary and para-veterinary education of the future.

## 3.5 Excellence in Clinical Services

Improving animal health and welfare by the provision of outstanding clinical activity across animal species by:

- Consolidating our position as the leading European centre of veterinary clinical excellence, influencing and adapting to the changing needs of both the veterinary profession and the community in general;
- Integrating clinical services, undergraduate and postgraduate education and clinical research;
- Developing strategic alliances with partner organisations and practices to enhance clinical service as well as the educational and clinical research activities of the College;
- Achieving a significant growth in case load (first opinion, direct referrals, secondary and tertiary referrals) driven by major investment in targeted services and facilities.

## 3.6 Excellence in business engagement and international activity

Engaging with the business community and exploring our novel ideas by:

• Increasing the revenue from commercial activity and robustly protecting intellectual property where appropriate;

- Developing the London BioScience Innovation Centre (LBIC) as a worldleading focus of interactions between life scientists and the business community;
- Promoting the RVC as a leading provider globally of innovation in the veterinary sciences;
- Implementing a targeted increase in undergraduate and postgraduate international student recruitment.

## 3.7 Excellence in Community engagement

Engaging fully with local, national and international communities and all our stakeholders by:

- Promoting the RVC's engagement with the wider community locally, nationally and internationally;
- Ensuring that the College's commitment to equality of opportunity is reflected fully in the recruitment, admission, and subsequent support of students from all backgrounds in support of widening participation.

## 3.8 Enabling excellence

To support the delivery of our mission and enable excellence the College infrastructure must be enhanced by:

- Attracting, developing and retaining the people the College needs to deliver its strategic and operational objectives;
- Ensuring the College continues to welcome and support people from diverse backgrounds across all sections of the community;
- Creating the infrastructure that will enable the College to achieve global preeminence in veterinary and para-veterinary education, research and clinical service;
- Working together and in collaboration with others to achieve excellence and release potential;
- Ensuring the delivery of a high quality estate that contributes to the College's vision for excellence;

- Developing integrated information services appropriate to the College's Mission and the demands of its students;
- Ensure long-term financial sustainability through embedded risk-based financial planning, budgeting and control that directly supports all of the principal activities of the College;
- Harnessing support for the RVC's mission through the Development Office

# 5.0 ESTATE DATA

## 4.1 General

The College has two main campuses at Camden and Hawkshead, with Hawkshead also providing farm teaching facilities known as Bolton's Park Farm. The two campuses are clearly distinct both in the estate form and in the activities that occur.

The Camden campus is the historic centre where the College began in 1791 (refer to section 3 of this document for more detail) and provides teaching and learning facilities for the BSc Bioveterinary Sciences three year degree together with the first two years of the five year Bachelor of Veterinary Medicine (BVetMed) course. Essentially, this teaching is science based and is supported by a strong bio-veterinary science research base.

The campus is also home to the wholly owned subsidiary company, the London BioScience Innovation Centre (LBIC) which is accommodated within one of the buildings on campus.

In assessing the efficiency of the RVC estate, an estate performance review report was commissioned from Investment Property Databank Ltd (IPD) which is based on the Estate Management Statistics (EMS) returns and compares the RVC performance to that of two other peer groups. The report is found in Appendix A. It is expected that a report will be commissioned annually to provide an independent health check on the estate and to chart progress to improved performance.

## 4.2 The Estate

## Hawkshead

The Hawkshead Campus (including Bolton's Park Farm) is approximately 235 hectares (580 acres) located within the Green Belt of Welwyn Hatfield Borough. The main site, defined as the Major Development Site (MDS) within the Green Belt is currently designated as 9 hectares (22 acres) identified in Appendix B.

#### Camden

The Camden Campus is located north west of Kings Cross railway land, measuring 1.5 hectares (2.85 acres). The site is located within a Conservation Area<sup>1</sup>. The campus is not constrained by any strategic View Policy Areas and does not have Listed Building status.

<sup>&</sup>lt;sup>1</sup> Policy EN31-EN37, London Borough of Camden Unitary Development Plan (Adopted June 2006)

The Camden campus sits on a very constrained site fronting Royal College Street dominated by the Hobday building, the Beaumont Animals Hospital and the LBIC (in the McFadyean building). The streetscape created is considered by the London Borough of Camden as important to the borough.

## 4.3 Tenure

The entire estate is owned on a freehold basis. There are no known covenants over the estate. The London Bioscience Innovation Centre (LBIC), a wholly owned subsidiary of the College has a lease on the McFadyean Building at Camden and there are minor tenancy arrangements relating to the parts of the estate with the College acting as landlord.

## 4.4 Planning Issues

Town planning is a key issue affecting the feasibility of an estate strategy. Planning policy, statutory designations and development control considerations can be major constraints on the scope for rationalisation, adaptations and development of any site.

#### Hawkshead Campus

The existing campus at Hawkshead is largely (> 65%) made up of post 1960's buildings with some more recent additions to the estate.

The MDS boundary is clearly drawn tightly around the Campus with various 'agricultural' facilities spilling over the MDS and into the Green Belt. There is a clear green 'heart' to the campus (accommodating the Statue entitled Duncan's Horses) which should be retained in any plans for intensification or new development.

The Campus currently divides into five functional zones:

- \* Teaching and Learning
- \* Residential
- \* Research
- \* Clinical
- \* Recreational

#### **Camden Campus**

As already stated in 5.2, the Camden Campus sits on a very constrained site fronting Royal College Street dominated by the Hobday Building, the Beaumont Animal Hospital and London BioScience Innovation Centre (LBIC). There is a limit to what can be achieved with the existing building stock without significant investment. An extension has been added to the Hobday Building in the last five years along with more recent modernisation minor projects to the main entrance, the museum and library.

The Amoroso Building is unfit for purpose and requires significant investment to bring it back into functional use. The building is now largely vacant with the activities moving to the new Hobday extension. The Beaumont Animals Hospital makes best use of the constrained space though there have been some recent modifications to retain Royal College of Veterinary Surgeons (RCVS) hospital accreditation.

The LBIC facility is a good example of what can be done to these buildings with significant investment. The existing largely unfit for purpose building has been remodelled and extended to ensure that it is fit for modern scientific purposes. Whilst retaining links into the College, the LBIC functions more or less independently providing incubator space for small businesses. The LBIC was partly funded by a significant grant from the London Development Agency (LDA). The LBIC now maintains > 95% occupancy of its facilities.

## 4.5 Age of Buildings

Built Era	RVC	RVC	Bloomsbury *
	Gross Floor Area m <sup>2</sup>	% of Total area	Average %
Pre 1840	0	0	8.2%
1840 - 1914	1,280	2.5%	10.1%
1915 – 1939	16,420	32.3%	22.2%
1940 - 1959	402	0.8%	23.7%
1960 – 1979	6,990	13.7%	27.7%
1980 onwards	25,793	50.7%	8.1%
TOTAL	50,885	100.0%	100.0%

The age profile of the estate buildings are as detailed below.

\* The Bloomsbury Average is indicated to provide a benchmark for analysis of the RVC data and comprises data from all the Bloomsbury Colleges submitting data through the EMS returns.



## 4.6 Existing space usage

The following identifies the space usage as at July 2008.

TOTAL BUILT ESTATE		50,885 m <sup>2</sup>
ACADEMIC ESTATE		45,035 m <sup>2</sup>
RESIDENTIAL ESTATE		5,837 m <sup>2</sup>
Staff Residential	1,700 m <sup>2</sup>	
Student Residential	4,137 m <sup>2</sup>	

ACADEMIC ESTATE		
Teaching and Learning Spaces	9,064 m <sup>2</sup>	20.2%
Research Spaces	7,327 m <sup>2</sup>	16.3%
Offices	6,207 m <sup>2</sup>	13.8%
Clinical Spaces	5,494 m <sup>2</sup>	12.2%
Plant Rooms	3,895 m <sup>2</sup>	8.6%
Circulation Spaces	3,870 m <sup>2</sup>	8.6%
Store Rooms	3,120 m <sup>2</sup>	6.9%
Support Spaces	2,831m <sup>2</sup>	6.3%
Toilets	1,679 m <sup>2</sup>	3.7%
Leisure Spaces	500 m <sup>2</sup>	1.1%

Student Union Spaces	500 m <sup>2</sup>	1.1%
Meeting Spaces	407 m <sup>2</sup>	0.9%
Social Spaces	154 m <sup>2</sup>	0.3%
TOTAL	45,035 m <sup>2</sup>	100.0%



# Academic Estate Space Usage

The breakdown of space between campuses is as detailed below.

Space Type	Bolton's Park (m <sup>2</sup> )	Camden (m²)	Hawkshead (m²)	TOTALS (m <sup>2</sup> )
Academic	7,397	13,125	24,526	45,048
Staff Residential	0	317	1,337	
Student Residential	0	1,399	2,784	
TOTAL	7,397	14,841	28,647	50,885



# 4.7 Distribution of Floor Space

A breakdown of non residential gross internal area (m2) on a building by building basis is identified in the following tables.

BOLTON'S PARK	Gross Internal Area m <sup>2</sup>
Barns and Out Buildings	6,091
Main Building	536
Anatomy Building	391
Farm Office/Farm House	232
Medway Building	147
TOTAL FOR BOLTONS PARK	7,397

CAMDEN	Gross Internal Area m2
Hobday Building	7,040
London BioScience Innovation Centre	2,350
BSU Building @ Camden	1,603
Amoroso Building	1,248
Beaumont Animals Hospital	644
Stable Block	201
Electricity Substation	39
TOTAL FOR CAMDEN	13,125

HAWKSHEAD	Gross Internal Area m <sup>2</sup>
Eclipse Building	3,915
Clinical Block	3,504
Queen Mother Hospital for Animals	2,553
Sundry Barns and Hay Stores	2,270
Mill Reef/Link Building	2,195
BSU Building @ Hawkshead	1,979
Large Animal Clinical Centre	921
Hawkshead House	819
Sefton Building	751
Animal Welfare Unit	630
Diagnostic Imaging Centre	622

Sundry Plant Rooms/Substations	415
Structure & Motion Laboratory	287
Sundry Stables	158
Boot Room	145
Clinical Isolation Barns	102
TOTAL FOR HAWKSHEAD	24,526

## 4.8 Building Condition

The most recent condition survey carried out by Drake and Kannemeyer in 2007 identifies the following condition of the built estate.

#### **Non-Residential Estate**

Condition Grade	RVC %	Bloomsbury Ave %
Grade A	9	12
Grade B	49	49
Grade C	39	38
Grade D	3	1

- 9% of the non residential estate is Category A (defined as new condition);
- 49% of the non residential estate is Category B (defined as sound, operationally safe and exhibiting only minor deterioration);
- 39% of the non residential estate is Category C (defined as operational, but major repair or replacement needed in the short to medium term);
- 3% of the non residential estate is Category D (defined as inoperable or serious risk of major failure or breakdown).

#### **Residential Estate**

Condition Grade	RVC	University of
	%	London* %
Grade A	0	28
Grade B	36	70
Grade C	61	2
Grade D	3	0

\*The other Bloomsbury Colleges do not report to EMS on residential property.

36% of the residential estate is Category B (defined as sound, operationally safe and exhibiting only minor deterioration);

61% of the residential estate is Category C (defined as operational, but major repair or replacement needed in the short to medium term);

3% of the residential estate is Category D (defined as inoperable or serious risk of major failure or breakdown).

The Planned Maintenance Programme in 2008 – 2010 will take account of the major deficiencies relating to legislative or health and safety risks and the College has committed £1m towards that work in the financial year 2008-09.

Major improvement in condition of the estate will derive from the resulting master plans and development plans for both campuses since it would not be cost effective to invest substantial sums in non-essential maintenance which may be subject to replacement or major alteration/refurbishment.

The very small amounts of Grade D (3% non-residential and 3% residential) will be eliminated in the as a result of the planned development projects over the next 5 years.

The RVC estate compares with its benchmark using the Bloomsbury Colleges. In condition grade, the non-residential estate has 58% at Grades 1 and 2, compared with 61% across the benchmarking group.

The RVC current invests significantly in the maintenance of its estate. In 2008/09 that investment was £1.225m and this investment has grown over the last three years. It is still failing to meet the HEFCE recommended guidelines on estate investment (HEFCE 99/18) at 1.5% of IRV. The Building Cost Information Service (BCIS) of the RICS recommends 2.5% of IRV in its Building Maintenance Information (MBI) guide and highlighted by the HEFCE Space Management Group.

In the financial year 2008/09, the RVC current allocation against the insurance replacement value (IRV) is 0.8%. In order to improve on the current condition of the estate, it is imperative that these guidelines are achieved.

#### **ESTATE STRATEGY GOAL 1**

The Royal Veterinary College will aim to allocate a budget for maintenance costs at 1.15% of IRV (2013) rising to 1.5% of IRV (2018).

In order to do this, the RVC is making a commitment to aim to budget in line with the HEFCE guidelines whilst continuing to invest in the capital development of its estate.

## 4.9 Functional Suitability

Similar considerations apply to the estate functionality. The most recent classification provided for the Estate Management Statistics (EMS, 2006) identifies the following.

#### **Non-Residential Estate**

Functionality Grade	RVC %	Bloomsbury Ave %
Grade 1	32	24
Grade 2	50	52
Grade 3	13	16
Grade 4	5	8

32% of the non residential estate is identified as Category 1 (defined as excellent); 50% of the non residential estate is identified as Category 2 (defined as good); 13% of the non residential estate is identified as Category 3 (defined as fair); 5% of the non residential estate is identified as Category 4 (defined as poor).

#### **Residential Estate**

Functionality Grade	RVC	University
	%	of London*
		%
Grade 1	29	12
Grade 2	71	88
Grade 3	0	0
Grade 4	0	0

\*The other Bloomsbury Colleges do not report to EMS on residential property.

29% of the non residential estate is identified as Category 1 (defined as excellent); 71% of the non residential estate is identified as Category 2 (defined as good);

As new developments occur then there will be a major shift from Categories 2, 3 and 4 into category 1 as buildings are designed with the users active involvement and with as far as possible future proofing in mind.

The RVC estate compares favourably with its benchmark using the Bloomsbury Colleges. In functional suitability, the non-residential estate has 82% at Grades 1 and 2, compared with 76% across the benchmarking group.

## 4.10 Space Management

The College is being proactive in its management of its entire estate. In order to achieve this three strategies have been identified.

In the first of these, the Senior Management Group (SMG) has clarified the ownership of all non-common teaching spaces with departments no longer 'owning' space but that ownership is by the College under the management of the Director of Estates. In order to ensure fair and equitable decision making, the SMG established a Space Management Planning Group (SMPG) chaired by the Director of Estates with the

major space occupiers as its standing group. All decisions on space allocation are made by this group.

The second strategy ensures transparency of the cost of non-common teaching space to the College and departments. In order to emphasise this, the Estates Department is developing a space charging policy for noncommon teaching spaces. In the first year (2008/09) there will be analysis of the current space usage using peer group benchmarking, in year 2 (2009/10) the developed model will be shadowed across the departments budgets ready for implementation from year 3 (2010/11). In implementing this strategy, it is expected that further efficiencies will be gained.

#### ESTATE STRATEGY GOAL 2

The Royal Veterinary College is committed to developing (2009) and fully implementing (2011) a space charging policy.

The final strategy seeks to driving efficiencies through occupation; there is a commitment to understanding the occupation and utilisation of space. In understanding this, there will be a clearer understanding of the nature of the space needs across the institution.

At an earlier stage in developing the strategy, there had been four independent twoweek long surveys of teaching spaces. These revealed a very poor utilisation of its common teaching spaces and it is essential therefore that the space management strategy must include regular and continual space utilisation surveys



**Camden Utilisation Survey** 15th January 2007 - 26th January 2007 100% 80% 60% 40% 20% 0% F1C F1B F26 U5 LT3 TEACH LAB FC8D 82 128 F25 COUNCIL Ľ ANATOMY F7 F4 DISSECTION **GREAT HALL** TOTAL Usage 



**Hawkshead Utilisation Survey** 29th January 2007 - 9th February 2007 100.0% 80.0% 60.0% 40.0% 20.0% 0.0% QMH LIVE Wet Lab LIVE Dry Lab G60 G70 S79 S80 Council MRLT MRSR NHR1 NHR2 Rm12 NLT ОLТ Prac F1a F1b Ę F82 F92 S71 TOTAL Useage 📥 TOTAL Utilise

Overall space utilisation on all four occasions was as follows:

CAMDEN	Frequency	Occupancy	Utilisation
08.05.06 - 19.05.06	14.6%	52.2%	9.4%
15.01.07 - 26.01.07	14.6%	43.5%	9.8%

HAWKSHEAD	Frequency	Occupancy	Utilisation
27.11.06 - 08.12.06	14.7%	42.1%	9.5%
29.01.07 - 09.02.07	14.8%	39.0%	8.1%

The result therefore is poor and well below the sector norm. In 2006, Estate Management Statistics (EMS) recorded the sector norms as 19% lower quartile, 25% median and 36% upper quartile.

It is essential that the estate is used effectively and in order to manage the increase in student numbers it is intended to develop and implement an efficient central timetabling using a module-based booking system.

The aim will be through effective central timetabling, space management, occupation surveys and space charging that the utilisation of the estate can be raised.

#### ESTATE STRATEGY GOAL 3

The Royal Veterinary College is committed to achieving a space utilisation of 25% (2018).

# 6.0 SUSTAINABILITY

## 5.1 General

Interest in the environment and specifically in climate change is unprecedented. What used to be a purely environmental issue has been pushed to the forefront of public and media interest by the release of the Stern Review<sup>2</sup> and Al Gore's documentary "*An Inconvenient Truth*". Political parties are keen to establish their green credentials, whilst increasing corporate attention is being given to the environmental impact of their business.

The UK Climate Change Bill, announced in 2007 sets out a plan to reduce carbon emissions by 60% by 2050. As a major owner of land and buildings, UK universities are key to achieving this aim and this is already happening through such initiatives as the Tyndall Centre, which hosts a consortium of six universities and wider collaborations all working together to develop sustainable responses to climate change.

More focussed, and perhaps more relevant, is the Environmental Association for Universities and Colleges (EAUC) and is the sustainability champion for universities and colleges in the UK. Through an extensive collaborative network of institutions and practitioners covering the whole organisation - campus, curriculum and community – the EAUC works to drive sustainability to the heart of further and higher education.

A recent guide to biodiversity on campus (EAUC) encourages institutions to take a fresh look at how biodiversity fits into their environmental management agenda and focuses on practical solutions such as habitat creation and management, guidance for successful long-term biodiversity initiatives, strategy and policy together with legal compliance.

The Royal Veterinary College is keen to play its part in managing climate change. Its activities are perhaps more diverse than most universities bringing with it additional challenges which create opportunities.

Sustainability means for the College an awareness of its impact on the environment and this can be managed to a large extent by communication and engagement. The College impacts both as consumer; consuming materials, energy and travelling to work as well as a producer in terms of waste. It is important that all these are tackled in a structured way to ensure that we can move towards reducing that impact.

The College is committed to this philosophy and has approved at Council level an Environmental Strategy which sets out our strategy for dealing with these matters in a focussed way.

<sup>&</sup>lt;sup>2</sup> Stern Review on the Economics of Climate Change, HM Treasury, 2006

The College has identified three main areas of concern and areas for which this strategy makes a commitment. These are:

- Travel and transport;
- Renewable energy sources;
- Waste management and recycling.

## 5.2 Travel and Transport

Travel to work by private vehicles consumes energy and creates a parking problem on campus. The need for parking spaces far exceeds the College's ability or desire to provide them.

At Camden, the campus is on a main through route and is well supplied with public transport in the form of buses, underground and taxis together with cycle lanes and good well lit footpaths. There is generally a culture of not using private vehicles partly driven by the London Congestion Zone, though the campus itself sits outside the zone.

There is limited car parking on campus with only 20 cars able to park at any one time and this is primarily for the disabled and for visitors. Some staff in the College are required to travel between the two campuses and will use the car parking facility. The supply on campus satisfies the demand.

The problem of travelling to work for staff, students and visitors is almost entirely focussed at the Hawkshead campus. There is no local public transport other than taxis. This means that all campus users have to find alternative methods of getting there. The Hawkshead campus is within the Hertfordshire Green Belt designation and as a result obtaining planning permission for car parking is very difficult and is frowned upon by local authorities who are being required to commit to the government agenda on use of private vehicles.

There is currently a demand for spaces that outstrips supply, and with increasing activity on campus this is only going to get worse. This matter is frequently

#### **ESTATE STRATEGY GOAL 4**

The Royal Veterinary College and the RVC Student Union Society is committed to developing (2009) and implementing (2011) a Green Travel Plan.

discussed at the Senior Management Group and there is commitment to developing a Green Travel Plan though the group is acutely aware that until all the elements are in place the plan cannot be fully implemented.

In 2005, the SMG decided to no longer allow students (other than final year BVetMed students or resident students) to park on campus. In order to ensure that students could travel to the campus, a heavily subsidised coach service, tailored to meet the residential locations, was provided.

Despite this a significant number of students continue to travel by private vehicle and park on the approach road. This is widely criticised by both the staff and students. The College Student Union Society have committed to reducing the travelling to College by private vehicle by 50% in 2009 and to encourage students to use the available coach service.

This strategy therefore seeks to define and put a framework to the implementation of a green travel plan. The component parts of the plan are that within three years of the publication of this strategy the College will:

- Promote a healthy approach to travelling to work;
- Encourage other means of travelling to work;
- Continue with the policy of not allowing students to park on campus;
- Work with the public transport authorities to introduce new bus routes;
- Work with the local authorities and other agencies to develop new safe cycle routes and footpaths from local conurbations and transport hubs;
- Accepting that some people will have to drive, promote incentives for car sharing;
- Introduce car park charging following a period of consultation on the most appropriate method to adopt.

#### ESTATE STRATEGY GOAL 5

The Royal Veterinary College is committed to introducing car park charging (2012) and to investing in new green travel initiatives.

## 5.3 Renewable Energy Sources

In 2006-07 the EMS<sup>3</sup> recorded that across the entire UK HE sector, over £353m was spent on energy of which approximately 12% of consumption was sourced from renewable sources. The Royal Veterinary College spent over £960k in the year 2007/08 on energy yet purchased none from renewal sources.

In 2006-07 the EMS<sup>4</sup> recorded that across the entire UK HE sector, the median energy emissions per student FTE was 644 Kg CO<sub>2</sub> whereas at the RVC, there were 3,500Kg CO<sub>2</sub> per student FTE. It is clear that significant reductions need to be made in emissions in order to achieve the sector norm.

There are various sources of renewal energy from combined heat and power plants (CHP) through anaerobic digesters and biomass plants to wind power. The College is a particularly high consumer of electricity with a large proportion of its estate given over to scientific and clinical activities.

<sup>&</sup>lt;sup>3</sup> Estate Management Statistics 2006 – 2007 for the HE Sector, OPD, 2008

<sup>&</sup>lt;sup>4</sup> Estate Management Statistics 2006 – 2007 for the HE Sector, OPD, 2008

Whilst design can play a part in helping to reduce consumption, the concept of the *'green laboratory'* is only in its infancy and is yet to be validated.

This issue has been considered by the SMG and some feasibility studies have been undertaken. The College is too small to benefit from a CHP under the current designs available; a biomass plant may be feasible, though the capital costs as yet outweigh the potential benefits. An anaerobic digester is feasible but is more profitable if the College were able to import waste from neighbouring farms which as yet has not been tested.

By far the most beneficial potential source of renewable energy for the College is a wind farm; at Hawkshead there is an estate of approximately 600 acres mostly set to farm land and woodland. The estate is situated in a rural part of the County surrounded by only small conurbations.

The first two stages of the feasibility study carried so far conclude that the site is well placed for three large wind turbines generating enough electricity year round to supply the entire Hawkshead campus and to return some renewable energy to the grid for the benefit of other consumers.

## 5.4 Waste Management and Recycling

Waste management is a particular problem for the College. Waste comes in the form of general day to day office waste, typically paper, plastics, glass and aluminium; the catering outlets also produce food waste. In addition to this, and uncommon in the higher education sector is farm and animal waste products.

As a result, the College has prepared a Waste Management Plan that seeks to deal with this waste in the most effective way possible. There is increasing pressure on the College primarily from its student body, to implement a structured waste recycling plan. This will most likely initially be dealing with the bulk waste in the form of paper, cardboard, glass, plastics and food.

The strategy will define waste streams that are to be targeted, location for containers, roles and responsibilities for staffing and environmental champions.

The aim of the strategy will be to show a structured reduction in waste to landfill of around 15% in year one and culminating in further reductions over the followings years with a target minimum of 40% overall reduction by year three.

#### **ESTATE STRATEGY GOAL 6**

The Royal Veterinary College is committed to developing a renewable energy source in order to reduce its greenhouse gas emission by 20% as a minimum (2018).

#### ESTATE STRATEGY GOAL 7

The Royal Veterinary College is committed to implement a structured recycling plan across the College (2012). The overall objectives of the strategy will be to:

- Ensure that student handouts are maximum two A4 pages printed double sided;
- Withdraw all cardboard from general waste stream;
- Ensure facilities for the recycling of Aluminium drinks cans are in place;
- Create recycling stations across the campus at least one per building;
- Create recycling stations for accommodation blocks;
- Promote resource efficiency within the college;
- Promote re use within the college;
- Define roles and responsibilities for staff, students and champions;
- Initiate working groups to promote environmental improvement;
- Monitor and measure the volumes where practicable;
- Recycling collections to be standardised across all campuses where practicable.

## 5.5 Water Supply

Water resource analysis today <sup>5</sup> indicates that the water we drink and which is used by farming and industry comes from three main sources:

- Reservoirs;
- Rivers;
- Underground aquifers

Every year, around 18 billion tonnes of water are taken from these sources in England. Of this, about 6 billion tonnes are put into the public water supply. Electricity generation uses 9 billion tonnes, industry 2.1 billion, farming 0.2 billion and other uses, such as fish farming, account for the rest. Figure 6 shows the regional variations in both the amount of water taken for the public water supply and the proportions taken from surface water and groundwater.

Water is commonly seen as an unlimited resource. Even after nearly two years of drought in the South East there was a continuous supply of water from our taps in the summer of 2006. In reality however, water is limited and public supplies were maintained as a result of restrictions on non essential uses and the excellent public response to the situation. Even so, a third dry winter could have caused serious problems for many.

To meet water demand, we are already abstracting water unsustainably in certain regions, which contributes to water stress. This can have serious environmental impacts. Reducing river flows and levels can reduce or even interrupt water supplies to homes and the environment, and reduce the oxygen available for plant and animal

<sup>&</sup>lt;sup>5</sup> Future Water *The Government's Water Strategy for England*, defra, February 2008
survival in the water. It can dry out and destroy wetlands, with the loss of the biodiversity and flood protection functions they provide. It can also increase the risk of flooding during heavy rainfall, through blockages due to siltation.

Less water in the environment also reduces the ability of rivers to dilute pollutants, leading to poor quality and in some cases foul smelling waters, and increasing the treatment requirements when the water is abstracted for drinking supply. As water treatment is energy intensive, this results in increased emissions of greenhouse gases. It is important therefore that we consider water wastage, use of fresh water and alternative extraction water strategies for the College.

Pressures on our water resources are set to increase. Population growth and changes in demand are needed in some areas where abstraction is not currently sustainable. Climate change is expected to severely worsen the situation with drier, hotter summers and more intense and sporadic winter rain, and some lower river flows even in winter. In addition, rising temperatures and changing precipitation patterns are likely to change the public demand for water. Protecting and in some cases enhancing our water resources is therefore essential.

In 2006-07 the EMS<sup>6</sup> recorded that across the entire UK HE sector median water consumption is  $0.91 \text{ m}^3 / \text{m}^2$  gross internal area. At the RVC, the water consumption is recorded as  $1.26 \text{ m}^3 / \text{m}^2$  gross internal area.

Some non-potable household water demand, for example toilet flushing and garden watering, can be met through alternative water sources. Rainwater can be harvested in water butts or larger systems, and grey water – water from showers and sinks – can be recycled. Similarly, many industrial processes do not require water to be treated to potable quality. There will also be scope for imaginative solutions to specific development projects. For example, the use of local boreholes should be investigated to supply water for a range of non-potable applications.

#### **ESTATE STRATEGY GOAL 8**

The Royal Veterinary College is committed to reducing water consumption by 25% (2014) and to investigate alternative sustainable sources of water supply (2017).

# 5.6 Sustainable Building Design

BREEAM (Building Research Establishment's Environmental Assessment Method) is the worlds longest established and most widely used environmental assessment method for buildings. It sets the standards for best practice in sustainable development and demonstrates a level of achievement. It has become the *de facto* measure of a building's environmental performance.

Aims of BREEAM are:

<sup>&</sup>lt;sup>6</sup> Estate Management Statistics 2006 – 2007 for the HE Sector, OPD, 2008

- To reduce the environmental impacts of developments.
- To enable developments to be recognised according to their environmental benefits.
- To provide a credible, environmental label for buildings.
- To stimulate demand for environmentally sustainable buildings.

**Objectives of BREEAM:** 

- To distinguish buildings of reduced environmental impact in the marketplace.
- To ensure best environmental practice is incorporated in building design, operation, management and maintenance.
- To set criteria and standards surpassing those required by regulations.
- To raise the awareness of owners, occupants, designers and operators of the benefits of buildings with a reduced impact on the environment.
- To inform the design process.
- To allow organisations to demonstrate progress towards corporate environmental objectives.

The building industry is hugely dependent on cheap oil, from the manufacture and transportation of its materials, to the machinery and tools used in demolition and construction. In the UK, it uses vast quantities of fossil fuels, accounting for over half of total carbon emissions that lead to climate change. The built environment is also responsible for significant amounts of air, soil and water pollution, and millions of tonnes of landfill waste. This is a situation that clearly needs to change.

With the inevitability of declining fossil fuels, and the threat of global climate change, reducing our energy consumption is an essential survival strategy. Choosing to build *green* saves energy. The low embodied energy of green products ensures that very little energy went into their manufacture and production, with a direct reduction in carbon emissions. Eco friendly design methodology can further reduce energy consumption by minimising energy inputs for heating, cooling and light, and incorporating energy efficient appliances.

#### **ESTATE STRATEGY GOAL 9**

The Royal Veterinary College is committed to designing new buildings to achieve BREEAM *Excellent* rating (2014).

Saving energy for the College also saves money - an issue that will become increasingly important as the cost of fossil fuels inevitably rises in the near future.

# 7.0 OPPORTUNITIES AND THREATS

# 6.1 General

As noted in the College Corporate Plan, the period of life of this strategy will be one of both continuity and further change. After a period of significant growth, the College now has a greater number of students and a more diverse student body than ever before. We are growing into becoming a medium size higher education institution, whilst still retaining the benefits of our established collegiate identity, through which we can respond flexibly to a rapidly changing world and relate personally and individually to our students.

We have the largest range of veterinary, para veterinary and animal science undergraduate and postgraduate courses of any veterinary school in the world, and we are the largest veterinary school in the UK. As such, we can command an outstanding critical mass of subject specific resources, to support teaching and research. We remain committed to being a research–led institution with a significant and expanding portfolio of international quality research. The third arm of our activity is our clinical provision, which integrates closely with both our teaching and research. This is moving into a new era, with the completion of the new phase of the Queen Mother Hospital for Animals and ambitious plans for the further expansion of first opinion and referral caseloads in all our clinical practices.

Yet, we seek not only to be remarkable for our size. We are aiming for high quality across the totality of our activities, as outlined in the College Corporate Plan. The Plan states the seven priority areas in which we will measure the progress we are making in maintaining or developing excellence, against the stated Strategic Aims. Underpinning these aims we have a more operational level of objectives which describe how they will be achieved. These objectives will be measured throughout the five year planning period in annual operating plans. The Corporate Plan does not go into detail about these, however this Estate Strategy aims to indicate how the Estate will support the College's vision and quest for excellence; it should provide the broad picture of priorities. To add background to this strategy, there follows an analysis of the context in which the College is operating and the strategic risks that may threaten the achievement of our aims in the next five years.

# 6.2 Context

The College operates in an increasingly complex world. In understanding how we will move forward in the next five years it is important to consider some of the main factors that will impact on our development.

# Political

Some of the government imperatives for the next five years seem clearly established already. For example, higher education institutions (HEI's) can expect continued exhortation to widen participation, engage with their local communities, and, in response to the Leitch agenda, engage with business and support economic development. However, some policies will inevitably change during the period, whatever the result of the next general election in 2009 or 2010, and we must respond flexibly to that.

One of the first political decisions that will affect us will be the government review of undergraduate top-up fees, expected by 2010. Any removal of the cap in top-up fees will have a significant impact on us, particularly in relation to the financial situation of our students embarking on a five year professional veterinary degree and especially with regard to our recruitment of students from widening participation backgrounds. Also, with increases in student fees comes the greater requirement to treat students as customers, who demand the best of customer care in both academic and non-academic provision.

#### Economy

Economic change and turbulence will affect the recruitment of students from particular parts of the world. The 'credit crunch' will have a national and global impact on the ability of some students to finance their studies. There may be a particular impact on our ability to recruit North American students, given that exchange rates remain unfavourable.

Local and regional economic factors will impact upon the College. London will remain a dynamic hub for economic activity and a meeting place for the world with the 2012 Olympics being a catalyst for regeneration and further business development. Engagement with the Regional Development Agencies for London (LDA) and for the East of England (EEDA) will remain crucial in identifying and responding to economic imperatives and opportunities for business growth.

#### Globalisation

The pace of change will remain undiminished. The internet will continue to make the world a 'smaller' place, enabling an enhanced global flow of knowledge and ideas, and providing access to greater numbers of potential students than ever. However, as new institutions open, particularly in developing countries, the competition for students, and quality staff, will become fiercer.

In this 'smaller' world, international collaborations will become ever more essential for any institution that seeks to have a global presence. New networks and opportunities for partnerships will open up, for example involving government, business and HEI's in China. There will be great opportunity for mutually beneficial two-way flows of information and expertise which will support curriculum development, enterprise and cultural engagement.

#### Environment

Awareness of environmental issues and the impact of environmental change will continue to grow over the period of this Corporate Plan. We must increasingly promote sustainable development and attempt to reduce the adverse environmental impact of our operations. These factors will impact on both our ongoing operational activity and proposals for new capital build during the next five years.

With climate change comes instability: issues concerning the international availability of food and water will become more prevalent and diseases will spread to new areas, affecting production animal farming and human health. We must demonstrate our understanding of these problems in our work with developing countries. A specific area of concern for the world and opportunity for the College will be in vector borne diseases and this is reflected in the College's research aims.

#### Demographics

This planning period will see the beginning of a significant fall in the number of young people in the UK, which will result in a fall in the number of 18 year olds by 4.6 per cent by 2020, or 70,000 full-time undergraduate places. Paradoxically the overall population is set to expand, with the UK becoming the most populous country in Europe. We will need to respond to this by promoting the attractiveness and relevance of biological science, and the veterinary sciences in particular, as well as developing new markets for mature, part-time, work- based and distance learners and overseas students. However, as the UK remains a net importer of qualified veterinary surgeons, we should be confident that demand for graduates of our professional veterinary degree will remain strong.

In addressing this demographic change, we must also continue to increase participation from disadvantaged social groups and males. Recruiting male students is an issue for all veterinary schools, where each cohort on the professional veterinary degree is now typically 80% female. This imbalance impacts on the student experience and will also increasingly affect the gender balance of our academic and clinical staff.

#### Legislation and regulation

The legislative and regulatory demands upon HEI's will continue to grow in this period. We must ensure that we engage with both the letter and the spirit of the legal requirements upon us, and anticipate any changes in those, for example with regard to environmental impacts, equality and diversity.

#### The University of London

The federal University of London has undergone a radical change in its governance, committee structures and financial modelling. As we, and other Colleges, secure our own Degree Awarding Powers, the relationships within the federation may change. Whilst the University retains its global reputation we believe that being an active and supportive member is mutually beneficial.

#### Accreditations

The quality of the College's academic provision is benchmarked through accreditation by a number of external bodies. We will strive to ensure that these are maintained throughout the planning period.

The American Veterinary Medical Association (AVMA) first accredited the College in 1998 (re-accredited in 2005). AVMA accreditation is seen as the international benchmark of quality of veterinary education and enables our professional veterinary graduates to seek licensure in North America on the same basis as graduates from the USA and Canada. We also hold accreditation from the Royal College of Veterinary Surgeon (RCVS), which has statutory responsibility to conduct regular inspections of veterinary schools in the UK. Visitations are conducted jointly with the European Association of Establishments of Veterinary Education (EAEVE), and the outcomes are accepted by the EU, allowing RVC graduates to practice throughout the EU. The last RCVS/EAEVE accreditation was in 2000; the next will be in 2010.

The Quality Assurance Agency (QAA) undertook an Institutional Audit of the College in 2008. The results of this are anticipated in early 2009.

# 6.3 Security, Bio-Security and Risk.

#### Security and Risk

Access to visitors is regulated through barrier access control. At Camden this is very effective however at Hawkshead, the surrounding fields are impossible to control and control cannot be guaranteed.

Movements of people within the Hawkshead campus are relatively un-restricted although a card controlled access system does allow for restrictions to be imposed. High security areas are already vehicle controlled and have strict pedestrian access.

The College has security staff on duty 24/7, 365 days per year with a College employed Head of Security and contract security cover. This works well however there are issues about "out-of-hours" lone working and this issue needs to be addressed to ensure complete security at all times.

#### **Bio-security and Risk**

Bio-security is a significant issue for the College in particular at Hawkshead. In order to assess the probability of the introduction of a notifiable livestock disease in general and foot and mouth disease (FMD) or Bovine Tuberculosis (BT) in particular as a consequence of regular normal activities at the RVC, disease introduction pathways have been documented.

Hazardous activities and practices as well as risk mitigation measures have been recorded. The College has installed a vehicle wash facility on the periphery of the campus in order to protect both incoming and exiting vehicles in the event of a major bio-security outbreak.

Further work is being undertaken to develop a unifying bio security protocol that describes the bio-security policies for the RVC and integrates this into the College disaster recovery plan.

#### 6.4 Issues

#### Hawkshead

The existing building stock at Hawkshead is largely made up of post 1960's structures with an element of more modern buildings eg Eclipse, LIVE building and the QMH phase 3.

A general observation is that whilst much of the older stock at Hawkshead is 'fit for purpose' it does not compare well with the more modern facilities provided in the later developments.

The residential accommodation is low density and there is an opportunity to provide additional and replacement facilities with the redevelopment of the dated Northumberland Hall building.

The Queen Mother Hospital for Animals (QMH) is situated to the south-east corner of the campus and is a highly successful medical and practical referral teaching facility. The latest development phase makes the QMH the largest such facility in the UK.

The Major Development Site (MDS) boundary is tightly drawn around the campus reflecting the sensitivity of its green belt status though there are already some facilities that have been allowed to spill over the MDS and into the green belt. There is a clear green heart to the campus providing a buffer between the residential zone and the teaching and learning facilities and this should be retained and intensified in any future developments.

The campus overall neatly lends itself to significant zoning with five main zones for residential, teaching and learning, clinical, research and social/sports. Once again, these zones must be retained and intensified in any future developments.

#### Camden

There is a limit to what can be achieved with the existing building stock without significant investment. An extension to the roof of the Hobday building was carried out in 2003 and in more recent years investment has been made to the main entrance, the museum and student social facilities.

The LBIC is a good example of what can be done to these buildings with investment with the existing near derelict building transformed into state of the art laboratories and offices for small start-up bioscience companies. The LBIC was partly funded by the London Development Agency.

The Amoroso building is no longer fit for purpose and requires significant investment to bring it back into use. The activities that this building previously housed is now accommodated in the Hobday extension spaces. The Amoroso building is now used for storage.

The Beaumont Animals Hospital makes good use of its constrained space however if it is to become a world class facility then this space needs to be reviewed. It is not ideally suited, however it benefits from a central location and familiarity and ease of access by its clients.

# 6.5 Estate Review 2007

The College embarked on a review of its estate as a preamble to the preparation of this document. It was considered prudent to review whether the College should

continue to operate across two campuses or whether it would be beneficial for the RVC to be based on a single campus.

In March 2006, WSP was commissioned by the RVC to undertake that review and to make recommendations on the future estate strategy. In doing so they considered:

- The condition of the existing buildings, space usage and space utilisation;
- Issues affecting the use, management and sustainable development of the RVC estate;
- The views of staff, students, alumni and key stakeholders;
- External influences including town planning and highways considerations.

Four options emerged from the initial review:

- Retain the status quo;
- Retained both Hawkshead and Camden campuses with significant investment in both;
- Relocate the teaching and research activities from Camden to Hawkshead;
- Total relocation of both Camden and Hawkshead to another new location.

Development and cost appraisals were undertaken for each of these and there followed a further round of consultation with staff and students.

The recommendation then placed before the College Council was subject to funding arrangements being secured, that the teaching and research activities should relocate to the Hawkshead campus.

The matter was thoroughly debated at College Council and it was concluded that this was not the right time in the College's development to embark on this major relocation exercise but to retain both campuses and invest to improve the facilities available.

This outcome gives a clear steer to the development of this RVC Estate Strategy.

# 6.6 Current Priorities

As an integral part of developing this strategy, the SMG was asked to consider its priorities for the coming period of the strategy. Whilst this is an almost impossible task to predict, some clear priorities emerged from what was already known and these are identified below.

# Priority 1: A-rated

Office accommodation at Hawkshead

Transport, travel and access

#### **Priority 1: B-rated**

Research laboratories at Hawkshead Social learning spaces at Camden H&S/legislative works at Camden Waste Management at Hawkshead Car parks at Hawkshead Student residences at Hawkshead

These priorities reflect the changes that need to be managed in order to achieve the corporate goals identified earlier in this document. They embrace the increase in student numbers together with the corresponding increases in staff numbers and research activity to support the core teaching and learning. This review considered that the clinical facilities in some areas needed to be improved; this was not necessarily a priority in itself.

SMG Priority Areas		PRIC	RITY 1	PRIORITY 2		
Issue	Campus	AVE Priority Max 25	A rated (21 -25)	B rated (16-20)	C rated (11-15)	D rated (0-10)
Offices	Н	21	✓			
Offices	C	11			✓	
General teaching space	Н	8				✓
General teaching space	С	10				✓
Lecture theatres	Н	9				✓
Lecture theatres	C	8				√
Laboratories (Research)	Н	19		√		
Laboratories (Research)	С	8				✓
Laboratories (Teaching)	Н	6				√
Laboratories (Teaching)	С	7				✓
Social Learning Spaces	Н	13			✓	
Social Learning Spaces	C	17		√		
H&S / Legislative works	C	17		√		
H&S / Legislative works	Н	15			√	
Equestrian Centre	H (BP)	9				√
Clinical facilities (small animal)	н	6				√
Clinical facilities (small animal)	C	13			✓	
Clinical facilities (large animal)	Н	12			√	
BSU facilities	H	7				√
BSU facilities	C	3				✓
Farm facilities	H (BP)	9				✓
Support/storage facilities	H	12			√	
Support/storage facilities	C	12			✓	
CPD Training Centre	H	10				√
Catering/cafes	Н	11			✓	
Catering/cafes	C	12			✓	
Sports/leisure	H	15			✓	
Abattoir	H (BP)	6				√
Farm Shop	H (BP)	4				
Waste Management	H	16		√		
Waste Management	H(BP)	16		√		
Waste Management	C	9				√
Recycling	Н	9				✓
Recycling	С	8				✓
Infrastructure (drainage, power	H	13			✓	
etc)						
Infrastructure (drainage, power	С	11			1	
etc)						
Wind farm / Sustainable energy	H	6				
Transport & access	H	21				
Car Parks	Н	19		•		
Kesidences	Н	18		v		

# 8.0 PROPOSALS

# 7.1 General

During the development of an estate strategy, the College does not stand still and some progress on capital development continues. Funding from the HEFCE and other external sources brings opportunities that cannot be ignored, however, these opportunities are considered alongside broader considerations of the entire estate.

# 7.2 Current Proposals

The College has recently been allocated a Capital Investment Framework grant from HEFCE of just in excess of £7m and is using this allocation to begin to deal with the office accommodation, research laboratories and social learning spaces at Hawkshead. This is known as the Teaching and Research Centre (TaRC) project. Budget £8.2m

In order to locate these facilities within the appropriate zone and to maximise its inter-relationship with other facilities, it was decided to relocate the existing Sefton Equine Hospital. This is known as the Equine Clinical Centre project. Whilst the initial prioritisation of facilities did not rate this high, it is in need of significant refurbishment and it is not currently located within the clinical zone. It was decided therefore to commit College reserves to relocate and provide new equine hospital facilities close to the Large Animal Clinical Centre (LACC) adjacent the QMH. Budget £2m

Recognising that social learning spaces at Camden were also in demand to support the new BVetMed curriculum, the College has committed some of its cash reserves to provide some much needed social learning spaces at Camden. This project will also include a new café and social space within an underused quadrangle space. This is known as the Camden Social Learning Zone project.

Budget £1m

Total cost of current proposals £11.2m

# 7.3 Current Future Proposals

Future proposals emerge as a result of the priority development highlighted in 7.6 above. These projects are being developed to feasibility stage prior to funding arrangements being established and approvals sought from the College Council. Major capital projects currently undergoing feasibility are:

*Student residential facilities*: a project to replace the Northumberland Hall building and increase the student residences from the current 46 to over 188 bed-spaces including refectory and hotel style overnight accommodation.

Estimated budget £23m

*Swimming pool and fitness centre*: a project to replace the existing pool with a 6 or 8 lane 50m pool, fitness centre and studio space with associated changing and reception. Estimated budget £20m

*Rehabilitation Centre at Hawkshead and Liveries at Bolton's Park:* a project to develop equestrian rehabilitation facilities, livery and cross country course

Estimated budget £3m

*Nursery/Crèche at Hawkshead:* a project to develop nursery facilities for staff and students

Estimated budget £3m

# ESTATE STRATEGY GOAL 10

The Royal Veterinary College is committed to find funding for a targeted capital development projects for both the Hawkshead and Camden Campuses (2009).

The total capital commitment listed here is £49m.

# 7.4 Masterplanning

The development of the estate has happened at the RVC to a large extent in an uncontrolled manner. That is not to say that the resulting campuses do not work but it has led to departments being dispersed.

At this stage in its development, it is clear that this needs to be addressed and if this strategy is to be successful then there needs to be a clear framework within which to strategically develop the College's estates.

There have previously been development plans developed and in one case this was submitted to Welwyn Hatfield Council; it was not well considered and was never approved and adopted.

Masterplanning is a positive and proactive process and can bring significant benefits to all involved. Masterplanning gives all those involved in the regeneration of spaces the opportunity to think about any changes in the wider context. Masterplans therefore have an important role to play in delivering sustainable developments and as a tool in the planning system. The preparation of a masterplan provides the means to address the multi-faceted issues that make places successful.

It is anticipated that this Masterplanning process will identify land opportunities both in terms of disposal as a potential source of funds for future development or for acquisition. This is the first step in creating a successful masterplan is the strategic framework which this document provides. The strategic framework contains a statement of aims and objectives for physical regeneration over a large area of land and may consider a much wider area than the spatial masterplan. It is based on analysis of the baseline data and is the key output of the preparation stage, functioning as the brief for the spatial masterplan. It also incorporates early ideas about how to deliver the proposed developments.

This develops into the broad vision special masterplan with three-dimensional proposals; plans, visuals and written documentation.

The implementation plan is the strategy for how to turn the vision and plans into reality. The masterplan is not complete without considering and testing how the proposals will be implemented. Implementation will require a written statement addressing cost, programme and other issues. Even if actual work on site is not imminent, these issues must be considered early.

#### **ESTATE STRATEGY GOAL 11**

The Royal Veterinary College is committed to commencing the masterplan process for both the Hawkshead and Camden Campuses (2009).

#### Camden

The opportunity for major development on the Camden campus is severely constrained by the site boundaries. Most of the site is currently developed with very few spaces between buildings. The development that has taken place to date has been major refurbishments and extensions onto buildings.

There are issues with the success of Camden as a campus; the site has very few open spaces and social spaces where staff and students can interact socially.

#### Hawkshead (including Bolton's Park)

As was mentioned earlier in this document, over time, spaces have become collocated and have as a result identified zones. There are five such zones already identified as:

- Teaching and Learning
- Research
- Clinical
- Residential
- Social and sports

It is intended therefore to build upon these zones and to develop, obtain approval and implement a campus masterplan for Hawkshead.

# 7.5 Issues for Further consideration

There are a number of other issues that require further debate and consideration and will be influential in the development of any masterplan.

- The future of the Clinical Block (Hawkshead) which is in need of significant refurbishment of redevelopment;
- The future of the Amoroso building (Camden) which is largely vacant other than storage;
- The future of the Beaumont Animals Hospital (Camden);
- Changes to the teaching and learning spaces to support the curriculum changes;
- Campus Landscaping strategy (Hawkshead);

# 9.0 RECOMMENDATIONS AND IMPLEMENTATION

# 8.1 General

The completion of this first ever Estate Strategy for the College has been an exciting and challenging process. It has brought together a range of factors that had previously been superficially considered without a great deal of supporting data.

In support of this the Principal has created and supported a new Estates Department with a new Director of Estates who is a member of the Senior Management Group (SMG) and an officer supporting the Finance & General Purposes Committee where estates matters are discussed and agreed.

This demonstrates a clear commitment to estate strategic planning as the College continues to grow. This document therefore very much supports and enables the College to achieve its corporate objectives and is well positioned to ensure that this is done effectively and efficiently.

# 8.2 Recommendations

The Estate Strategic Goals (ESG) identified throughout this document demonstrate the College's commitment to developing an estate that supports the vision of becoming the best veterinary College in the world.

In supporting the College's Corporate Plan, the Estates department has identified the following aims and objectives:

#### Aim

To ensure the delivery of a high quality estate that contributes to the College's vision for excellence.

# Objectives

- To develop a robust estate strategy that identifies the estate priorities reflecting the College's corporate aspirations;
- To develop and gain support and approval for campus master plans [ESG4, ESG5, ESG7, ESG8, ESG11];
- To ensure effective use of capital funding resources [ESG6, ESG10] ;
- To continue to provide first class facilities management service responding to user requirements [ESG2, ESG3, ESG9];
- To provide as far as possible a proactive maintenance service ensuring that the estate is fit for purpose [ESG1].

# 8.3 Implementation

The Estate Strategic Goals (ESG) identified throughout this document are aimed at a phased delivery of the estate aspirations. The implementation of this strategy will be assessed at

intervals throughout the planned life of this document and will therefore be subject to review depending on budget capabilities.

It is recognised also that this Strategy is longer that the College Corporate Plan period (2009 - 2014) for reasons explained elsewhere in this document, It should therefore be remembered that the goals will be necessarily reviewed at the point at which the College reviews its Corporate Objectives.

# APPENDIX A ESTATE PEFORMANCE REVIEW REPORT 2008

# EMS Estate Performance Review Royal Veterinary College

On the pulse of the property world



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#### **INTRODUCTION**

- This report presents an independent and objective review of estates performance at the Royal Veterinary College. All data and information has been approved and provided by the institution as part of the Estate Management Statistics service (EMS)<sup>1</sup> and reflects the 2006/2007 academic year.
- EMS was established in 1998 and has been developed to meet the needs of UK Higher Education estates. The service is available to all UK higher education institutions and all institutions are invited to submit annual information. The data is assembled to approved and standard definitions and has been validated for use.
- EMS is funded by the UK Higher Education Funding Councils and is the established primary source for estates information in the sector. Institutions are represented on a Steering Group who work in association with the Funding Councils to develop the service, which is run by IPD Occupiers.
- IPD Occupiers is part of Investment Property Databank Ltd (IPD)<sup>2</sup>. IPD was founded in 1985 and is recognised today as the UK's leading provider of property performance information. Around the world, investors, occupiers, advisors, lenders, analysts & researchers rely on information provided by IPD. The company is wholly independent and is dedicated exclusively to the supply of information services that are produced to the highest possible standards and are delivered impartially without conflicts of interest.
- 159 UK Higher Education institutions contributed information to EMS for the 2006/2007 period and the service is used by an increasing number of UK institutions to help identify

the scope for performance improvement, to justify change, support strategic objectives and to help demonstrate progress.

This EMS estate performance report is not intended as a strategy report, but sets the institution's performance in context by comparison with relevant peer groups. The report is useful to highlight key high level issues and understand the scope for improvement. The report represents an independent review of strategic performance, highlighting potential for change and is prepared by IPD Occupiers.

#### METHODOLOGY

- Data and measures were reviewed for the institution over the past three years to obtain an idea of context and the position the institution has reached.
- No institutional visit is carried out and this is a desk study using only the information and comparisons available through EMS Institution Reports.
- Measures were examined by looking at the executive summary and drawing high level comparison against all UK institutions. This sets up the initial appraisal of results.
- Each individual area (costs, space, quality & sustainability) was looked at, examining appropriate sections of the estate ratios page and using a variety of peer groups. Peer group selection and consideration is critical in making a rounded overview of the estate ratios. Some peer groups can be used throughout the analysis; however, some may have a bearing on only specific areas of performance.
- Please refer to End notes (page 30) for a full definition of all peer groups and also definitions of technical terms.

#### **EXECUTIVE SUMMARY**

This executive summary provides an overview of the Institution's performance across four key areas; cost analysis, space analysis, building quality and maintenance and energy and estates sustainability. It highlights both good performance within these areas and those areas in which there is potential to improve.

#### Cost Analysis

Total property costs reflect the total revenue costs of occupying space held for an estate, site or building and at around £4.9 m your total property cost for your institution has increased by 5.3% between 2005/6 and 2006/7. In the context of your income, total property costs account for approximately 10.4% of your HEI income, this ratio having fallen by approximately 7% between 2005/6 and 2006/07. This decrease places you at the median level compared to all your selected peer groups

Whilst your non-residential total property costs per square metre of net space place you at the lower quartile level compared to your selected peers, when viewed per student FTE, despite having fallen by 5.1% between 2005/06 and 2006/07, at £3,079, you fall around and above the upper quartile level compared to your selected peers. Whilst it may be prudent to try and reduce this level of costs, your performance in this area likely reflects that the nature of your college and that at 1,597 your student FTE numbers in 2006/07 fall considerably below the lower quartile level when compared to All UK peers of 3,809 students FTE.

Despite a 7.3% increase in your total income per square metre net internal area from 2005/06 to 2006/07, at £857 you fall below and at the lower quartile level compared to your selected peers. This may suggest that you need to review the provision of your space to ensure whether it is too generous, according to the size of the business the estate is supporting. It is unlikely that your non-residential income per student FTE could be increased given that at £31,422 you fall at and around the upper quartile levels compared to your selected peers. Your performance in this area may reflect the lower student numbers at your institution compared to your peers, and the specialist nature of the courses provided at your institution.

With respect to your residential income per bed space, whilst this has increased by 8.2% between 2005/06 and 2006/07, at £2,781 you fall below the lower quartile levels compared to the Royal Veterinary College peers and University of London peers (of £2886 and £3,808 respectively) and between the lower quartile and median when compared to the All UK Peer Group (of £2,476 and £2,955 respectively). Whilst this may suggest that there is potential to increase your income from this source, and remain competitive against your peers, in reality the potential to do so may be limited given the relatively poor condition of your residential estate (see Section 6).

Total backlog affordability is a ratio of income divided by the funding required to bring the estate into good condition and compliance with legislation. At 1.65, and despite having increased by 99% between 2005/06 and 2006/07, your score for this ratio is low, and places you below the lower quartile levels compared with all your selected peers. This implies a greater exposure to risk and indicates that you may be less able to afford your backlog requirements than the majority of your peers.

#### Space Analysis

Overall, despite having a higher allocation of space than many of your peers, which may be a reflection of the nature of the courses you provide, you have reduced your space allocation over the past three years. Your net: gross ratio suggest that you have less 'dead' space than your peers, and your academic space utilisation rate suggests an efficient use of the space you have.

- Your ratio of net to gross internal area improved by 7.7% between 2005/6 and 2006/7 and falls at 84%. At this level, you fall above the upper quartile when compared to all your selected peer groups at 79% (All UK), 80% (UoL) and 83% (RVC) respectively. Your performance in this area suggests that you have a lower proportion of 'dead' space than the majority of your peers. Only one institution within the Royal Veterinary College peers has a higher ratio.
- Whilst influenced by the nature of courses provided a lower space: student ratio generally indicates a more efficient use of space. Having fallen between 2004/05 and

2006/07, at 33.04 m<sup>2</sup> your total non-residential NIA per student FTE falls considerably above the upper quartile level for all your selected peer groups at 11.41m<sup>2</sup> (All UK ), 12.59 m<sup>2</sup> (UoL) and 19.67m<sup>2</sup> (RVC) respectively. Likewise at 19.26 m<sup>2</sup>, your academic space per student FTE also falls above the upper quartile levels of all your selected peers at 6.68 m<sup>2</sup> (All UK),7.5m<sup>2</sup> (UoL) and 14.91 (RVC) respectively. Despite the high levels of space allocated, both ratios have decreased over the past three years, which would suggest that there might be room for further improvements in this area.

- You have also reduced your office space per academic staff since 2004/05, this having fallen by 30.1% between 2005/06 and 2006/07 to 20.68m<sup>2</sup>. Whilst at this level, you remain around the upper quartile level for all selected peers at 16.70m<sup>2</sup> (All UK), 16.56m<sup>2</sup> (UoL) and 17.57m<sup>2</sup> (RVC), and this would suggest that there may be potential for further decreasing the space allocated to this function. However, the considerable reduction in space that you have made has resulted in your being more in line with your peers.
- Having fallen from 43% between 2004/05 and 2005/06, your utilisation of teaching space increased again by 12.5% between 2005/6 and 2006/7 to 36%. At this level it falls around the median to upper quartile level compared with your selected peers, which would suggest that, you are making efficient use of your space compared with the majority of your peers.

#### **Building Quality and Maintenance**

Overall the condition of your estate, both non-residential and residential would suggest cause for concern and a requirement for greater investment both maintenance and capex in order to prevent further deterioration.

Having increased by 5.5% between 2005/6 and 2006/07, at 58% your percentage of non-residential property in 'good' condition falls around the lower quartile levels compared to all your selected peers. 3% of your non-residential estate has become inoperable between 2005/06 and 2006/07. Despite this the functional suitability of the non-residential estate at 82% has further increased by 18% between 2005/06 and 2006/07, falling at the upper quartile levels compared with your selected peers.

- The condition of your residential estate has fallen by 52% between 2005/06 and 2006/07 and at 36%, you fall below the lower quartile level for all your selected peer groups. As with your non-residential estate, 3% of your residential state is in inoperable condition. The condition of your residential estate would suggest some cause for concern and that investment will be needed to ensure it remains attractive to students. Despite its condition, the functional suitability of your residential space remains high at 100% having remained at this level from 2004/05. This places you at and above the upper quartile levels compared to your peers
- Given the concerns highlighted with respect to the condition of your estate, having increased by 139% between 2005/06 and 2006/07 at £74.18 your capital expenditure per gross square metre you fall below the lower quartile level of University of London peers (£81.47), between the lower quartile and median for Royal Veterinary College peers (£62.23 and £83.38 respectively) and just above the median of the All UK group (£69.58). As with maintenance costs, given the condition of your estate it is likely that further increases in capital expenditure will be required to prevent further deterioration. However, your backlog affordability ratio would suggest that this might be difficult to achieve.

#### **Energy and Estate Sustainability**

- Continuing the trend seen from 2004/05 to 2005/06, your energy consumption has risen by 1% from 2005/06 to 2006/07. At 281.10kW/h, your energy consumption per gross square metre ranges from below the lower quartile level to between the median and upper quartile levels compared to your peers. Although there was only a minimal increase in consumption between 2005/06 and 2006/07, every effort should be made to maintain or reduce your current consumption levels.
- Despite having fallen by 8% between 2005/06 and 2006/07, at 12,646.4 kWh per student FTE you are consuming substantially more energy per student FTE when compared to the majority of your peers. However, as with energy consumption per square metre, whilst every effort should be made to continue to reduce your consumption in this area,

this result may reflect your lower student numbers compared to the majority of your peers, and the nature of the courses provided.

- Your water consumption per square metre gross has increased by 31.3% between 2005/06 and 2006/07, which follows an increasing usage trend between 2004/05 and 2005/06. At 1.26m<sup>3</sup> you fall at or above the upper quartile levels for all selected peers with only one other institution within Royal Veterinary College peer group and four institutions within the University of London peers provided a higher consumption in 2006/07.
- Having fallen between 2004/05 and 2005/06 your notional energy emissions per student FTE increased by 5% between 2005/06 and 2006/07. At 3,645.64 kg CO<sub>2</sub> your notional energy emissions per student FTE fall above the upper quartile level for all your selected peers at 1,604.84kg CO<sub>2</sub> (All UK), 2,242.73kg CO<sub>2</sub> (UoL) and 2,580.55kg CO<sub>2</sub> (RVC) respectively.
- Having increased by 208% from 0.83 tonnes between 2004/05 and 2005/06 to 2.57 tonnes per student FTE between 2005/06 and 2006/07, your waste per student FTE falls considerably above the upper quartile level compared to all selected peers at 0.25 tonnes (All UK), 0.33 tonnes (RVC) and 0.46 tonnes (UoL). This may suggest that either there was a particular reason for the increase between 2005/06 and 2006/07 or potentially a data error. If this is not the case, given that all institutions are seeking to reduce waste produced, every effort should be made to review ways to reduce waste consumption per student in forthcoming years.
- Given the considerable increase in waste produced between 2005/06 and 2006/07, somewhat surprisingly, the amount of waste recycled has fallen by 67% over the same period. In 2005/06, the reported level of waste recycled was 100%. This level fell by 67% to 33% of waste being recycled between 2005/06 and 2006/07. This may mean either that the type of waste produced during this period changed to items less suited to recycling, or potentially a data error/change of interpretation of the definition of what was recycled in one of the years has skewed the figures. Despite this, your performance in this area is encouraging compared to the majority of your peers, and at your current level of 33% you fall around the median to upper quartile levels compared your peers.

#### COST ANALYSIS

#### **Ratio of Total Property Costs to HEI Income**

Total property costs reflect the total revenue costs of occupying space held for an estate, site or building and at around £4.9 m your total property cost for your institution has increased by 5.3% between 2005/6 and 2006/7. In the context of your income, total property costs account for approximately 10.4% of your HEI income, this ratio having fallen by approximately 7% between 2005/6 and 2006/07. This decrease places at the median level compared to all your selected peer groups



#### Non-Residential Total Property Costs per Student FTE

At £3,079, your non-residential total property cost per student FTE has fallen by 5.1% between 2005/6 and 2006/07. The places you around the upper quartile level when compared to University of London Peers (UoL £2,938), and Royal Veterinary College peers (RVC £3,124), but considerably above the upper quartile level compared to the All UK peer group (£1,278). This result most likely reflects that the nature of your college and that at 1,597 your student FTE numbers in 2006/07 fall considerably below the lower quartile level when compared to all UK peers of 3,809 students FTE.



#### Non-Residential Total Property Costs per Square Metre

Having fallen by 2.9% from 2005/06, at £93 your non-residential total property costs per square metre of net space places you below the lower quartile level compared to all your selected peers at £98 (All UK), £103 (RVC) and £117 (UoL) respectively.



#### **Total Income per Square Metre**

Despite a 7.3% increase in your total income per square metre net internal area from 2005/6 to 2006/7, at £857, you fall below the lower quartile levels for Royal Veterinary College peers at £966.80 and £1,466.11 for University of London and at the lower quartile level of £857.76 All UK peers. This may suggest that you need to review the provision of your space to ensure whether it is too generous. However, it is recognised that this may reflect the nature of the courses you provide.



#### Non-Residential Income per Student FTE

Your non-residential income per student FTE increased by 4.6% between 2005/6 and 2006/07 and at £31,422 you fall considerably above the upper quartile levels for All UK peers of £14,3056, below the upper quartile level of £36,367 for Royal Veterinary College peers, and above the upper quartile level for University of London peers of £29,306.

#### **HEI Income per Bed Space**

Your residential income per bed space has increased by 8.2% between 2005/06 and 2006/07. At £2,781 this places you below the lower quartile levels compared to the Royal Veterinary College peers and University of London peers (of £2885.62 and £3,807.80 respectively) and between the lower quartile and median when compared to the All UK Peer Group (of £2,476.39 and £2,955.53 respectively) . This may suggest that there is potential to increase your income from this source, and remain competitive against your peers. However, the potential to do so may be limited given the relatively poor condition of your residential estate (see Section 6).

#### Income as a proportion of IRV

Your income as a proportion of IRV has decreased by 6% from 2005/06 and at 3.0 you fall at the upper quartile level compared to All UK and Royal Veterinary College peers (both at 2.97), between the median and upper quartile compared to University of London peers (2.84 and 3.35 respectively).

#### 8.4 Total Backlog Affordability

Your score for this ratio, which compares institutional income with the funding required to bring the estate into good condition and compliance with legislation, demonstrates that your ability to afford your backlog requirements is less than the majority of your peers. A high score is preferable since it means that the HE estate should readily able to meet its backlog requirements, and implies less exposure to risk. Despite having increased by 99% between 2005/06 and 2006/07, your total backlog affordability score, at 1.65, is low. At this level you fall below the lower quartile level for all selected peer groups at 2.63 (All UK), 3.08 (RVC) and 3.65 (UoL) respectively.



The following table provides a summary cost analysis for the Royal Veterinary College in comparison with its selected peers.

	Royal Veterinary College	%	UK median (ALL)	%	University of London Peer Group (UoL) <sup>3</sup>	%	Royal Veterinary College Peer Group (RVC) <sup>4</sup>	%
al property cost (£) actual (non- dential)	£4,917,910	+5.3%	-	-	-	-	-	-
al property cost: income ratio (combined)	10%	-7%	9.7%	-1%	10%	-	10%	-
al property cost per student FTE (non- dential)	£3,079	-5.1%	£883	+6.6%	£1,833	+18.6%	£2,545	+43%
al property cost per m² (non-residential)	£93	-2.9%	£114	+6.9%	£156	+20%	£137	+20%
ome per m <sup>2</sup> (combined)	£857	+7.3%	£1,043	+13%	£1,767	+7.5%	£1,183	+21%
ome per student FTE (non-residential)	£31,422	+4.6%	£9,161	+10.2%	£19,927	+2.5%	£20,484	+13.5%
ome per Bedspace (residential)	£2,781	+8.2%	£2,956	+5.9%	£3,925	+6.1%	£3,233	+8.5%
ome as a proportion of IRV (combined)	3.0	-6%	2.39	-	2.84	+0.7%	2.57	-14.4%

#### Cost analysis Royal Veterinary College vs. Peer groups

l backlog affordability score	1.65	+99%	4.93	+16.8%	7.56	+10%	3.51	+14.3%

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#### SPACE ANALYSIS

#### 10.0

#### 8.5 Net to Gross Internal Area

Your ratio of net to gross internal area improved by 7.7% between 2005/6 and 2006/7 and falls at 84%. At this level, you fall above the upper quartile when compared to all your selected peer groups at 79% (All UK), 80% (UoL) and 83% (RVC) respectively. Your performance in this area suggests that you have a lower proportion of 'dead' space than the majority of your peers. Only one institution within the Royal Veterinary College peers had a higher ratio in 2006/07.





# 8.6 Non-Residential NIA per Student FTE

Whilst your space allocation per Student FTE has fallen since 2004/05, and by 2.2% between 2005/06 and 2006/07, at 33.04 m<sup>2</sup> your total non-residential NIA per student FTE falls considerably above the upper quartile level for all your selected peer groups at 11.41m<sup>2</sup> (All UK), 12.59 m<sup>2</sup> (UoL) and 19.67 m<sup>2</sup> (RVC) respectively. Generally a lower space: student ratio generally indicates a more efficient use of space, and whilst this is influenced by the nature of courses provided, your improvement over the past three years suggests there may be room for further improvement in this area.



# 8.7 Academic Space per Student FTE

It would appear likely that your performance in this ratio is influenced by the nature of the courses provided at your institution. Having fallen by 0.6% between 2005/06 and 2006/07 at 19.26 m<sup>2</sup> your academic space per student FTE falls above the upper quartile levels of all your selected peers, 6.68m<sup>2</sup> (All UK), 7.5m<sup>2</sup> (UoL) and 14.91m<sup>2</sup> (RVC) respectively. Again, this would suggest that there might be further potential to reduce your space allocation in this respect.



# 8.8 Residential Space per Bed Space

Your performance in this area indicates that compared to the majority of your peers, space allocated for this purpose is relatively high. You had a 5.3% increase in residential space per bed space from 2005/6 to 2006/07. At 21.76 m<sup>2</sup>, you are below the lower quartile level of 22.45m2 of Royal Veterinary College peers, at the lower quartile level of 21.76 m<sup>2</sup> of the University of London peers, and above the upper quartile level compared to the All UK at 20.73 m2 respectively. This would suggest there may be opportunities to reduce your space allocation.



# 8.9 Utilisation of Teaching Space

Having fallen from 43% between 2004/05 and 2005/06, your utilisation of teaching space increased again by 12.5% between 2005/6 and 2006/7 to 36%. At this level it falls around the median level of 38% compared to University of London Peers, at the upper quartile level of 36% for All UK peers, and above the upper quartile level of 27% compared with Royal Veterinary College peers. Whilst this would suggest there is room for further improvement, you are making efficient use of your space compared with the majority of your peers.



# 8.10 Office Space per Academic Staff Member

Having fallen between 2004/05 and 2005/06 your office space per academic staff member decreased by a further 30.1% between 2005/06 and 2006/07 and now falls at 20.68m<sup>2</sup>. Whilst at this level, you remain around the upper quartile level for all selected peers at 16.70m<sup>2</sup> (All UK), 16.56 m<sup>2</sup> (UoL) and 17.57 m<sup>2</sup> (RVC). This would also suggest that there may be potential for further decreasing the space allocated to this function. However, the considerable reduction in space that you have made has resulted in your being more in line with your peers.


The following table provides a summary space analysis for the Royal Veterinary College compared with its selected peers.

#### University of Royal Royal Veterinary London Peer median College College Peer Group (UoL)3 (ALL) Group (RVC) Total net internal space (m<sup>2</sup>) (combined) 60,086 \_ \_ \_ -\_ 84% 70% Ratio of net to gross internal space 73% -2.2% 71% -2.7% -5.4% Non-residential space per student FTE 33.04 7.58 -3.4% 9.91 -8.7% 15.67-12.7% (m<sup>2</sup>) Academic space per student FTE (m<sup>2</sup>) 19.26 4.26 -3.4% 5.99 -5% 9.73 +6.1% Residential space per bedspace (m<sup>2</sup>) 21.76 17.66 -1.3% 18.54 -15.8% 25.04 +7% Utilisation rate (teaching space) 36% 25% -7.4% 38% +18.8% 0.23 \_ 20.68 13.61 -3.2% 14.90 -2.9% 15.25 -0.3% Office NIA per academic staff member (m<sup>2</sup>)

### Space analysis Royal Veterinary College vs. Peer groups

**BUILDING QUALITY & MAINTENANCE** 

# 8.11 Buildings in Condition A and B as a Percentage of Gross Internal Area

With a 5.5% increase between 2005/6 and 2006/07, at 58% your percentage of non-residential property in 'good' condition falls around the lower quartile level for All UK peers (55%), at the lower quartile level compared to University of London peers (58%) and just below the lower quartile level of the Royal Veterinary College peers at 65%. Furthermore, and having risen by 3% between 2005/06 and 2006/07, 3% of your non-residential estate is in inoperable condition, which places you at the upper quartile level compared to all your selected peers.

Functional suitability of the non-residential estate at 82% has further increased by 18% between 2005/06 and 2006/07, falling at the upper quartile levels of 85% (RVC), 86% All UK and 86% (UoL) respectively.



### 8.12 Condition of Residential Space as a Percentage of Gross Internal Area

At 36% and having fallen by 52% between 2005/06 and 2006/07, you fall below the lower quartile level for all your selected peer groups at 36% (UoL), 41% (RVC) and 55% (All UK) respectively. As with your non-residential estate, having risen by 3% between 2005/06 and 2006/07, 3% of your residential state is in inoperable condition. This places you at the median level compared to University of London peers and at the upper quartile level for All UK and Royal Veterinary College peers. The condition of your residential estate would suggest some cause for concern and that investment will be needed to ensure it remains attractive to students. Despite its condition, the functional suitability of your residential space remains high at 100% having remained at this level from 2004/05. This places you at and above the upper quartile levels compared to your peers at 92% (All UK) 85% (UoL) and 93% (RVC) respectively.





# 8.13 Cost to upgrade to 'good condition' as a % of IRV (non residential)

Your cost to upgrade to 'good' condition as a percentage of IRV has risen by 48% between 2005/06 and 2006/07. At 23%, you fall above on the upper quartile level when compared to all selected peer groups at 15% (All UK), 9% (UoL) and 12% (RVC) respectively.



# 8.14 Total Maintenance Costs per Square Metre Gross Internal Area

Your total maintenance costs per gross square metre of the whole estate rose by 13.1% between 2005/6 and 2006/7. This may be a reflection of the stage of the life cycle of your buildings. At £22.78, you fall below the lower quartile level compared to University of London peers (£24.56) and Royal Veterinary College peers (£23.49) and around the median when compared to All UK peers (£22.09). Given the comparatively poor condition of your estate, this suggests that increased maintenance may be needed in future.



# 8.15 Maintenance Costs and Capex to Insurance Replacement Value (IRV)

Your combined maintenance and capital costs as a percentage of IRV has increased by 33% to 4.0%. At this level you fall just below the indicative ratio of 4.5% (or above) as outlined in JM

Consulting's report 'Future needs for capital funding in higher education: a review of the future of SRIF and learning and teaching capital' to HEFCE of September 2006<sup>5</sup> advising that annual expenditure should be close to an indicative 4.5% (or above) of an institutions Insurance Replacement Value.

# 8.16 Capital Expenditure per Square Metre (combined)

Despite having increased by 139% between 2005/06 and 2006/07, at £74.18 your capital expenditure per gross square metre falls below the lower quartile level of University of London peers (£81.47), between the lower quartile and median for Royal Veterinary College peers (£62.23 and £83.38 respectively) and just above the median of the All UK group (£69.58). As with maintenance costs, given the condition of your estate it is likely that further increases in capital expenditure will be required to prevent further deterioration.



The following table provides a summary condition analysis for the Royal Veterinary College compared with its selected peers.

### Building quality & maintenance Royal Veterinary College vs. Peer groups

	Royal Veterinary College	%	UK median (ALL)	%	University of London Peer Group (UoL) <sup>3</sup>	%	Royal Veterinary College Peer Group (RVC)	%	
pace in 'good' condition – non- ntial	58%	+5.5%	71%	-	81%	+10.6%	72%	+10.8%	
pace in 'good' condition – ntial	36%	-52%	75%	+10.3%	66%	n/a	59%	-	

e functionally suitable – non- itial	82%	+18.8%	78%	+2.6%	82%	+7.9%	78%	-4.9%
e functionally suitable – itial	100%		84%	+15.1%	98%	n/a	90%	+150%
ace inoperable – non-residential	3%	+3pp	1%	-	1%	+1pp	2%	-
ace inoperable – residential	3%	+3pp	0%	-	3%	+3pp	1%	+1pp
nance Costs and Capex to nce Replacement Value (IRV) ined)	4%	+33.3%	5%	-	4%	-42.8%	5%	+25%
upgrade to 'good' condition as V (non-residential)	23%	-48%	9%	-11.2%	5%	-16.6%	11%	+22.2%
nance costs per gross square combined)	£22.39	+13.1%	£22.09	+12.6%	£34.24	16.8%	£35.08	+11.2%
expenditure per gross square combined)	£74.18	+139%	£69.58	+27.3%	£108.55	-17.7%	£83.38	+30.8%

### **ENERGY & ESTATES SUSTAINABILITY**

#### **Energy Consumption per Square Metre**

Continuing the trend seen from 2004/05 to 2005/06, your energy consumption has risen by 1% from 2005/06 to 2006/07. At 281.10 kW/h your energy consumption per gross square metre falls below the lower quartile level compared to Royal Veterinary College peers (290.89kWh), around the median for the University of London peers (278.49kWh) and between the median and upper quartile levels for All UK (256.89kWh and 308.50 kWh respectively). Although there was only a minimal increase in consumption between 2005/06 and 2006/07, every effort should be made to maintain or reduce your current consumption levels.



#### **Energy Consumption per Student FTE**

Despite having fallen by 8% between 2005/06 and 2006/07, at 12,646.4 kWh you are consuming substantially more energy per student FTE when compared to the majority of your peers. You fall considerably above the upper quartile level for All UK (6,249.55 kWh), University of London peers (7,303.40kWh), and around the upper quartile level for Royal Veterinary College peers (11,163.72 kWh). As with energy consumption per square metre, whilst every effort should be made to continue to reduce your consumption in this area, your performance in this area may reflect your lower student numbers compared to the majority of your peers, and the nature of the courses provided.



#### Water Consumption per Square Metre Gross

Your water consumption per square metre gross has increased by 31.3% between 2005/06 and 2006/07, which follows an increasing usage trend between 2004/05 and 2005/06. At 1.26m<sup>3</sup> you fall at or above the upper quartile levels for all selected peers at 1.17m<sup>3</sup> (All UK), 1.21m<sup>3</sup> (RVC) and 1.26 m<sup>3</sup> (UoL) respectively. Only one other institution within Royal Veterinary College Peers and four institutions within the University of London peers have a higher consumption.



### Notional Energy Emissions per Gross Square Metre

Your notional energy emissions per gross square metre have increased by 15% between 2005/6 and 2006/07 and at 81.24 kgCO2 psm you fall at the median compared to University of London peers, around the median compared to Royal Veterinary College peers (86.98kgCO2) and at the upper quartile level for All UK (81.27kgCO2).



### Notional Energy Emissions per Student FTE

Having fallen between 2004/05 and 2005/06 your notional energy emissions per student FTE increased by 5% between 2005/06 and 2006/07. At 3,645.64 kg CO2 your notional energy

emissions per student FTE fall above the upper quartile level for all your selected peers at 1,604.84 (All UK), 2,242.73 (UoL) and 2,580.55 (RVC) respectively.



#### Waste Mass per Student FTE

Having increased by 208% from 0.83 tonnes between 2004/05 and 2005/06 to 2.57 tonnes per student FTE between 2005/06 and 2006/07, you fall considerably above the upper quartile level compared to all selected peers at 0.25 tonnes (All UK), 0.33 tonnes (RVC) and 0.46 tonnes (UoL). This may suggest that either there was a particular (known) reason for the increase between 2005/06 and 2006/07 or potentially a data error. If this is not the case, given that all institutions are seeking to reduce waste produced, every effort should be made to review ways to reduce waste consumption per student in forthcoming years.

#### **Proportion of Recycled Waste**

Given the considerable increase in waste produced between 2005/06 and 2006/07, somewhat surprisingly, the amount of waste recycled has fallen by 67% over the same period. In 2005/06, the reported level of waste recycled was 100%. This level fell by 67% to 33% of waste being recycled between 2005/06 and 2006/07. This may mean either that the type of waste produced during this period changed to items less suited to recycling, or potentially a data error/ change of interpretation of the definition of what was recycled in one of the years has skewed the figure. Despite this, your performance in this area is encouraging compared to the majority of your peers, and at your current level of 33% you fall around the median level compared to Royal Veterinary College peers (32%), at and above the upper quartile level compared to University of London (33%) and All UK (36%) respectively.



The following table provides a summary energy and sustainability analysis for the Royal Veterinary College in comparison with its selected peers.

	Royal Veterinary College	%	UK median (ALL)	%	University of London Peer Group (UoL) <sup>3</sup>	%	Royal Veterinary College Peer Group (RVC) <sup>4</sup>	%
rgy consumption (kWh) actual เe	20,200,100	+2%	_	_	_	-	-	-
rgy consumption (kWh) per are metre (gross)	281.10	+1%	256.89	-6.8%	278.49	-1.2%	329.03	-0.3%
rgy consumption (kWh) per lent FTE	12,646.40	-8%	3,364.56	-7.3%	5,374.51	-18.1%	9,287.14	-8.5%
ter consumption (m³) per square re (gross)	<b>1.26</b> m <sup>3</sup>	+31.3%	0.91	-1.1%	0.91	-5.2%	1.10	+18.3%
ter consumption (m³) per student	56.70	+19.8	11.80	-1.5%	16.94	-18.6%	26.67	+11.9%
ional energy emissions (kg CO2) square metre (gross)	81.24	+15%	67.66	-7.4%	81.24	-4%	86.98	+16%
ional energy emissions (kg CO2) student FTE	3,654.65	+4.8%	897.41	-3.1%	1,434.41	-18.7%	2,232.03	-9.6%
ste mass (tonnes) per student FTE	2.57	+209.6%	0.13	-	0.17	+112.5%	0.23	-8%
ste mass (tonnes) per square re (gross)	0.06	+238%	0.01	-	0.01	-	0.01	-
ycled waste proportion (%)	33%	-67%	23%	+85.7%	28%	+180%	32%	+23.1%

### Energy & estates sustainability Royal Veterinary College vs. Peer groups

#### **END NOTES**

<sup>1</sup> For further information on EMS see <u>www.opdems.ac.uk</u>

<sup>2</sup> For further information on investment property databank see <u>www.ipd.com</u>

<sup>3</sup> The University of London Peer Group contains the following institutions

- 1. Birkbeck College
- 2. Central School of Speech and Drama
- 3. City University, London
- 4. Courtauld Institute of Art
- 5. Goldsmiths College, University of London
- 6. Heythrop College
- 7. Institute of Education
- 8. Kings College London
- 9. London Business School
- 10. London School of Economics and Politics
- 11. London School of Hygiene and Tropical Medicine
- 12. Queen Mary, University of London
- 13. Royal Academy of Music
- 14. Royal Holloway, University of London
- 15. Royal Veterinary College
- 16. School of Oriental and African Studies
- 17. School of Pharmacy
- 18. St George's Hospital Medical School
- 19. University College London

<sup>4</sup> The Royal Veterinary College Peer Group contains the following institutions

- 1. London School of Hygiene and Tropical Medicine
- Royal Agricultural College
  Royal Veterinary College
- 4. School of Phamacv
- 5. University of Bristol
- 6. University of Cambridge
- 7. University of Edinburgh
- 8. University of Glasgow
- 9. University of Liverpool

<sup>5</sup> 'Future needs for capital funding in higher education: a review of the future of SRIF and learning and teaching capital'. Report to HEFCE by JM Consulting. September 2006, available on the web at www.hefce.ac.uk under Publications/Research reports'.

# APPENDIX B CAMPUS PLANS









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