

The University of Edinburgh - Easter Bush Campus
Campus Appraisal



January 2016



THE UNIVERSITY of EDINBURGH
Easter Bush Campus

The University of Edinburgh - Easter Bush Campus Appraisal

01/16

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Left: Aerial photograph of the Easter Bush Campus (2012).

1 Introduction

Introduction

Page \ Park Architects were engaged by the University of Edinburgh in July 2015, to conduct a campus appraisal of their Easter Bush Campus lying to the south of Edinburgh city centre.

The campus may be considered as one of four satellite settings to the University's Central Quarter, the others being King's Buildings, BioQuarter and the Western General.

The Easter Bush Campus accommodates multiple partners who are outlined in the adjacent page. With such a wide range of development partners a coordinated approach to development is essential.

The site has seen significant development and investment in the past five years and the plans for further investment on the campus are considerable. In support of these plans, a masterplanning exercise has been undertaken to guide development on the campus, and this campus appraisal provides complimentary analysis in support of the masterplan and to guide future iterations.

Right: Extract from the Royal (Dick) School of Veterinary Studies Website.

Stakeholders & partners

Overview

Easter Bush Campus acts as a hub of activity bringing together partners and other stakeholders within the region and beyond.

 <p>EBRC The Easter Bush Research Consortium brings together The Roslin Institute, the Moredun Research Institute and Scotland's Rural College. › EBRC</p>	 <p>BBSRC Biotechnology and Biological Sciences Research Council is a UK Research Council and is the largest UK public funder of non-medical bioscience. › BBSRC</p>
 <p>NIB The National Institutes of Bioscience bring together 8 research institutes to ensure the effective delivery of a National Strategy in Bioscience. › NIB</p>	 <p>Scottish Government The Scottish Government Riaghaltas na h-Alba › Scottish Government</p>
 <p>SRUC Scotland's Rural College exists to deliver comprehensive skills, education and business support for Scotland's land-based industries. › SRUC</p>	 <p>Biosciences KTN The Biosciences KTN helps accelerating UK economic growth by stimulating and supporting business-led innovation. › Biosciences KTN</p>
 <p>Midlothian Council Midlothian Council is a very committed partner in the development of the Easter Bush Campus. › Midlothian Council</p>	 <p>Industry Links Links with local, national and international industries and campus support from Edinburgh Research & Innovation. › Industry Links</p>
 <p>Moredun Moredun is committed to promoting animal health and welfare through research and education. › Moredun</p>	 <p>Local Science Parks A number of science parks are located close to the Easter Bush campus. › Local Science Parks</p>

2 \Location & Context

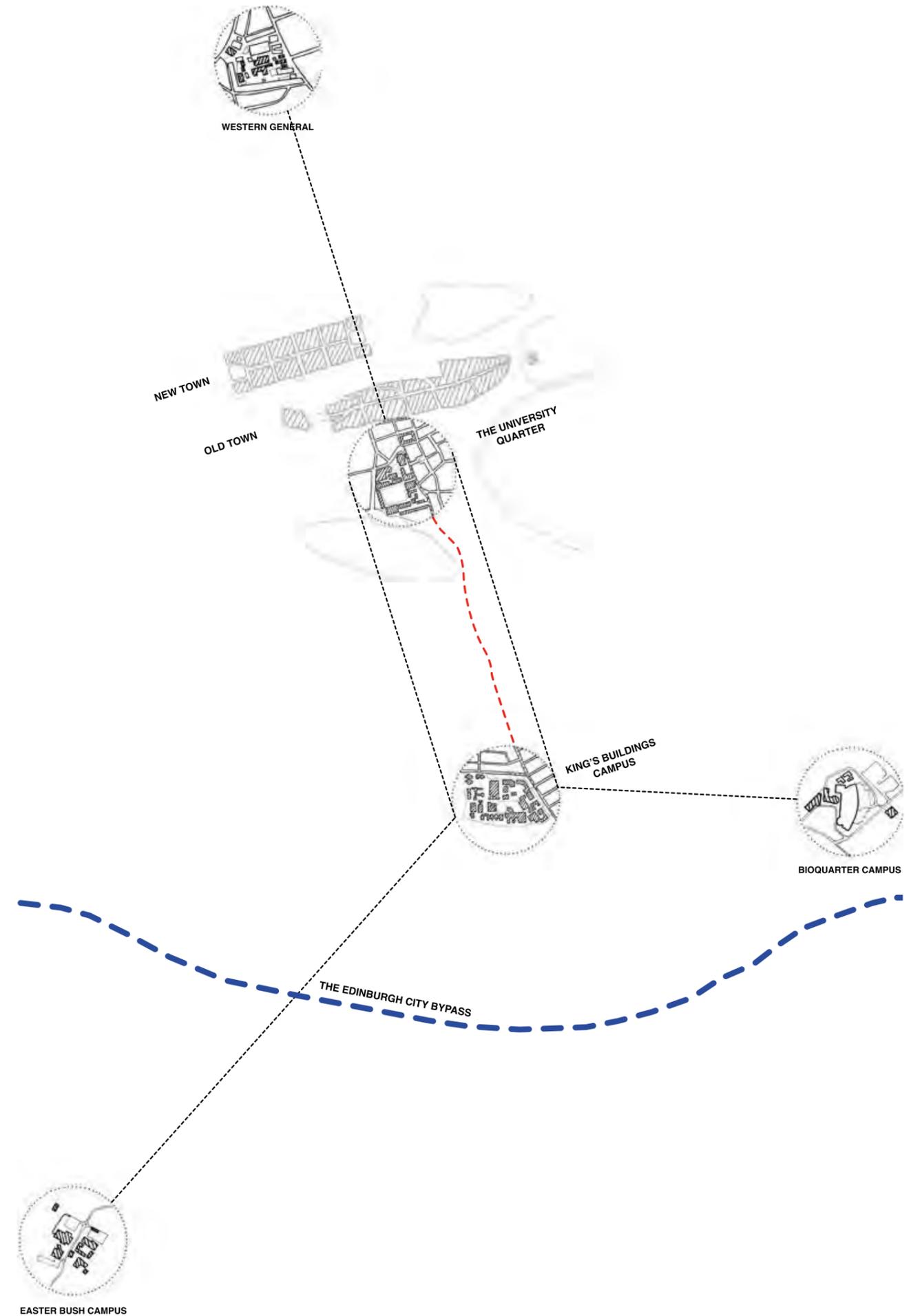
The University in the City

The University of Edinburgh can be considered a multi-campus university, composed of four primary satellites - King's Buildings, BioQuarter, Easter Bush and the Western General – focused around the Central University Quarter. Each component has a unique built setting quality, and spatial experience determined by its location, evolution and purpose.

The Central University Quarter is ingrained into the city fabric, and thus provides a typically urban experience. The King's Buildings Campus floats on the periphery, at a junction between the Green Belt and the residential expansion that developed around it, giving it a suburban, semi-rural character.

Easter Bush and Little France have stronger connections, both physically and mentally, to the King's Buildings Campus than the Central University Quarter, with each having different levels of semi-rural character resulting from their development strategies and settings.

Right: Diagram of the multi-campus University of Edinburgh in relation to the city as a whole.



The College of Medicine & Veterinary Medicine - Vision

The College of Medicine and Veterinary Medicine delivers internationally leading research, education and innovation in the core disciplines of medicine, veterinary medicine and biomedical sciences. At its heart are two schools – Edinburgh Medical School and Royal (Dick) School of Veterinary Studies – which are home to five cross-disciplinary Research Institutes.

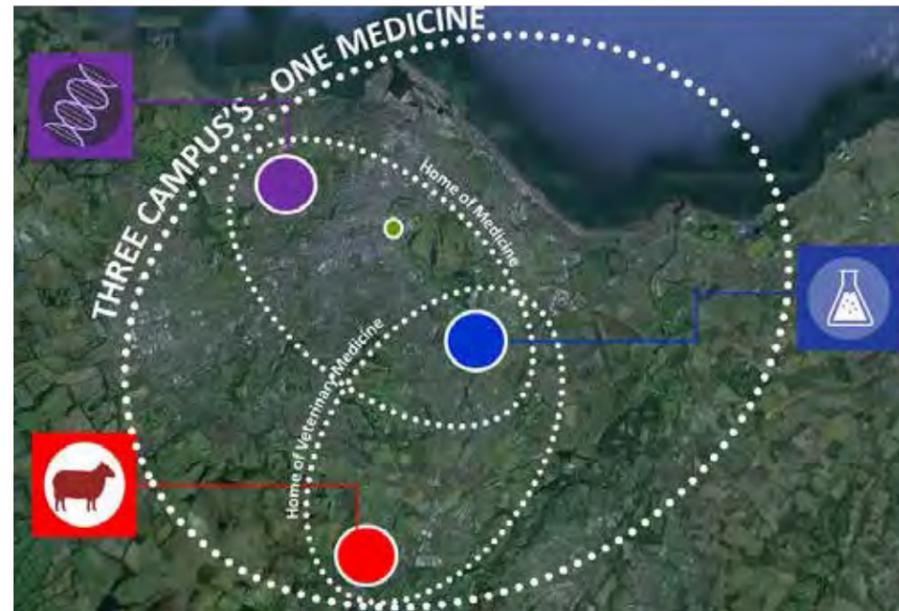
From medical and veterinary beginnings in 1726 and 1823 respectively, the estate that encompasses the College has grown from a small presence in the heart of the city to its current spread across four sites in Edinburgh and Midlothian.

The estate includes a diverse range of which provide accommodation for both teaching and research activities; these date from the 18th century to the present day and are used for a wide variety of purposes such as dry and wet laboratories, study and office space, state of the art imaging suites, equine surgery theatres and other extremely specialised facilities.

The vision for development of the estate is one of the key enablers in driving the growth of the College towards its ambition of world top 10 status in the three core disciplines. It is also a critical part of the framework to engender a coherent sense of community for students and staff wherever they are in our physical and digital environments.

Three Campus's One Medicine:

The College operates within three distinctive, vibrant and multi-partnered medical campuses, linking to related locations across the University, NHS and associated organisations. The campuses separately and together create a community that integrates internationally leading research with innovative education and commercial partnerships in an environment deeply embedded in clinical practice.



CMVM Estates Priorities

Our vision will be achieved through our estates Capital Programme that will underpin College priorities –

Overarching Priorities:

1. Providing the highest quality environment for research, teaching and learning across our 3 campuses, building on best practice within and beyond the University.
2. Delivering the physical environments that create a cross-site community for students and staff with a highly visible, coherent and attractive identity.
3. Reaching and engaging the public with our rich past, vibrant present and exciting future of medicine, veterinary medicine and life sciences research and impact on society.
4. Working in close partnership with organisations and sectors that enhance the opportunities to deliver teaching, learning and knowledge transfer in integrated and innovative campuses.

Medicine Priorities:

1. Delivering a connected BioQuarter Campus in partnership with NHS Lothian, Scottish Enterprise and City of Edinburgh Council, to reunite research and teaching from central areas with groups at this site.
2. Enhancing and consolidating the Western General Hospital site to strengthen its key research themes and integrated education facilities, aligned with local NHS Lothian clinical priorities.
3. Opening up medicine and biomedical sciences to the public, to inspire current and future scientists and clinicians and to increase public understanding and shaping of medical research and innovation in healthcare.
4. Defining the sense of place and community for BioQuarter Campus, in the context of this urban medical environment.

BioQuarter Campus

- Institute for Regeneration and Repair
- Usher Institute of Population Health Sciences and Informatics
- Sense of place
- New Edinburgh Medical School
- Leisure and Amenities for staff and students

Western General Campus

- MRC HGU
- IGMM Expansion
- Molecular Pathology Centre

Central

- Amazing Bodies @ The Cutting Edge

Veterinary Medicine Priorities:

1. Continued development of the Easter Bush estate to achieve improved integration of education, research, clinical service and commercial space.
2. Replace and enhance facilities for large animal and equine research and care.
3. Completion of public realm and social facilities to define the sense of place and community on this semi-rural campus.
4. New build to reflect aspirations for European Centre of Excellence in animal biosciences, food security, agriculture and global health.

Easter Bush Campus

- Roslin Innovation Centre & Campus HUB
- Equine Diagnostics, Surgical and Critical Care Unit
- Large Animal Research and Imaging Facility
- Additional clinical space for Hospital for Small Animals
- New capabilities for new agricultural initiatives.
- Centralisation of cross-College support functions – CAT3, TRF, freezers and archives

College Estates Overview

Developing our estate is one of the key enablers for the College to achieve world top 10 ranking in all three disciplines of medicine, veterinary medicine and biomedical sciences. It is an essential component of our strategy to:

- Enhance our students' experience of world leading education,
- Optimise the outcomes and impact of our internationally leading research and
- Maximise the benefits of co-location with clinical services, commercial partners and policy makers

Our objectives across all projects are to ensure that individually and together they provide environments that are:

- Commensurate with our peers
- Sustained and sustainable
- Enhancing of the student and staff experience
- Creating co-designed learning spaces
- Research spaces which are benchmarks in their field
- Protecting our heritage
- Supporting the economy
- Creating places where people want to be

Easter Bush Masterplan

In 2008 a masterplanning process was undertaken by the University of Edinburgh Estates Department, in association with Oberlanders Architects, to control the development of the Easter Bush Campus over the next 20 years.

The masterplan gained approval in principle by Midlothian Council and has evolved over the last 6 years to the current point (see opposite). Six major projects having been completed, and a further eight either under construction, or at planning stage.

The area covered by the masterplan has provided the context, and area, for an appraisal to be carried out on the existing form of the campus.



Right: Easter Bush Campus Masterplan (2015).

Campus Connections

The Easter Bush Campus is located approximately 7 miles from the University Central Area. Recently the campus has been developed to be more accessible on foot, by bike and by public transport.

There are three Lothian Buses - Services 15, 37 & 67 - that service the campus directly, stopping outside the Veterinary Teaching Building, with a number of additional buses servicing the stops at Gowkley Moss Roundabout and Easter Howgate Farm, both an approximate 20 minute walk to the Easter Bush Campus. These services connect the Easter Bush Campus to King's Buildings, Central Area, and even the Western General.

It takes approximately 35 minutes to cycle to the Easter Bush campus from the Central Area, cycling at a moderate speed. The suggested cycle routes, shown on the map opposite, were generated from CycleStreets.net with the fastest route measured at 6.5 miles and the quietest route at 7.25 miles. Sections of these routes make use of off-road cycle paths, but other sections are on very busy, hazardous, sections of roads.

The proximity of the campus to Edinburgh Airport is important given its National Institute status, and by car Edinburgh Airport is only a 20 minute drive away. Alternatively, Airlink shuttle buses run frequently throughout the day and night seven days a week between the city centre and the Airport. The journey takes approximately 25 minutes.

On the campus itself there are a number of facilities to support sustainable travel, detailed in the following section on Transport & Movement.

Lothian Buses

	Service 3
	Service 7
	Service 8
	Service 15
	Service 24
	Service 29
	Service 31
	Service 37
	Service 38
	Service 41
	Service 42
	Service 47
	Service 49
	Service 67

University Shuttle Buses

	Central Area - King's Buildings
	BioQuarter - Western General

Cycle Routes

	Fastest Route
	Quietest Route



Right: Route Map of the Bus and Cycle routes that connect the 5 University Campuses.

The Surrounding Area

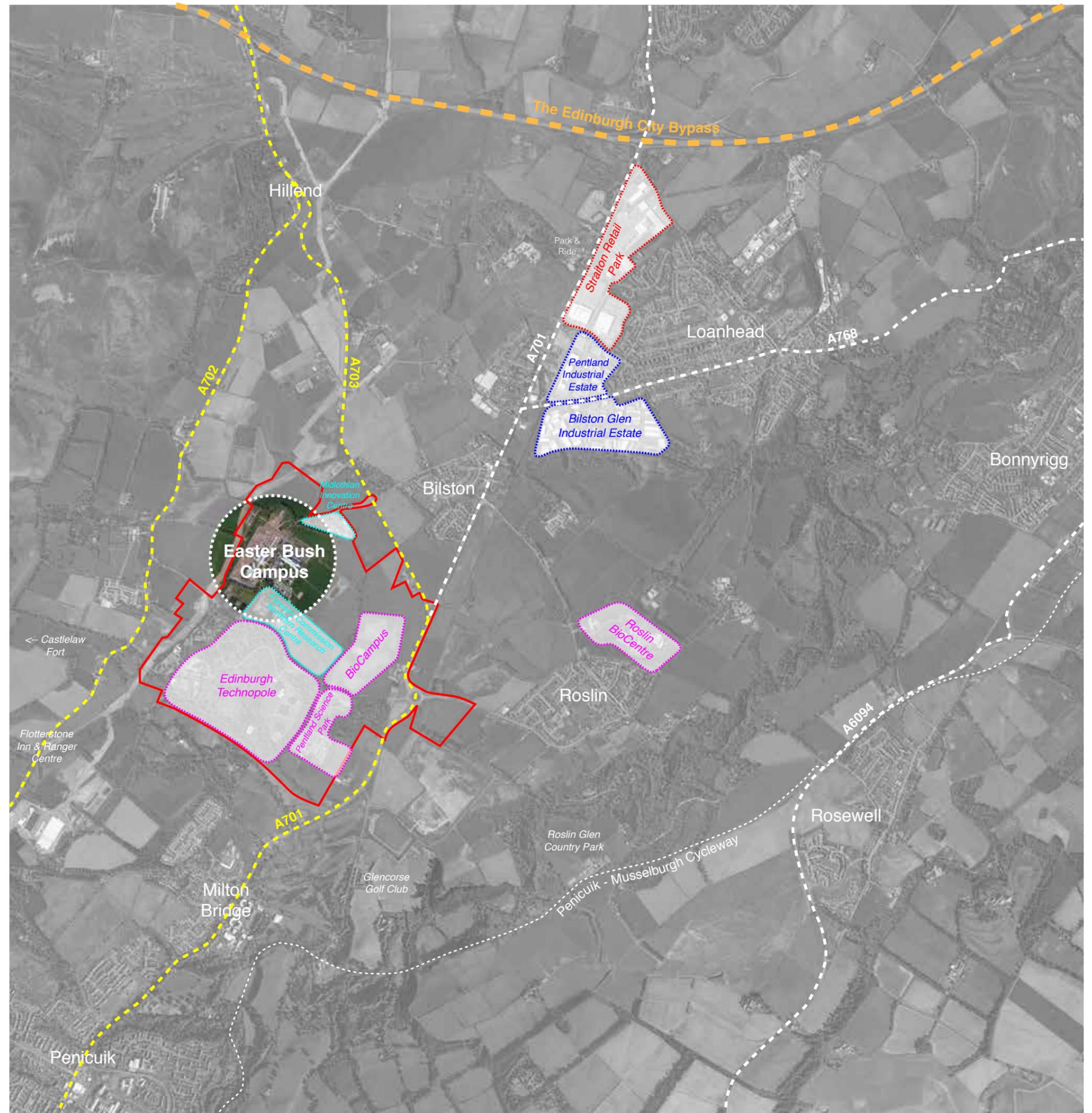
The Easter Bush Campus is a 59.6ha site, sitting within an extended area of University of Edinburgh land ownership (see Appendix 1). Located approximately 8 miles south of Edinburgh City Centre, and 2.5 miles from the Edinburgh City Bypass, the campus is home to the University of Edinburgh's Royal (Dick) School of Veterinary Studies, as well as the Roslin Institute and Scotland's Rural University College (SRUC).

The campus sits within the 'Bush Estate' - outlined in red - a multi-disciplinary partnership between universities, research institutes, BBSRC, the Scottish Government, science parks, Scottish Enterprise, and Edinburgh City Council. Of the seven science parks within the wider Edinburgh City region, four are located in Midlothian, adjacent to the Easter Bush Campus, these are; Edinburgh Technopole, BioCampus, Pentlands Science Park and Roslin BioCentre. The campus location makes it part of an important cluster of science, research and technology organisations. A further 11 plots of land in the area have been reserved for the development of Knowledge-Based industries (see Section 4 - Planning Context).

Although the campus sits within the heart of the Green Belt, and the surrounding countryside is predominantly agricultural land, there are clear signs of the campus' proximity to Edinburgh, for example, the network of roads that feed through the area, connecting several commuter towns and villages. There are also a number of commercial, industrial and recreational features present in the area consistent with an urban fringe landscape.

Significant surrounding land-uses include; Roslin Glen Country Park, Flotterstone Inn (pub) and nearby Ranger Centre (a significant access point to the Pentland Hills), Castlelow Fort, Glencorse Golf Club, the Penicuik to Musselburgh Foot & Cycleway, Straiton Retail Park, Pentland Industrial Estate, Bilston Industrial Estate and Straiton Park & Ride.

Right: Easter Bush Campus in relation to the surrounding towns/villages and significant land uses.



Landscape Character

The landscape character of the area local to the Easter Bush Campus is strongly influenced by the meeting of two distinct geographies – the lowland river valley of the North Esk, and the range of hills that forms the Pentlands, a prominent hill range visible throughout the surrounding area.

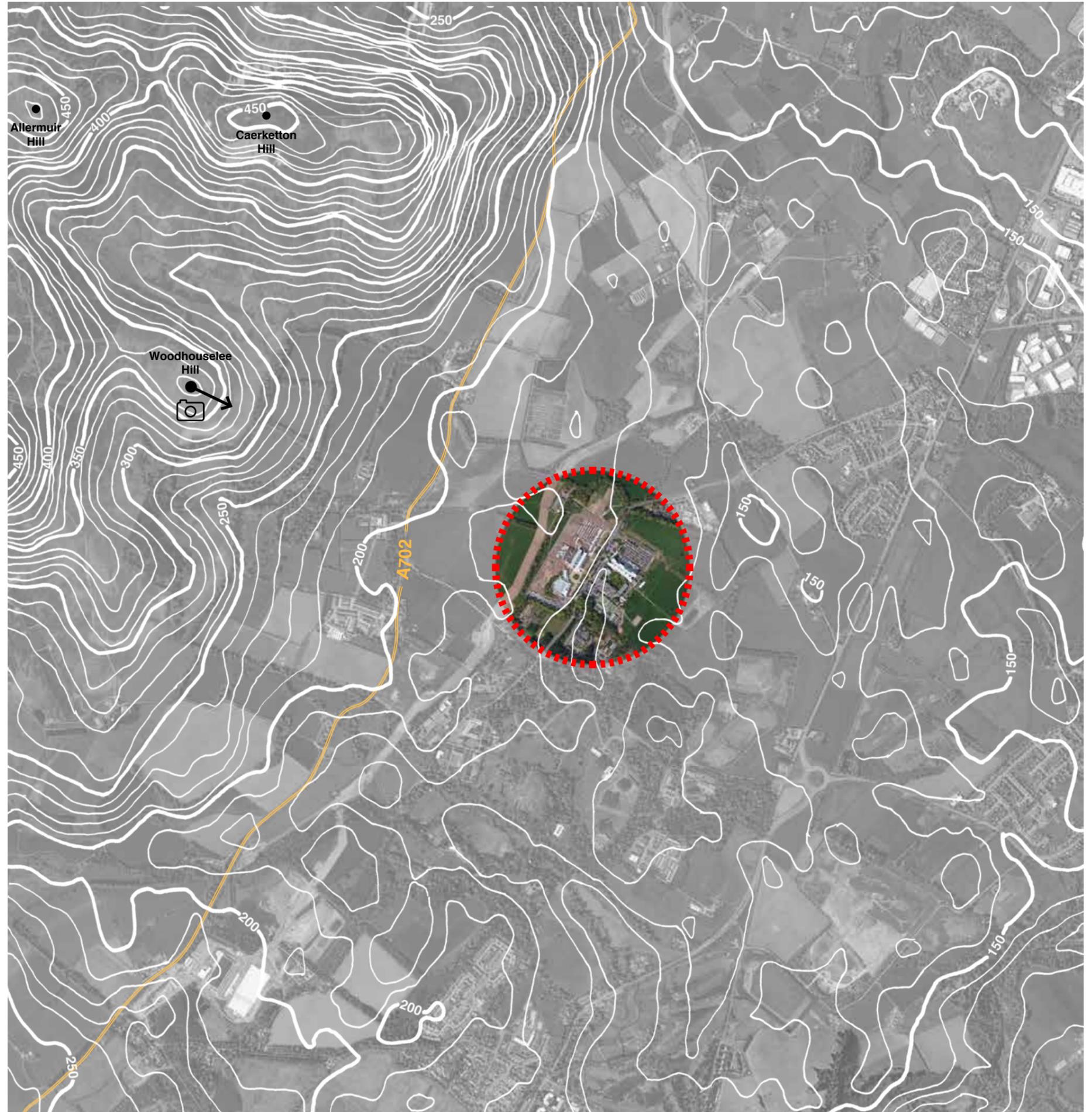
The Easter Bush Campus is sited at the foot of the Pentland Hills, on the south-east side, on a relatively flat site. The campus itself, has a slight downwards slope from west to east with a level change of approximately 20m across the entire site.

Despite the scale of some of the building on the campus (see Section 5 - Built Form), because of the surrounding topography and tree planting, the campus has limited impact on the skyline. It can be seen from the A702 when approaching from both the north and the south, and from vantage points on the Pentland Hills.



Right: Topographical Setting of the Easter Bush Campus.

Above: Photograph of the Easter Bush Campus from Woodhouselee Hill



Study Area

For the purposes of this appraisal, the area to be analysed will be restricted to the 59.6ha site that is covered by the Easter Bush Masterplan. The site comprises four distinct areas, including;

- the area either side of Bush Farm Road that is already built upon (A).
- the grazing fields on the north and east sides which currently house horse and cattle (B)
- the land to the south adjacent to the Bumstead Building (C).
- a sheep enclosure to the north (D).



Right (Top): Boundary of the Campus Appraisal Study Area.

Right (Bottom): View to the South-East, showing fields included in the study area boundary.

Above: The Easter Bush Masterplan.

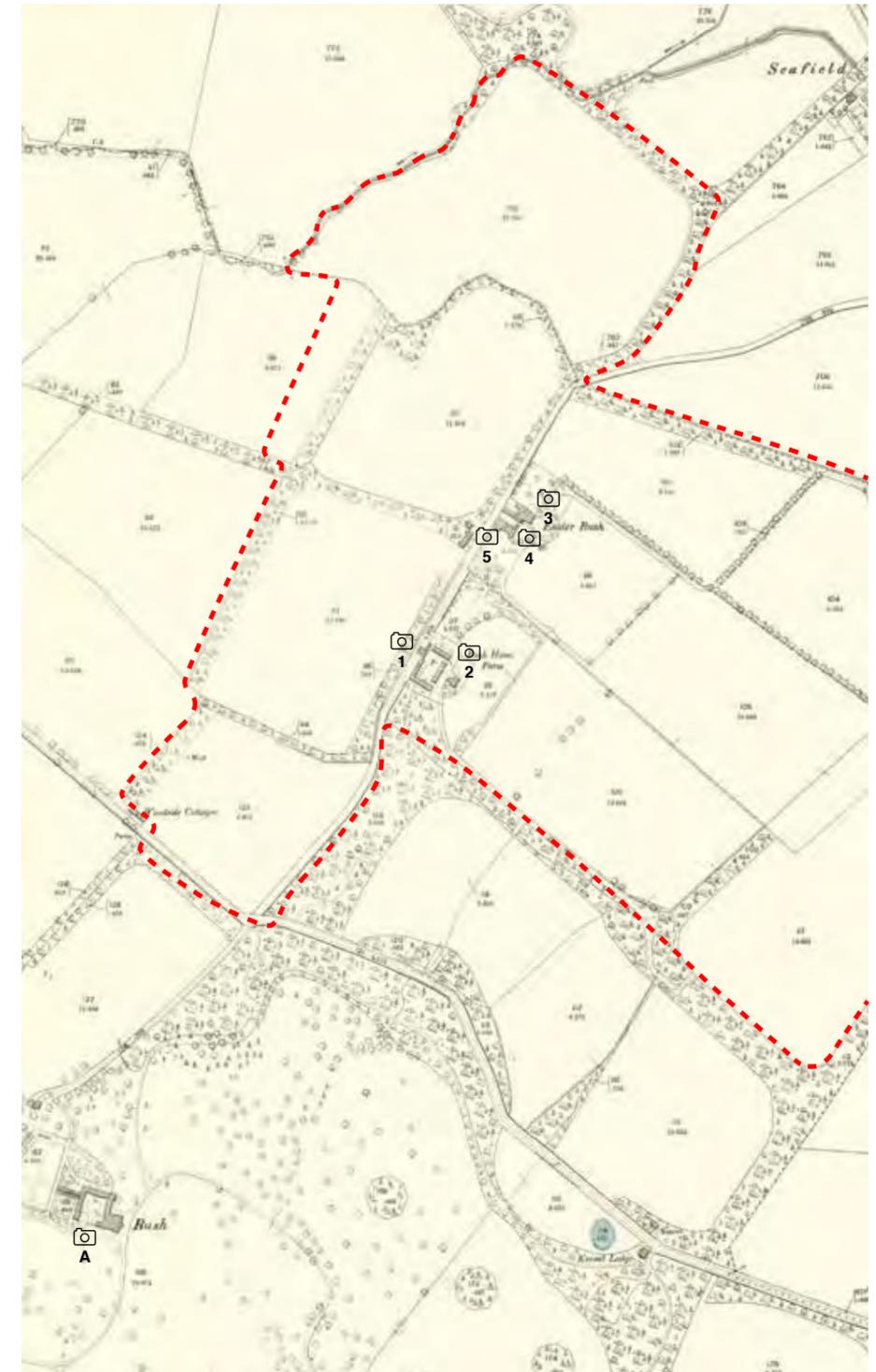
3 \ Heritage

Historic Setting

Historically, the site on which the Easter Bush campus sits was agricultural land. The first mention of 'Bush' which related to the near-by Bush Estate, and the Category A listed Bush House (A) which lay at its centre, was recorded on maps as early as 1812. Buildings at Bush Home Farm and Easter Bush appeared by 1892.

Of the buildings shown on the 1892 map, those at Bush Home Farm remain on the campus as they originally existed (1 & 2). Some of the buildings on the east side of the road at Easter Bush have been replaced over the years, and recent extensions were added in 2010 as part of the campus redevelopment to create a Campus Service Centre, but they retain much of their original agricultural character (3 & 4). The building on the west side of the road also remains as houses (5).

Despite their agricultural heritage, none of the buildings on the Easter Bush campus are listed.



Right: Extract from 1892 OS Map of Edinburghshire

Above: The Bush House, now part of the Edinburgh Technopole.

History of the Royal (Dick) School of Veterinary Studies

Originally called the Highland Society's Veterinary School, the Royal (Dick) School of Veterinary Studies, as it is now known, was founded by William Dick in 1823. Dick had been providing lectures on 'The Veterinary Art' for four years prior to the founding of the school, but in November 1823, after the Highland Society of Scotland agreed to give financial support to provide regular teaching on the veterinary art, lectures continued to take place at the Calton Convening Rooms, Waterloo Place, and practical classes at the forge at Clyde Street.

In 1829 the School moved to rented accommodation at 8 Clyde Street, and in 1833 the purpose-built accommodation, paid for by Dick, was completed. The buildings around the Clyde Street courtyard now contained an 80-seat lecture theatre, a small animal hospital, dissecting room, stables, a farrier's forge, and a museum. A fire in 1853, allowed Dick to knock down an adjacent tenement and build a three-storey extension, completed in 1865. By 1887 the College owned the entire site, converting houses along the east-side of the courtyard to teaching classrooms.

In 1916, the College relocated to the purpose built Summerhall, designed by David McArthur. The brief for such a building was highly complex, requiring spaces with highly dissimilar functions. The main teaching and administrative block followed typically Beaux-Arts planning, in which the main elements of the brief

were strung out along corridors on an E plan. The lower level blocks to the rear of the site consisted of two parallel ranges enclosing a 'trotting track', or courtyard, for exercising animals.

A first extension was added to Summerhall by 1940, designed by Lorrimer & Matthew, it created a new north wing to the original building. In the 1960s Reich & Hall were commissioned to undertake an options appraisal to explore the viability of further expansion of the campus. The result was two blocks containing research facilities, laboratories and a small animal clinic, completed in 1973.

Summerhall remained the home of the Royal (Dick) School of Veterinary Studies until 2011, when the school was officially re-consolidated at the Easter Bush Campus.

A number of artefacts have followed the Royal (Dick) School of Veterinary Studies from both Clyde Street and Summerhall, and are now in place at Easter Bush. The horse statue that sat atop the Clyde Street building became somewhat an icon of the Dick Vet, and has followed the School as it moved to Summerhall and has resided at Easter Bush since 2003. The six stained glass window panels within the staircase of Summerhall are displayed in the reception area of the R(D) SVS Teaching Building, alongside the statue of William Dick



Right (Top): Drawing of Edinburgh Veterinary College, Clyde Street, 1833 - 1916.

Right (Middle): William Dick with his students at Clyde Street (early 1860s) & Dick Vet students at Clyde Street Veterinary School (1900), with a statue of William Dick

Right (Bottom): The Royal (Dick) Veterinary College at Summerhall (1916 - 2011).

Above: R(D)SVS artefacts from Clyde Street & Summerhall now in place at Easter Bush (left - right) - The Horse Statue in front of Equine Hospital Reception, Stained glass window panels and Statue of William Dick in R(D)SVS Teaching Building foyer..



History of the Roslin Institute

The Roslin Institute was established in 1993 as a wholly owned but independent institute of the Biotechnology and Biological Research Council. Its antecedents, however, go back to 1919 and are closely linked to animal genetics research at the University of Edinburgh.

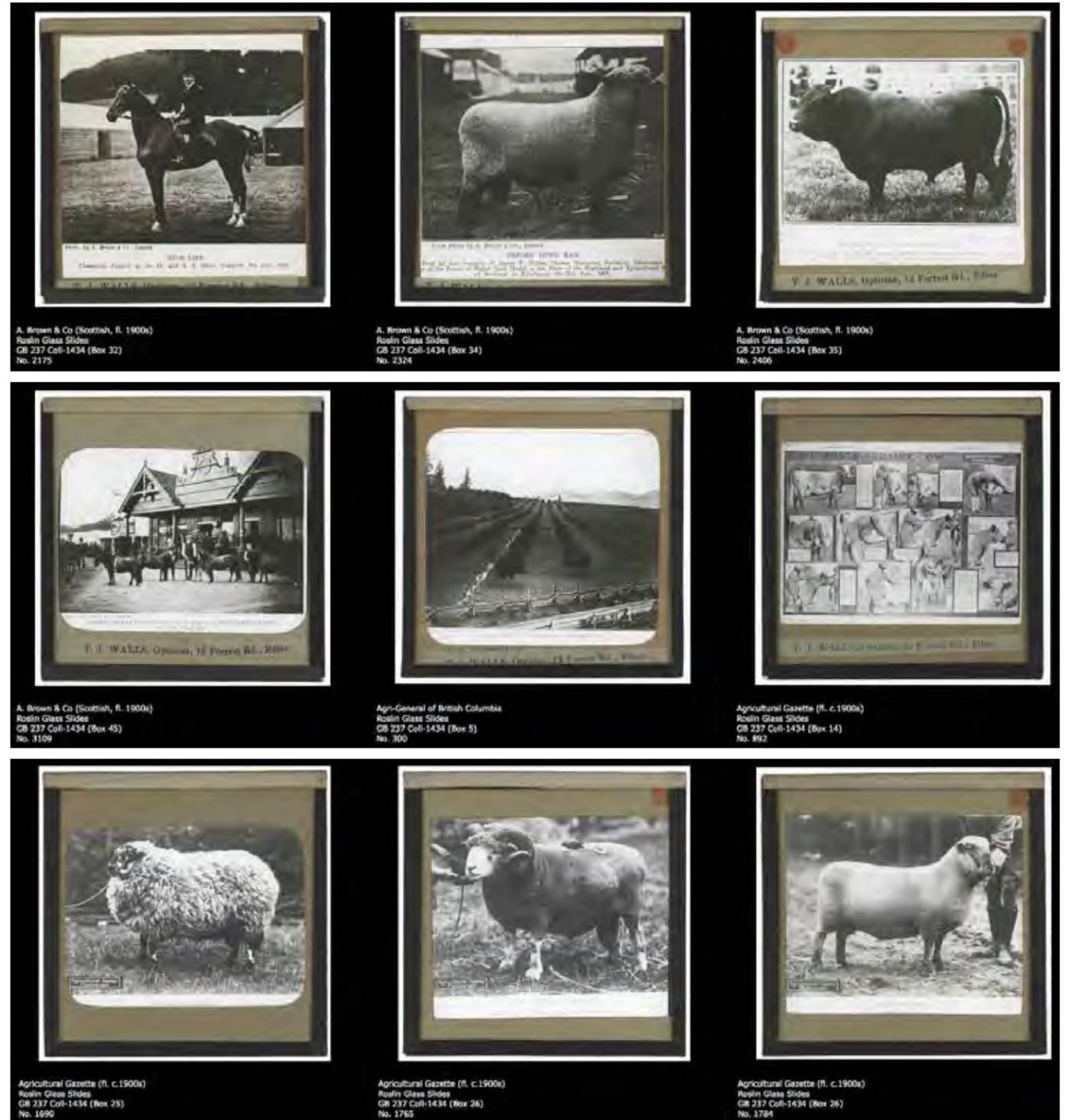
The Roslin Institute traces its origins to the establishment in 1919 of the Institute of Animal Genetics (IAG) by the University of Edinburgh. In 1947, the Agricultural Research Council (later the Agriculture and Food Research Council - AFRC) created a series of publicly funded research organisations to help UK farmers produce more food. In Edinburgh the expertise within the IAG was used to create two new organisations, the Poultry Research Centre (PRC) and the Animal Breeding Research Organisation (ABRO). Within the University of Edinburgh a residual presence was maintained in the form of the Unit of Animal Genetics (UAG).

In 1985, a fundamental review of over 30 AFRC Institutes and Units led to the closure of the UAG and PRC and ABRO were combined with the Institute of Animal Physiology based at Babraham to form the Institute of Animal Physiology and Genetics Research (IAPGR). ABRO staff were progressively relocated onto the PRC site at Roslin to form the Edinburgh Research Station of IAPGR.

In 1992, the AFRC decided that Roslin and Babraham should be developed into independent Institutes, each with its own clearly defined mission. On 1 April 1993, Roslin Institute (named after the local village) was established as an independent, but wholly owned, Institute of the Biotechnology and Biological Sciences Research Council (BBSRC). In 1995 Roslin Institute became a company limited by guarantee and a Scottish Charity sponsored by BBSRC.

In April 2007, Roslin Institute was integrated with the Neuropathogenesis Unit formerly of the Institute for Animal Health, and in April 2008 the combined organisation became a part of the Royal (Dick) School of Veterinary Studies (RDSVS) of the University of Edinburgh.

Right: Selection of the Roslin Institutes archive images that were digitised from glass slides following the integration with the University of Edinburgh





Right: The Roslin Institute at its original site in Roslin, before moving to Easter Bush in 2011.

Campus Evolution

The University of Edinburgh purchased the Bush and Dryden estates in 1947, allocating the land around the farmstead at Easter Bush to the Veterinary College for livestock practical teaching.

In 1962, the university opened a Veterinary Field Station (1) and Centre for Tropical Veterinary Medicine (2) on the land to the south of Home Farm at Easter Bush. These buildings housed clinical teaching facilities, research laboratories and offices as well as lecture theatres, seminar rooms, a refectory and a gym, which saw the facilities of the Royal (Dick) School of Veterinary Studies being split-up for the first time since 1829.

The Hospital for Small Animals (3) opened in 1999 on a site to the south-west of the existing developments, containing clinical consulting rooms, operating theatres, kennels, tutorial rooms and offices.

In 2002, the University purchased Langhill Farm, sited just 2 miles from Easter Bush, it provided improved livestock facilities for the 220 strong herd of dairy cows. The land that had previously been occupied by the livestock, was able to be re-developed, and in 2003 the Equine and Large Ruminant Hospitals (4) opened.

In 2005, the University of Edinburgh approved a detailed proposal to relocate all of the Royal (Dick) School of Veterinary Studies teaching activities to a purpose-built new building amongst the schools state-of-the-art animal hospitals at Easter Bush. Included in this proposal was a physical masterplan, the purpose of which was to kick-started the next phase of development at the Easter Bush Campus.

The first of the masterplan projects to be completed was the Campus Infrastructure (Phase 1) which included a brand new Campus Services Centre, improvements to roads, footpaths and cycle paths, as well as the provision of 765 monitored parking spaces and improved bus services. This was followed by the Riddell Swann Veterinary Cancer Centre, an extension to the Hospital for Small Animals, in 2009.

The Roslin Institute was integrated into the University of Edinburgh in 2008. Following this, 2011 saw the completion of the two largest buildings on the Easter Bush Campus, the Roslin Institute (5) in the north-east corner, and the Royal (Dick) School of Veterinary Studies Teaching Building (6) in the north-west. The completion of the R(D)SVS Teaching Building allowed for the staff and students to be relocated, and vacate Summerhall. For the first time since 1962 all the veterinary facilities, along with the Roslin Institute, were consolidated at one location.

Since that major move, a Conventional Avian Research Unit (7) and Specified Pathogen Free Avian Facility (8) were completed in 2013 & 2014 respectively to support research work. An additional four projects are currently either under-construction, or at planning stage. These include; the Roslin Innovation Centre - HUB Building (9), Campus Infrastructure (Phase 2) & Energy Centre, an Equine Diagnostic, Surgical and Critical Care Unit and a Large Animal Research and Imaging Facility.

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- MACDONALD, A.A., WARWICK, C. & JOHNSTON, W.T. (2011). Early contributions to the development of veterinary education in Scotland. *Veterinary History*: VOL 16: pp. 10-40.
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Images

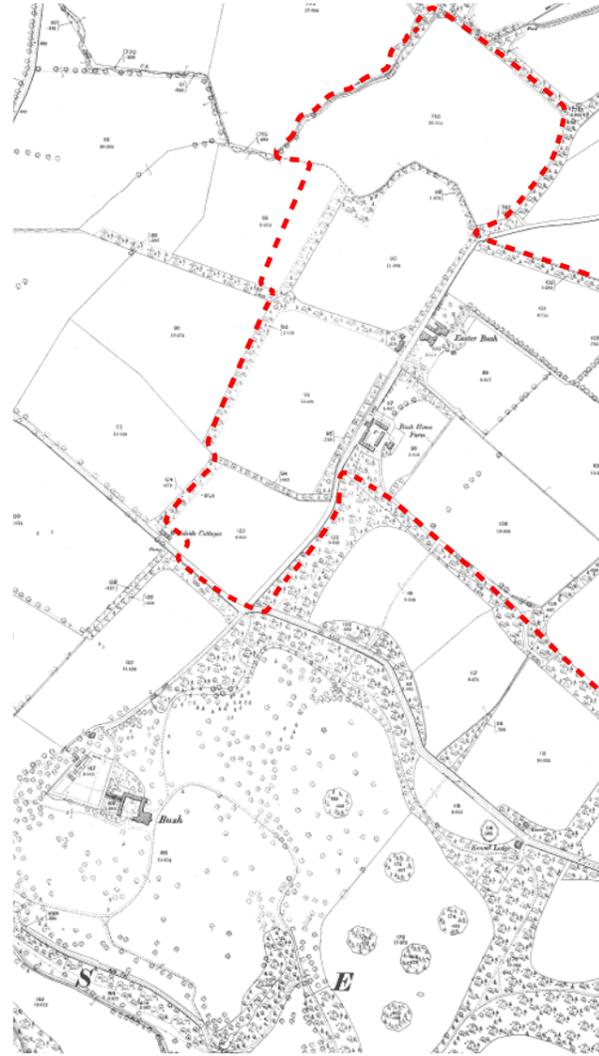
- Canmore; <https://canmore.org.uk>
- The History of the Dick Vet; <https://www.historypin.org>
- National Library of Scotland; <http://maps.nls.uk>



Left - Right: (1) Veterinary Field Station, 1962, (2) Centre for Tropical Veterinary Medicine, 1962, (3) Hospital for Small Animals, 1999, (4) Equine and Large Ruminant Hospitals, 2003, (5) Roslin Institute, 2011, (6) Royal (Dick) School of Veterinary Studies Teaching Building, 2011, (7) Conventional Avian Research Facility, 2013, (8) Specified Pathogen Free Avian Facility, 2014, and (9) Roslin Innovation Centre, n/a.



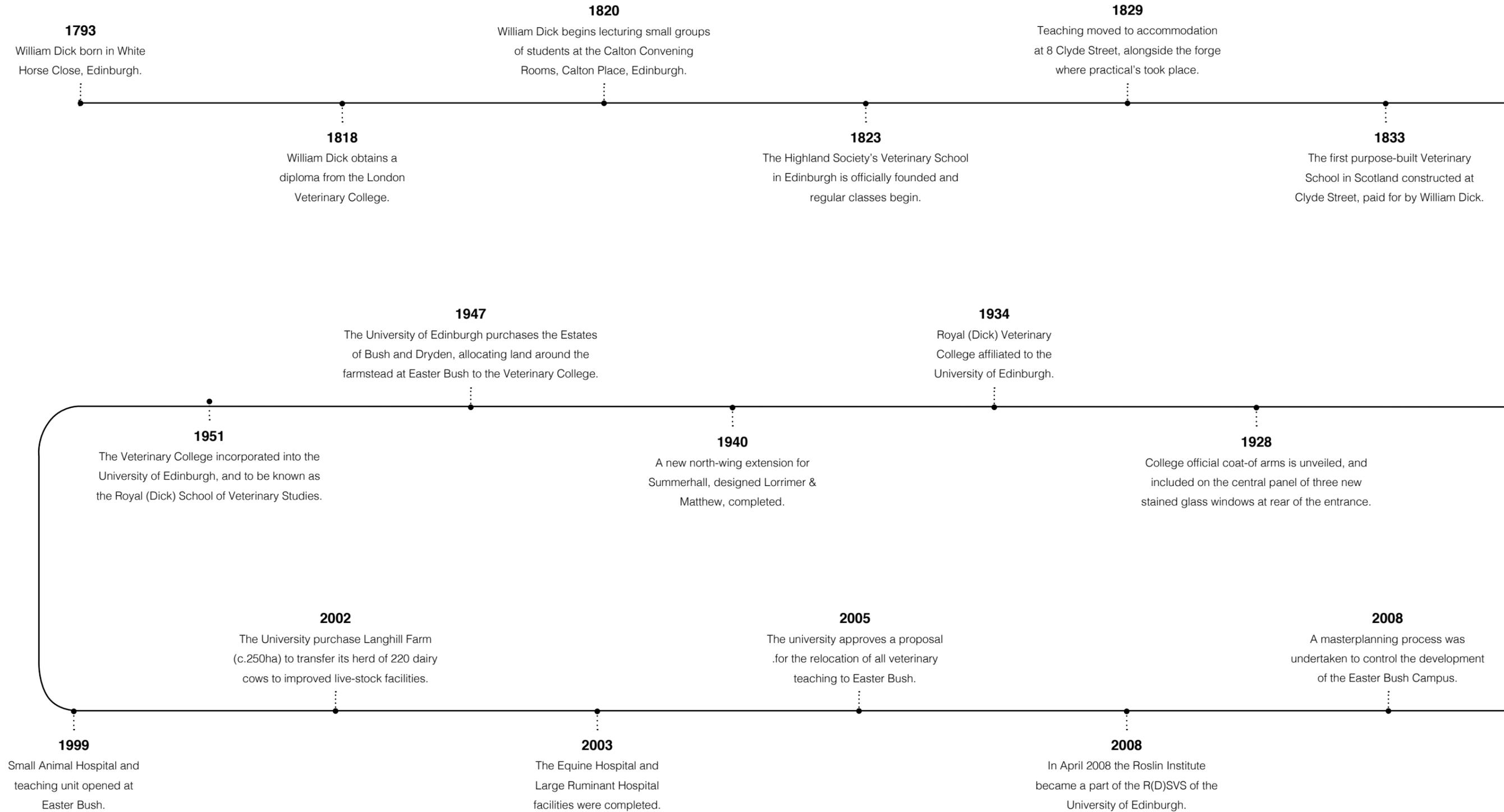
Easter Bush Campus
Appraisal Study Area

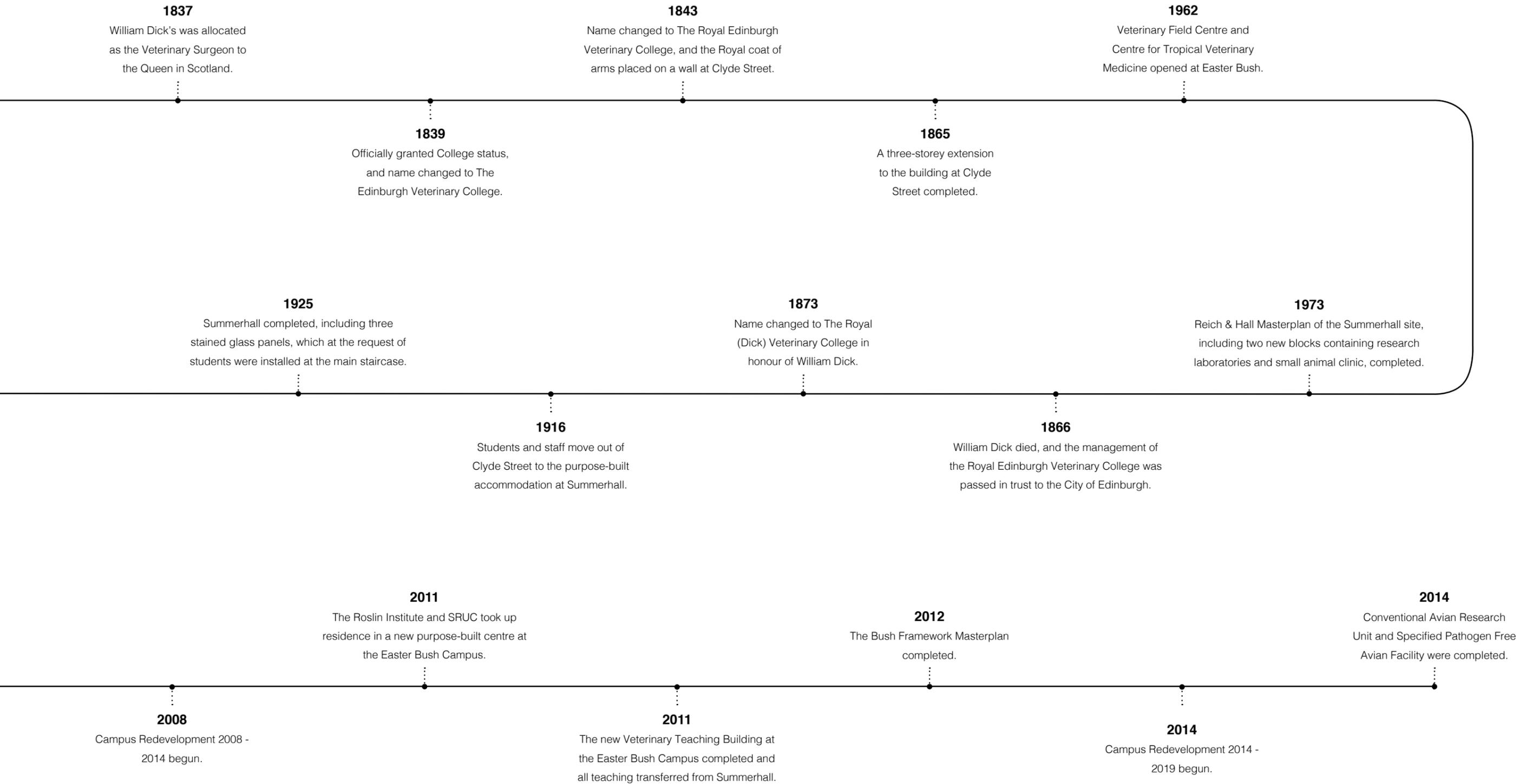


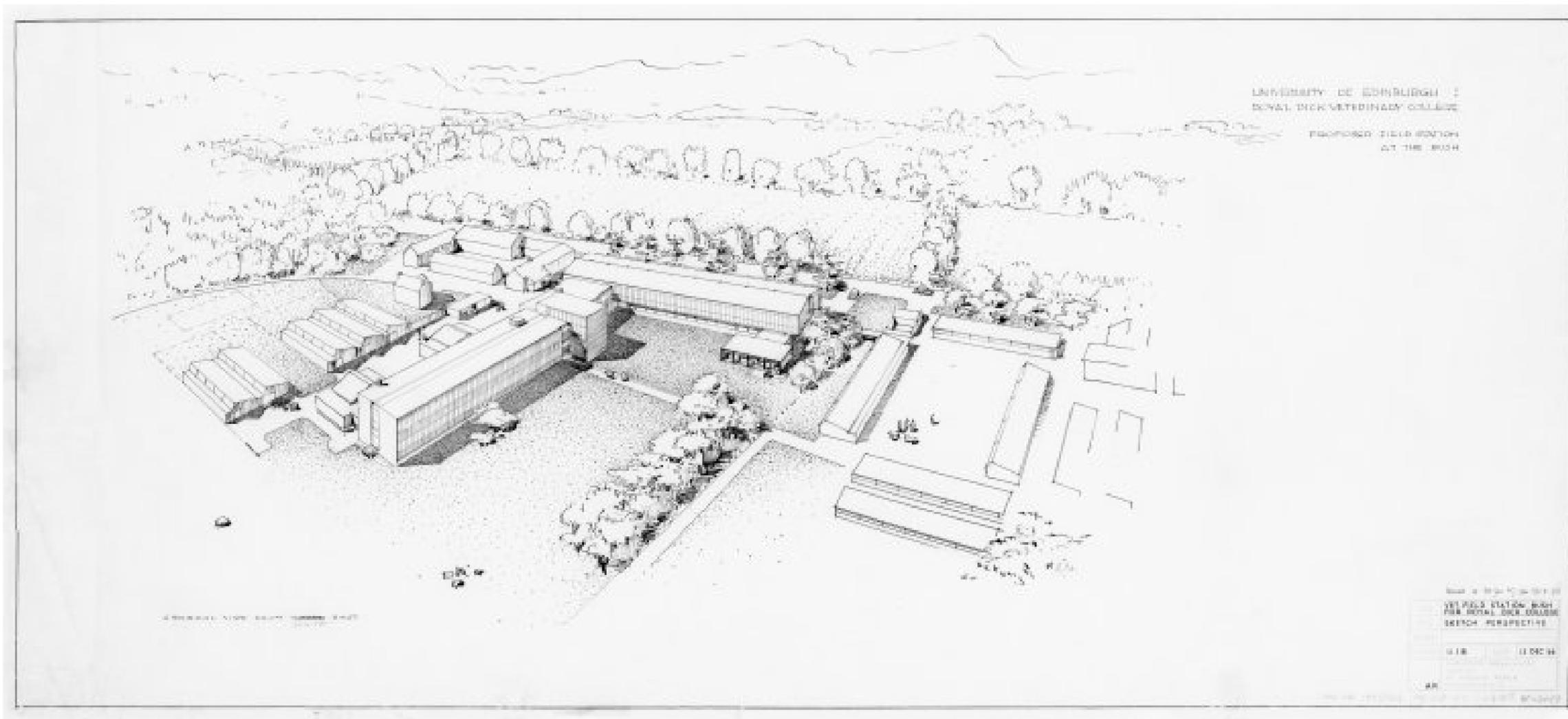
Left - Right: OS maps of Easter Bush in 1950s, 1980s
and Present Day.



Timeline of Events







Top: 'The University of Edinburgh: Royal Dick Veterinary College. Proposed Field Station at the Bush - General view from SE.' by Alan Reich (1956).

Left: 'Easter Bush Veterinary Field Station, oblique Aerial View, taken from SW.' RCAHMS Aerial Photography (1996).

Right: 'General oblique aerial view looking towards the Pentland Regional Park with the scientific research establishment in the foreground, taken from SE.' RCAHMS Aerial Photography Digital (2005)..



Right: 'R(D)SVS Teaching Building and the Roslin Institute under construction.

4 \Planning Context

Midlothian Local Plan (2008)

The Easter Bush Campus lies within the boundaries of Midlothian Council, and the current development plan that governs the area comprises the Strategic Development Plan for Edinburgh and South-East Scotland, and the Midlothian Local Plan (2008).

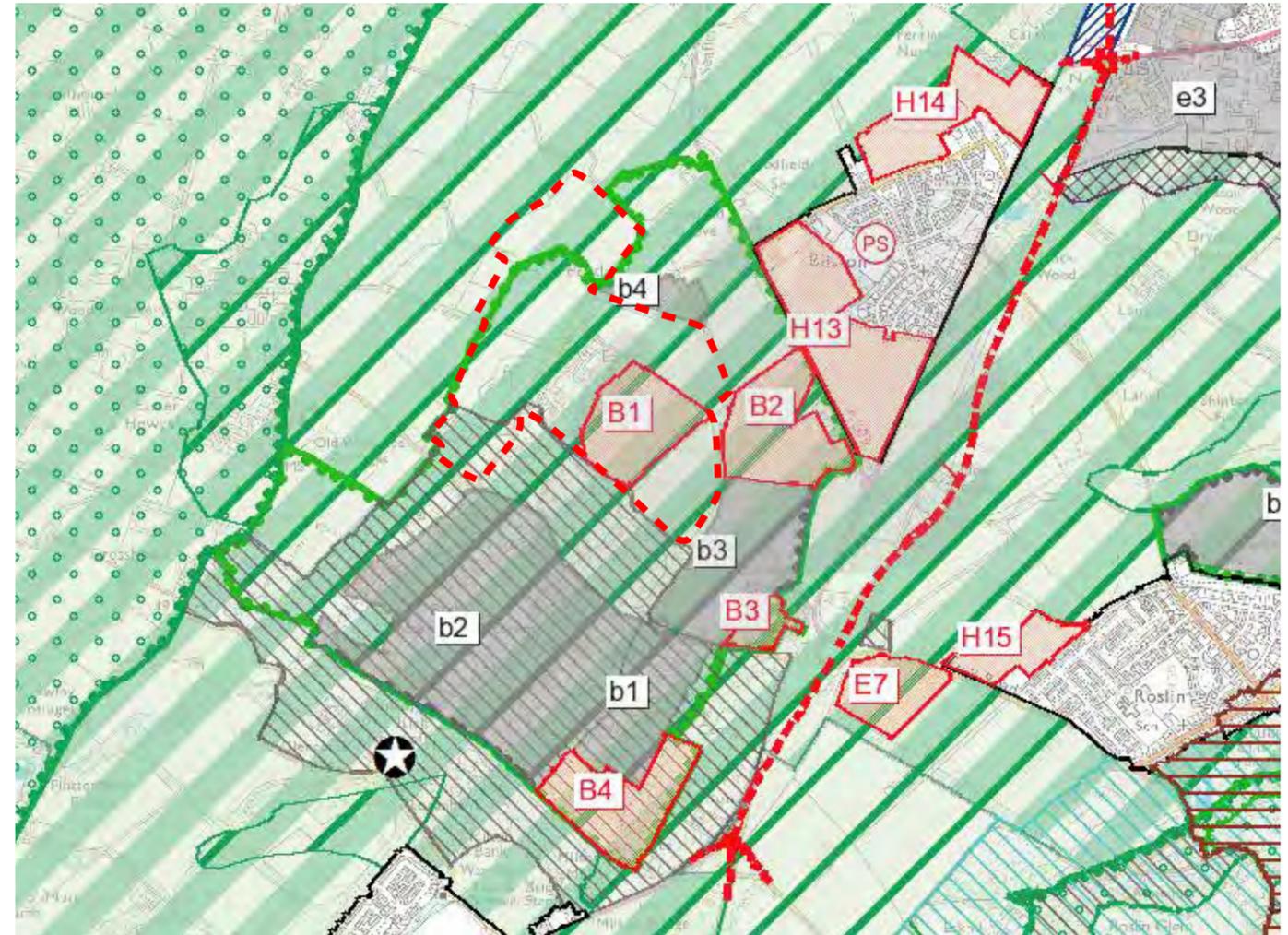
There are five policies within the Midlothian Local Plan (2008) that relate directly to the Easter Bush Campus. These include;

- Policy RP1: 'Protection of the Countryside' (1)
- Policy RP2: 'Protection of the Green Belt' (2)
- Policy RP3: 'Major non-conforming land uses in the green belt' (3)
- Policy RP4: 'Prime Agricultural Land' (4)
- Policy ECON2: 'Biotechnology and other knowledge-based industries (5) (proposal)' - specifically site reference B1: Easter Bush - Area = 7.5 hectares.

The Midlothian Local Plan (2008) will remain in force until replaced by the Midlothian Local Development Plan. The MLDP Proposed Plan was published in May 2015 and available for comment during the 6 week statutory period.

The Midlothian Local Development Plan Proposed Plan provides a much more significant level of detail regarding the area around the Easter Bush Campus. This is as a result of the increased economic significance of the area as emphasised with its identification as a 'Centre of Economic Growth' (6).

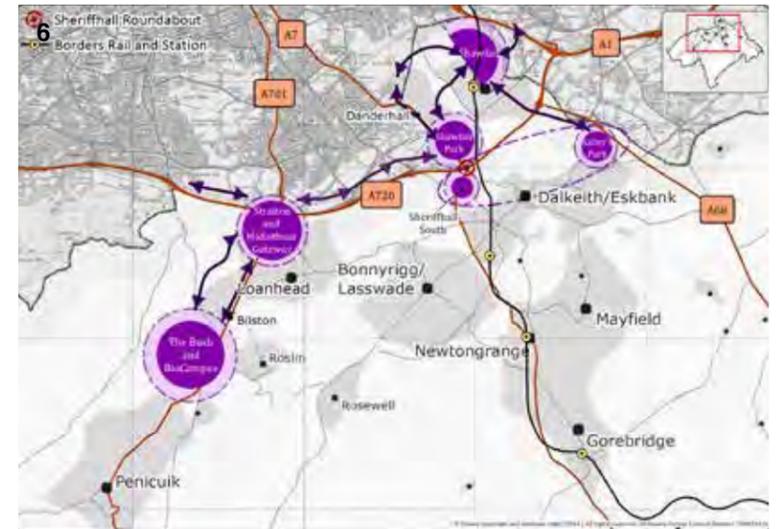
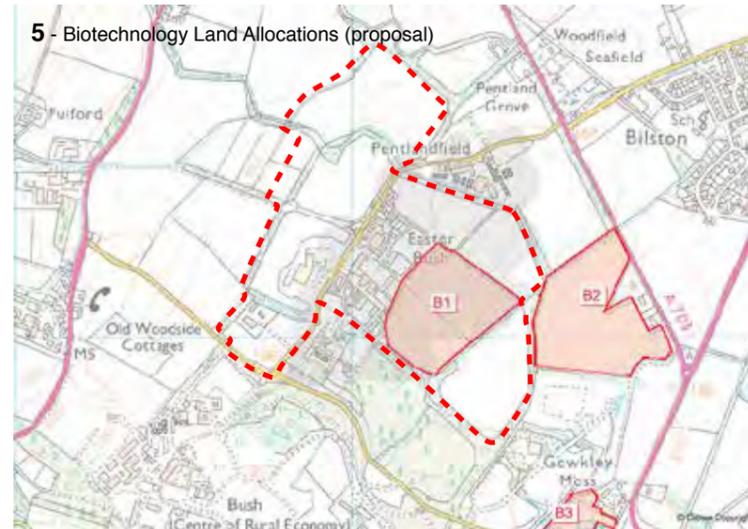
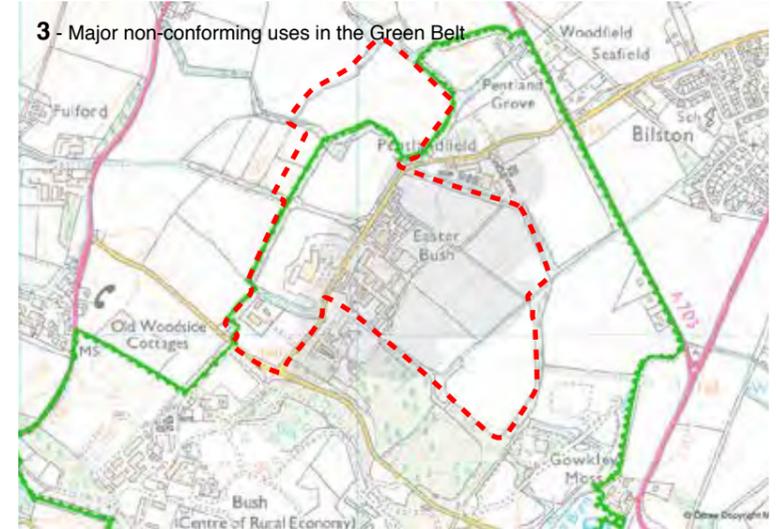
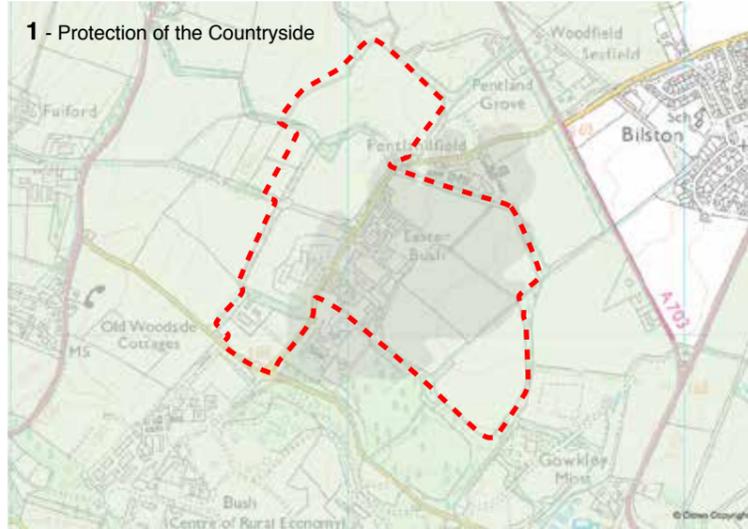
Right: Midlothian Local Plan - Proposals Map



--- Easter Bush Campus Appraisal Study Area



Easter Bush Campus Appraisal Study Area



Right: (1 - 5) Extracts from Midlothian Local Plan - Proposals Map showing policies; RP1: Protection of the Countryside; RP2: Protection of the Green Belt; RP3: Major Non-Conforming Uses in the Green Belt; RP4: Prime Agricultural Land; and ECON2: Biotechnology Land Allocations. (6) Extract from Midlothian Local Development Plan Proposed Plan showing significant Economic Clusters.

Midlothian Local Development Plan - Proposed Plan

The Midlothian Local Development Plan - Proposed Plan comprises a development strategy for the future development of Midlothian to 2024 and a detailed policy framework for guiding development. It relates to new housing, economic and retail development, new transport links, schools and other infrastructure, along with guidance on countryside, Green Belt and natural and built environment conservation.

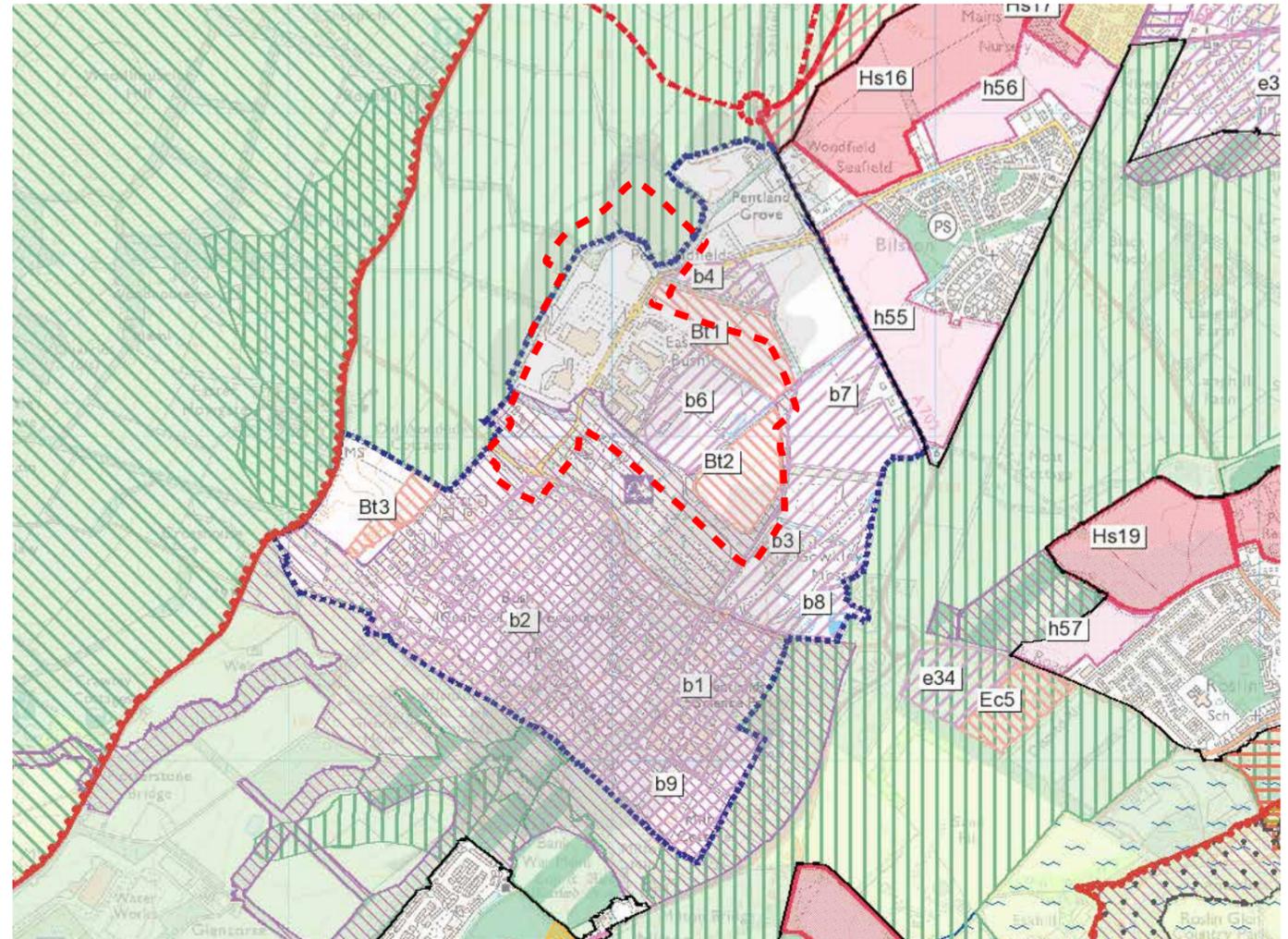
The Government identified that biotechnology and bioscience have significant potential for economic growth and job creation. The Easter Bush Campus forms part of 'The Bush Bioscience Cluster' where the developments in these fields in Midlothian are focused. The cluster incorporates six out of the eight science parks and research facilities that comprise the 'Edinburgh Science Triangle'.

Within the Midlothian Local Development Plan - Proposed Plan, Policy ECON2 identifies an area as 'The Bush Bioscience Cluster' to be safeguarded for the specific purpose of supporting and expanding bioscience research and development. Development will only be supported at The Bush if it fits into one of the three following categories;

- A site identified in Policy STRAT1: 'Committed Development'
- A site identified in Proposal STRAT5: 'Strategic Employment Land Allocations'
- A non-allocated site but included within the Bush Framework Masterplan

The Bush Framework Masterplan is a document that has been prepared through a partnership between The University of Edinburgh, Midlothian Council and Scottish Enterprise, in order to help guide future development on the site, and secure investment in the infrastructure required to maximise its growth potential. Unless included in the Bush Framework Masterplan, proposals for non-research or bioscience manufacturing uses will not be supported by Midlothian Council

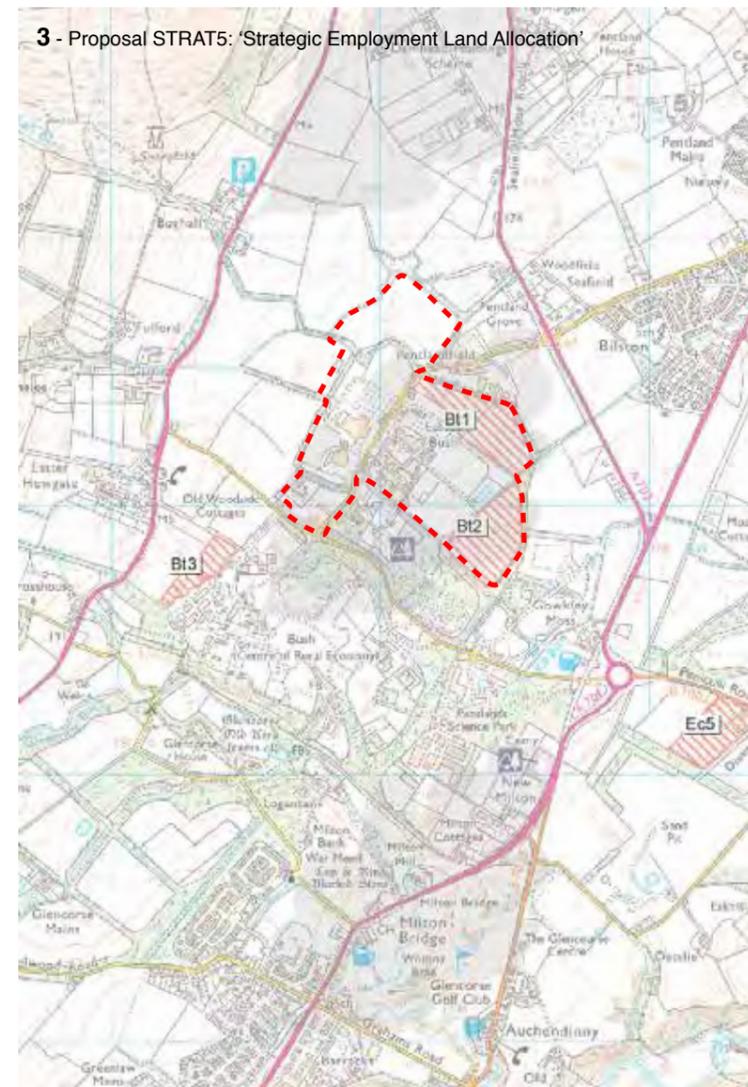
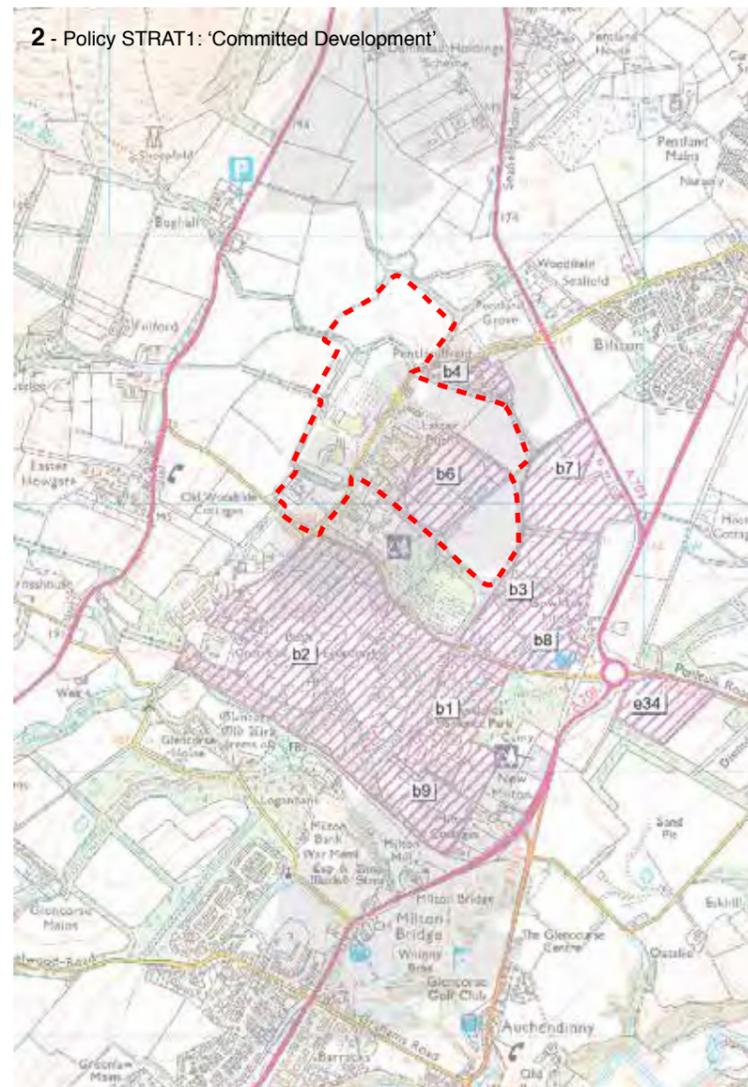
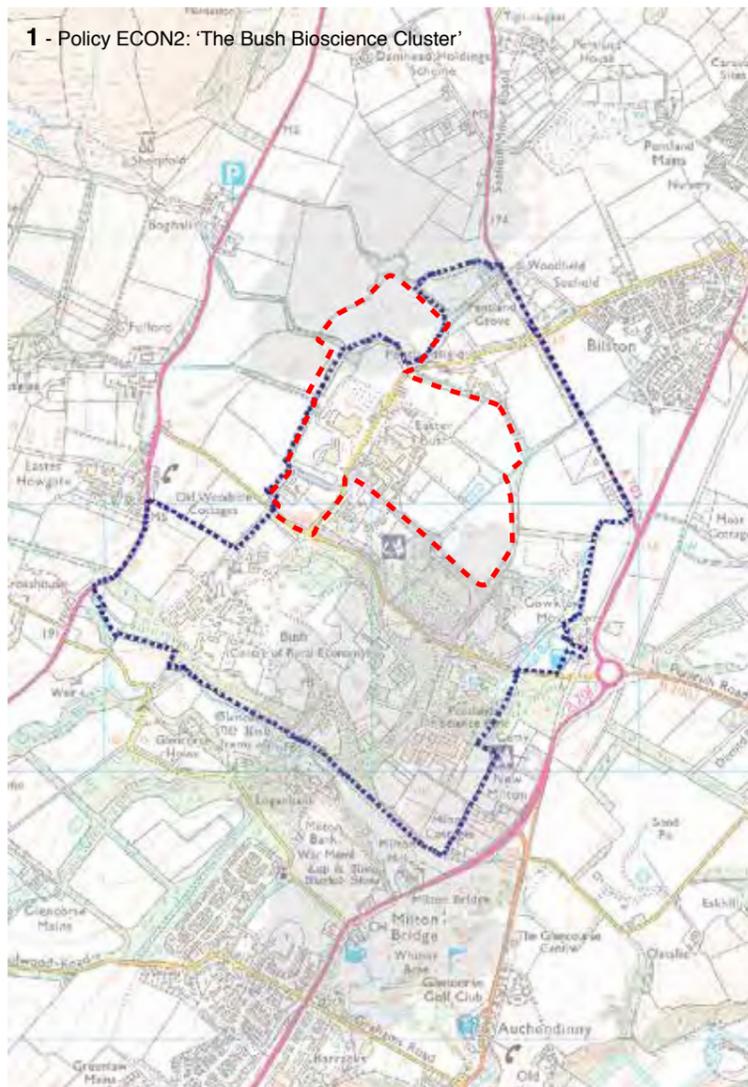
Right: Midlothian Local Development Plan - Proposed Plan - Proposals Map



--- Easter Bush Campus Appraisal Study Area



Easter Bush Campus Appraisal Study Area



Right: (1 - 3) Extracts from Midlothian Local Development Plan - Proposed Plan - Proposals Map showing policies; ECON2: The Bush Bioscience Cluster; STRAT1: Committed Development; and STRAT5: Strategic Economic Land Allocation.

The Bush Framework Masterplan

Commissioned by Midlothian Council, Scottish Enterprise and the University of Edinburgh, The Bush Framework was prepared in December 2012 by LUC (Land Use Consultants), and in association with SQW, Goodson Associates, Goodson Cole Transportation and Cameron Rae Architects. It is a strategic framework masterplan for the various clusters of specialist bioscience research and business at 'The Bush'.

The Bush Framework Masterplan will have a variety of uses including:

- An overarching framework masterplan for the various sites and organisations within The Bush;
- A supporting strategy document for funding opportunities and promoting investment;
- A strategic reference document for determining relevant planning applications;
- A strategic reference document for future Midlothian Local Development Plan reviews;
- A strategic bridging document to link to the Midlothian Economic Recovery Plan and the Midlothian Economic Development Framework, and the relevant economic sector action plans;
- A strategic bridging document to link to the Midlothian Community Plan and the Single Outcome Agreement.



Right: The Bush Framework Masterplan (2012)

Easter Bush Masterplan

In 2008 the University of Edinburgh, alongside Oberlanders Architects, produced a masterplan which set out the proposed extension to the existing Edinburgh University Veterinary Campus. It was approved in principle by Midlothian Council and forms one of the core components of the Bush Framework Masterplan.

The masterplan is regularly reviewed by the estates team, and is constantly evolving in-line with the ongoing campus developments

The Easter Bush Masterplan is used to guide development of animal health care, education and related research on this site, and to show the long-term development intentions. The first phase, which has since been completed, involved much of the infrastructure, public transport improvements and cycle routes implementation, as well as the core teaching facilities.



Right (Top): Easter Bush Campus Masterplan (2015)

Right (Bottom): evolution of the Easter Bush Campus Masterplan from 2013 - 2015

5 \Existing Built Form

Campus Map

Constructed between 1962 and 2015, the collection of buildings that make up the Easter Bush Campus are of varying age, size and quality. The campus has a typically science park layout, with a series of buildings sitting within a landscape, lacking a singular element that connects them. However, the campus is midway through a masterplanning process, which should help to define a clear structure.

At present, the scale of the R(D)SVS Teaching Building and the Roslin Institute, and their location adjacent to Bush Farm Road, running through the centre of the campus, makes them the predominant buildings on the site. Aside from the Hospital for Small Animals and Greenwood Building the remainder of the buildings on campus are of relatively low-scale, at one- or two-storey height.

The Sir Alexander Robertson Building, Equine Clinical Unit and Large Animal Practice, built in the 1960s are of poor quality and nearing the end of their usable life. There are plans to remove them and replace them with new facilities as part of the masterplan.

The nature of the site means there are large amounts of open space, a significant portion of this is given-over to 5 permit controlled car-parks for staff and students, where as the rest has been landscaped to form a series of gardens.

Right: Photos showing contrast in scale, building quality and landscaping design.

Opposite: Campus Site Plan



TEACHING & RESEARCH

- 701A. Equine Clinical Unit
- 701B. Large Animal Practice
- 702. Sir Alexander Robertson Building
(Centre for Tropical Veterinary Medicine)
- 703. Freezer Farm
- 704. Scintigraphy and Exotic Animal Unit
(Large Animal Anatomy Teaching Unit)
- 719. Hospital for Small Animals
- 720. Campus Service Centre
- 721. Stable Block
- 723. Equine Facility
- 726. Research Unit
- 727A. Farm Animal Hospital Teaching Unit
- 727B. Equine Hospital
- 727C. Equine Hospital Ancillary
- 727D. Equine Hospital Ancillary
- 728. The Royal (Dick) School of Veterinary
Studies - Teaching Building
- 732. Reception for Equine Hospital
- 747. Sheep Shed Changing Facility
- 758. Bumstead Building - Specified
Pathogen Free Avian Facility
- 781. The Roslin Institute Building
- 782. Riddell-Swan Veterinary Cancer Centre
- 783. Greenwood Building - Conventional
Avian Facility
- 785. HV Switch Centre
- 787. Sheep Shed

RESIDENTIAL

- 761. 11 Easter Bush
- 762. 12 Easter Bush
- 763. 13 Easter Bush
- 769. 15 Easter Bush
- 772. 35 Easter Bush
- 773. 36 Easter Bush
- 774. 37 Easter Bush
- 775. 38 Easter Bush
- 776. 39 Easter Bush
- 777. 40 Easter Bush



Character Types

There are five distinct character types present on the Easter Bush Campus, defined by the scale/type/age of building, the amount/type of surrounding open space and the relationship to adjacent buildings. The character types are;

1. Modern Science Park (BLUE)

These are usually large individual buildings set out in open space, surrounded by their own formal landscaping and with large car parks adjacent.

2. 1960s Development (RED)

These are mostly medium scale buildings and historic development patterns contained them to one central area. They are the poorest quality buildings on the campus, and are to be removed as part of the masterplan development.

3. Farm Outbuildings (YELLOW)

These are single storey sheds arranged around yards, with poor ground floor visual permeability, and large sliding access doors. They are predominantly used for stabling and storage purposes, but also house teaching, clinical and rehab spaces.

4. Historic Buildings (PINK)

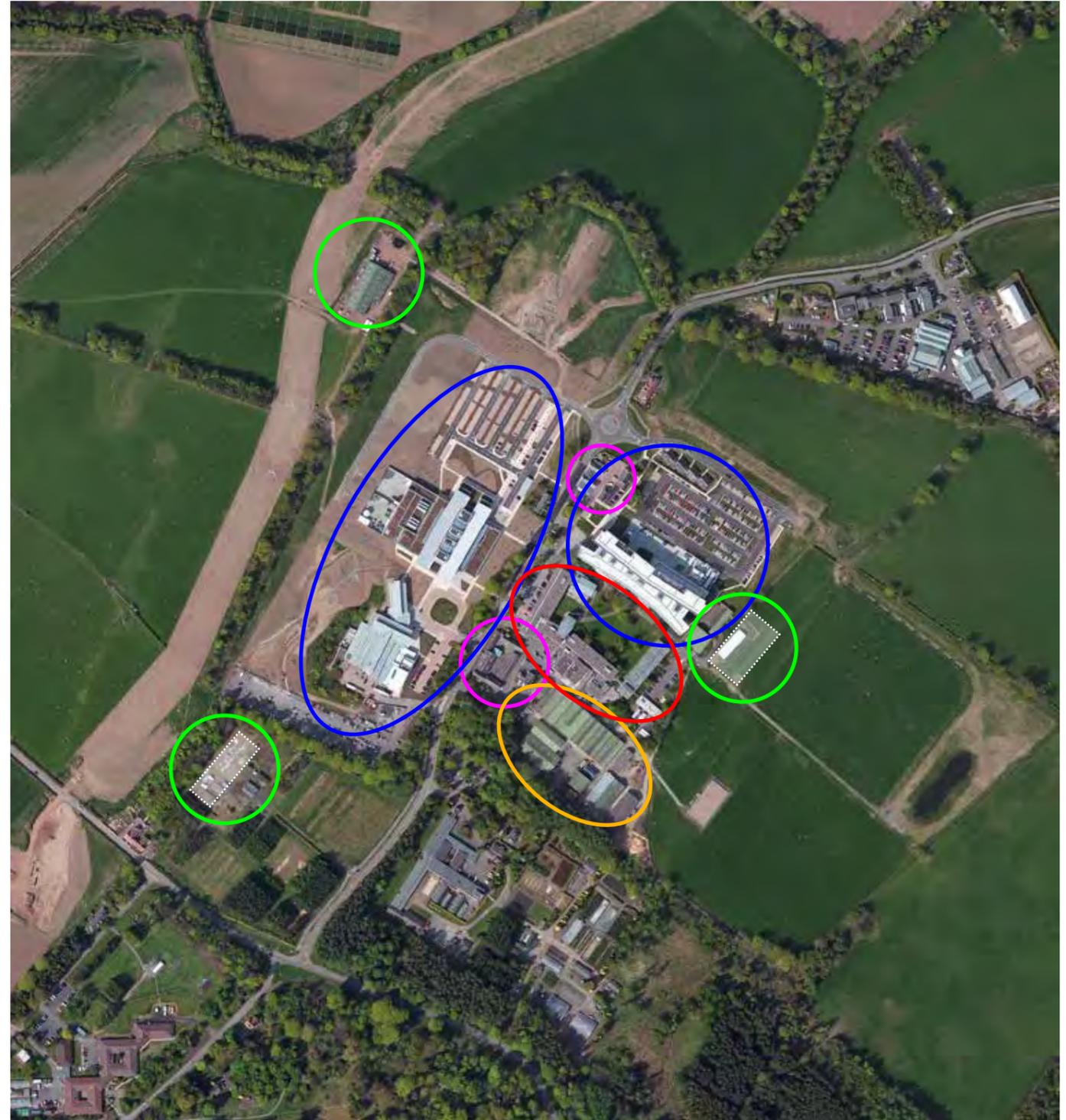
These are the original farm buildings, clustered together in two areas. They are made of stone and of a much smaller scale than the rest of the campus.

5. New Additions (GREEN)

These are typically of a medium scale, and currently lie outwith the main campus development. They will be absorbed into the campus as the masterplan develops, and the spaces between get filled, making them better connected.

At the time this document was written the aerial photographs were not updated to include the newly completed Bumstead Building and Greenwood Building, and showed the now demolished Easter Bush Veterinary Centre still in place.

Right: Aerial photograph showing the areas of campus where each of the five character types occurs.





Campus Entrances

The Easter Bush Campus can be considered to have three outer and two inner entrances. The outer entrances are where the campus is first signposted (A) on the approach, and lead from the main north/south routes into the Bush Estate. The inner entrances are where the edge of the campus is marked with university branded signage (B) which is currently under review as part of ongoing development. The entrances are not in the form of traditional campus gateways, but each has a unique function.

1. This is the main entrance used by campus users coming from Edinburgh. As part of the campus infrastructure (phase 1) the University of Edinburgh developed this junction to improve traffic flows and safety for cyclists and other road users. The junction is controlled by a traffic light system, and has filter lanes for those turning right into the campus. From this point there is a segregated cycle/foot path that runs parallel to Bush Farm Road straight through the heart of the campus
2. The Gowkley Moss Roundabout is a major junction within the surrounding area, and is the point of access for buses travelling between the campus and Penicuik. The campus is signposted on approach to, and on the roundabout.
3. The entrance from the A702 is not frequently used to access the campus, mostly by those travelling from Midlothian, and it has a minimal amount of infrastructure which reflects this.
4. This is not a typical 'entrance' as such, but it uses university signage as a marker to show where the edge of the campus sits.
5. This uses university signage to mark the way to the campus from the cross-roads in the centre of the Bush Estate, with the entrance to Edinburgh Technopole directly opposite.





Building Heights & Massing

The range of building heights across the campus varies greatly as a result of the historic development pattern, and the types of building uses needed by a working animal hospital. The buildings can be separated into three distinct groups based on their scale; Large, Medium and Small.

Large

There are only two buildings on campus in this category, the R(D)SVS teaching building and the Roslin Institute. They dominate the campus with heights greater than 11m in places, and large overall floor areas. They are visible above the tree line on the approach to the campus, as well as from vantage points to the west.

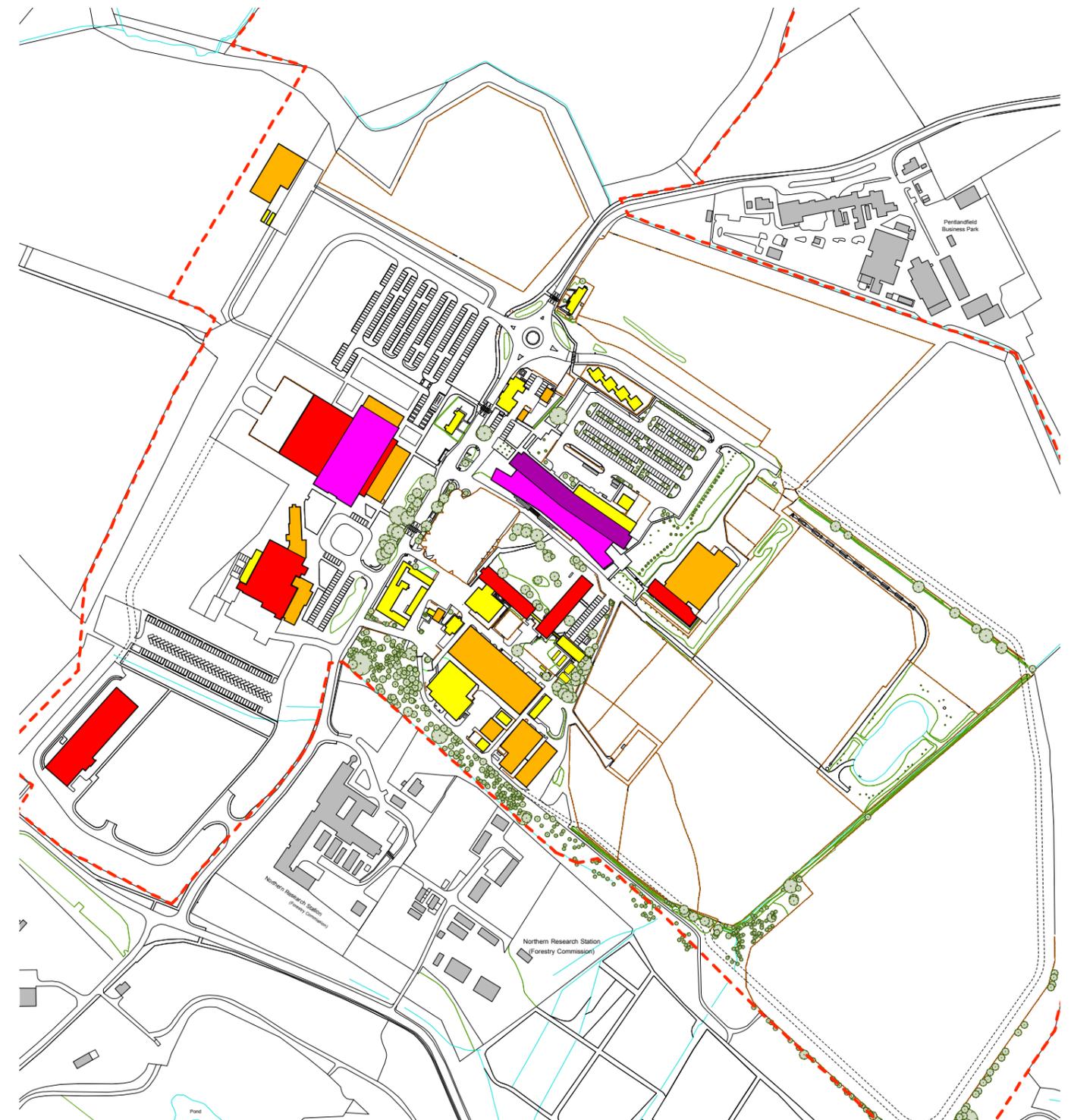
Medium

The majority of the buildings on campus have been classed as being 'medium scale' but they can vary greatly in their appearance. The Small Animal Hospital, Bumstead Building and Greenwood Building are all at the larger end of the 'medium scale' spectrum, with relatively large floor areas and heights of up to 9m in places. In the middle of the scale is the original 1960's buildings, despite their small footprint, the three storey height includes them in this category. The last buildings classed as medium scale is the double height Equine Hospital, with its large footprint.

Small

These are mostly single storey buildings, of which there are three types in this category; traditional stone build properties, extensions to the existing 1960s buildings and shed and stable units around the Equine Hospital.

The overall massing of the campus is relatively low due to the large amount of open space (and car parking) between buildings, and the scattering of single storey units that occupy the south-east corner.



Large



Medium



Small



Building Types & Uses

The main building uses on the campus are; teaching, research, animal hospital, residential and support (inc. animal pens). Whilst activities within the buildings vary, there are very few buildings on the campus that contain more than one use.

Teaching is largely contained to the main R(D)SVS building (1), with a small supplementary building specifically for Farm Animal Teaching adjacent to the equine hospital (2). The Animal hospitals are also used for teaching practical lessons, but it is not their main purpose. They are focused on consultation, diagnosis, treatment and rehabilitation of animals.

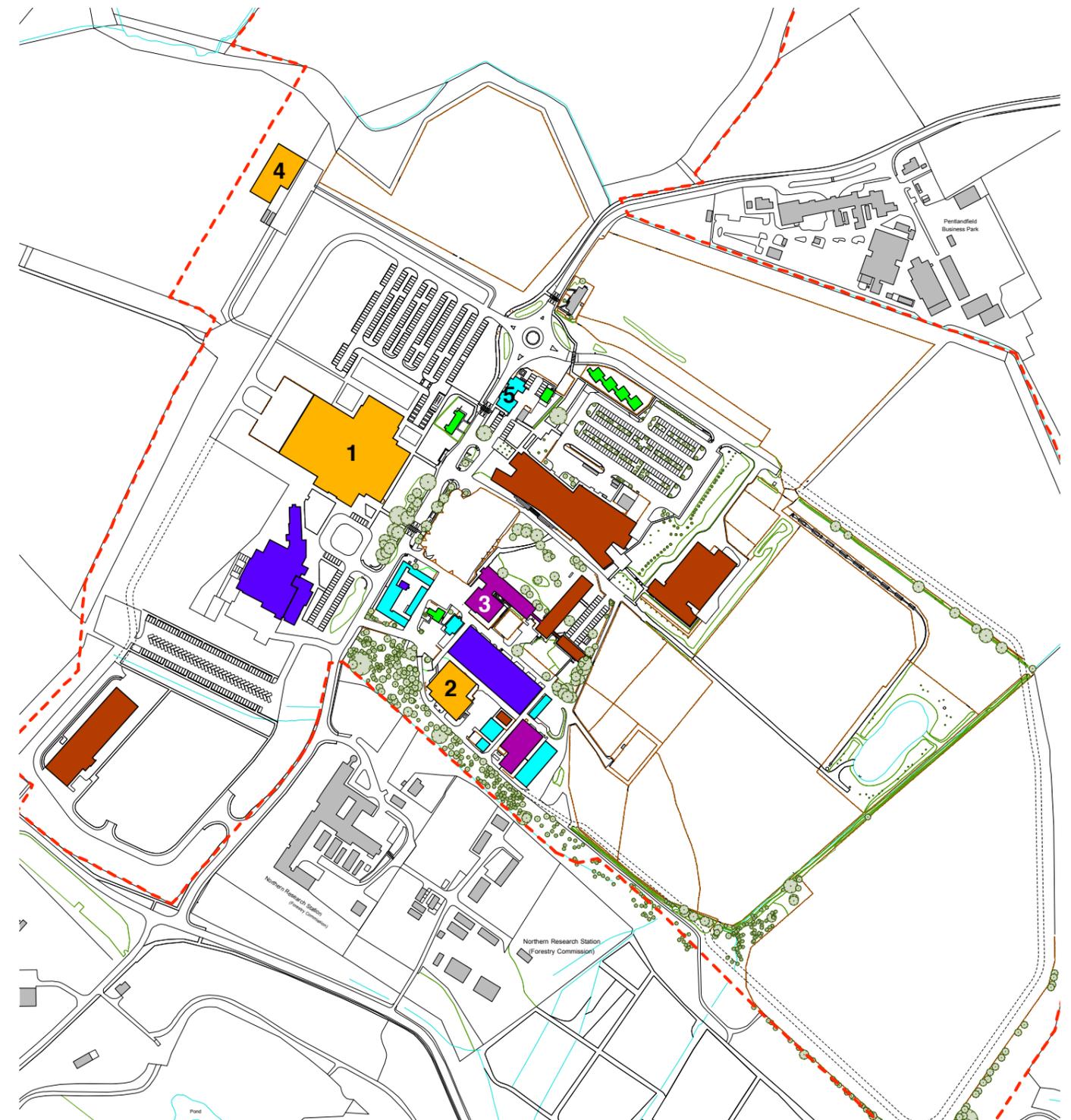
Research is spread across the buildings occupied by the Roslin Institute, with the R(D)SVS carrying out a limited amount of research within the Equine Clinical unit (3).

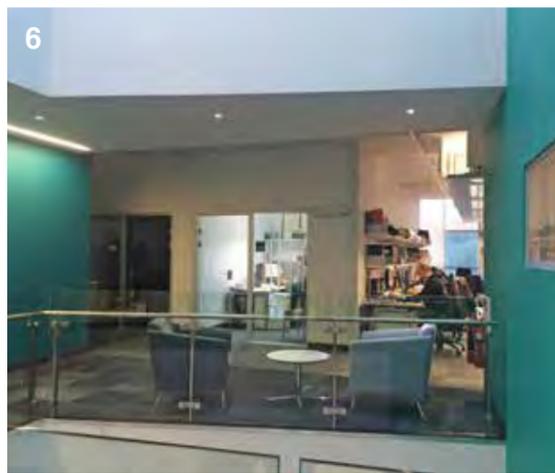
A large number of the support buildings are sheds and storage units associated with the equine hospital, but other uses include sheep accommodation (4) and the Campus Service Centre (5).

The nature of the activities that occur on a veterinary teaching and research campus has a notable impact on the appearance of the buildings, as the following pages demonstrate. A full breakdown of the activities within each building is included in Chapter 8 - Academic.

KEY

-  Teaching
-  Research
-  Research & Teaching
-  Animal Hospital
-  Support
-  Residential





Right: (1) Roslin Institute Conference Suite (2) R(D)SVS Lecture Theatre II (3a&b) R(D)SVS Physiology Teaching Lab (4a&b) Roslin Institute Research Lab (5) Roslin Institute write-up space (6) Roslin Institute break-out space (7) Hospital for Small Animals Consulting Room (8) Hospital for Small Animals minor procedures operating room (9) Equine Hospital treatment room (10) Equine Hospital Stables.

Building Facades & Entrances

The largest buildings on campus have been designed to be viewed from more than one direction, and as such do not have a prominent front facade. This is a typical characteristic of buildings set within a broad landscape setting. The position of their main entrances also reflects this, located at the most visible point from what is considered to be the main direction of approach. The R(D) SVS building has an entrance on either side of the building, both leading into the welcoming foyer space. The main public entrances are announced in their position, architecture and exterior landscaping qualities (A).

The Roslin Institute Building and the R(D)SVS Teaching Building both have stepped levels of security. The ground floor is designed as a welcoming public space, and beyond that swipe cards are needed for access (B). In some instances individual rooms also require swipe cards and PIN codes to access.

There are a scattering of buildings with external secure entrances (ie. those requiring swipe card access) across the campus. As these entrances tend to lead directly into working areas, by-passing reception areas, they are only accessible to staff and students.

As the campus also works with a number of large animals, and farm machinery carrying supplies, large sliding service doors are required for access and are present on many of the buildings. These entrances are mostly within the Equine Hospital and face onto main thoroughfares and yards, creating activated outdoor spaces, as discussed on the following page. Others are located on the rear-side of buildings in service areas.

Residential properties were defined as having private entrances, being only accessible by the occupants.



KEY

- Public Entrance
- Secure Entrance
- Private Entrance
- Service Doors (Large)





Top: Main Public entrances to the (1) Roslin Institute, (2) R(D)SVS Teaching Buildings, (3) Greenwood Building, and (4) Hospital for Small Animals.
Bottom: Secure entrances of the (5) Sir Alexander Robertson Building and (6) Hospital for Small Animals, and (7 & 8) Service Doors in the Equine Hospital.

Visual Permeability & Ground-Floor Activation

The level of ground floor activation is down to both physical and visual permeability, but on this campus the level of activation that is achieved on each buildings perimeter is determined by the uses within the building. The amount of facades on the campus with little or no visual permeability is due to the types of activities that occur within the buildings. The successful rehabilitation or quarantine of animals is dependant on creating controlled, quiet conditions.

The areas with the highest level of activation are the south-facing facades of the R(D)SVS teaching building with its double height glazing that can open up letting the cafe spread onto the adjacent public realm (1), and the glazed ground-floor level under the colonnade of the Roslin Institute (2). However, both the R(D)SVS and the Roslin Institute feature relatively blank facades, with relatively poor visual permeability on the north-facing side (3 & 4).

In contrast, the activation around the equine hospital is poor, with many blank facades, or high level windows, not allowing views into the buildings (5). The impact of closing the sliding service doors of the main equine hospital building (6) is substantial, severing both visual and physical connections through the building, and creating poorly activated ground floor levels.

Despite many of the newer buildings on the campus containing sensitive research activities, requiring controlled environments, there is an effort to provide good visual permeability around the main entrances (7 & 8). In other instances, the amount of ground-floor activation across the campus could be increased, especially where animal treatment does not occur, by removing sensitive activities from the ground floor level.

KEY	
	Good Visual Permeability (Full height Glazing or Large Windows)
	Poor Visual Permeability (Small or Few Windows)
	No Visual Permeability (Blank Facades or Clear Storey)
	Obscured by Vegetation





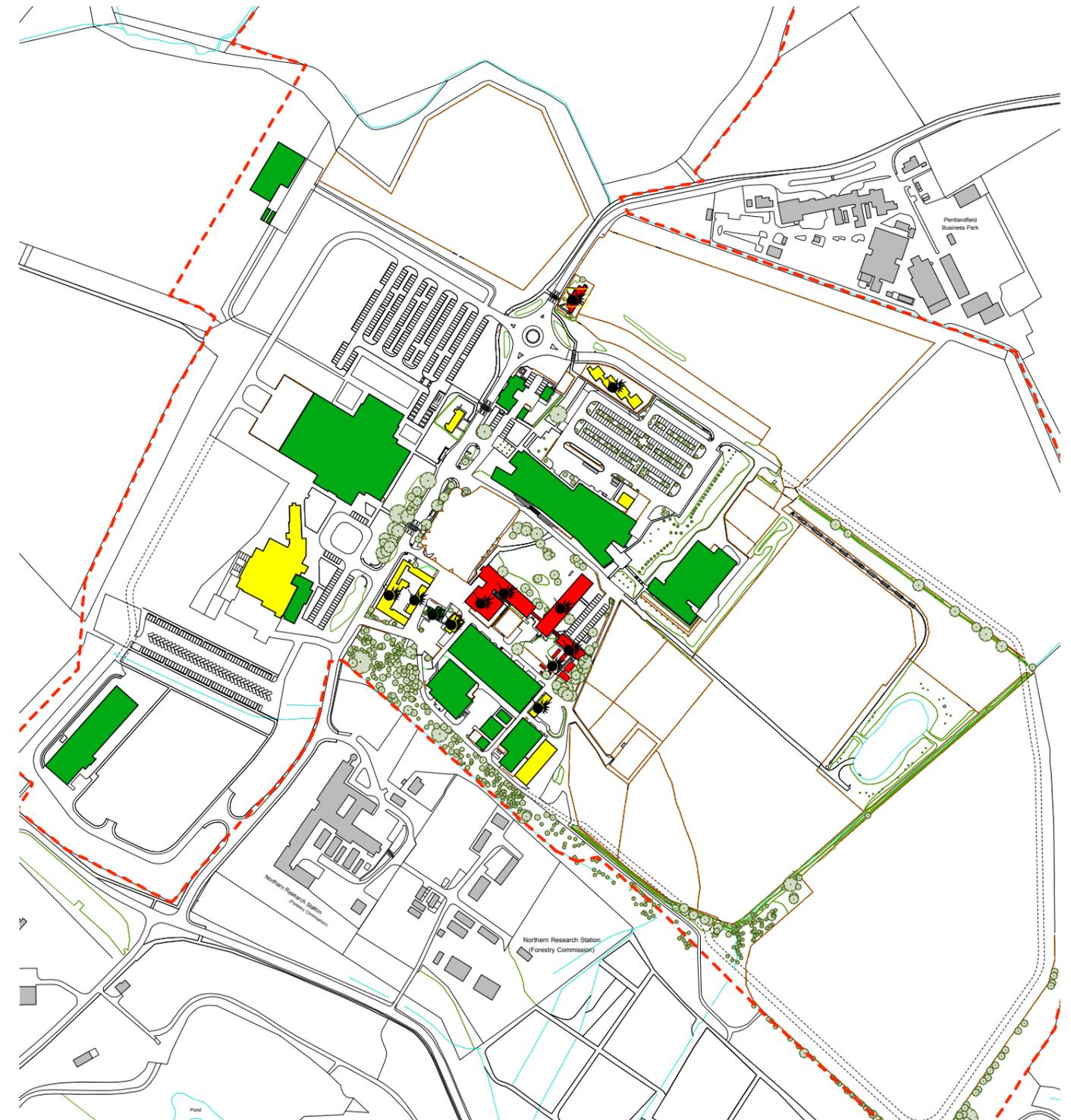
Building Quality & Future Demolitions

Some of the buildings on campus are of poor quality, nearing the end of their usable life or vacant. These are mostly the 1960s buildings. As part of the Easter Bush masterplan a number of buildings will be demolished to make way for new state of the art developments. It is not just the buildings of poor quality that are to be removed, there are also a number of smaller buildings that make inefficient use of the land that are to be demolished and their uses incorporated into new builds.

The replacement of these buildings will help to unify the appearance of the campus, and ensure that the teaching and research remains world-class.

This information is based on an implementation strategy defined by the University of Edinburgh to successfully deliver the Easter Bush Masterplan.

- KEY
- Good Quality
 - Average Quality
 - Reaching end of usable Life
 - For Demolition



Good



Average



Poor



6 \Transport & Movement

Location of Campus Users

The home post code locations of staff and students, whose main study or employment activity takes place at Easter Bush, was plotted with GIS mapping software on two separate maps. The key points are as follows;

- Student home locations are in significant clusters to the south of Edinburgh City Centre, along the two main bus routes to the campus.
- There are instances of high density student accommodation, particularly around Pollock Halls of Residences, and extending towards the Pleasance and Newington.
- In addition to the high density clusters along the main transport corridors, there are a small number within the outlying area, who are likely to rely on cars to access the campus.
- Staff home locations are far less clustered and are relatively evenly distributed across the wider city area and Midlothian, but typically around major road networks.
- There are minimal number of staff and students living within the 800m and 2500m isochrones, suggesting that walking and cycling is perhaps less desirable to users, though not impossible.

The location home postcodes in relation to the campus is fundamental in the choices that campus users make regarding methods of transport chosen for commuting purposes. The figures are shown in the table below:

Mode Share	Easter Bush		SRUC	Technopole
	Staff	Students		
Walking	4%	1%	4%	2%
Cycling	4%	4%	4%	9%

Sources: 2013 Travel Survey Report; 2014 SRUC Travel Survey; Edinburgh Technopole Occupier Transport Habit Survey 2014

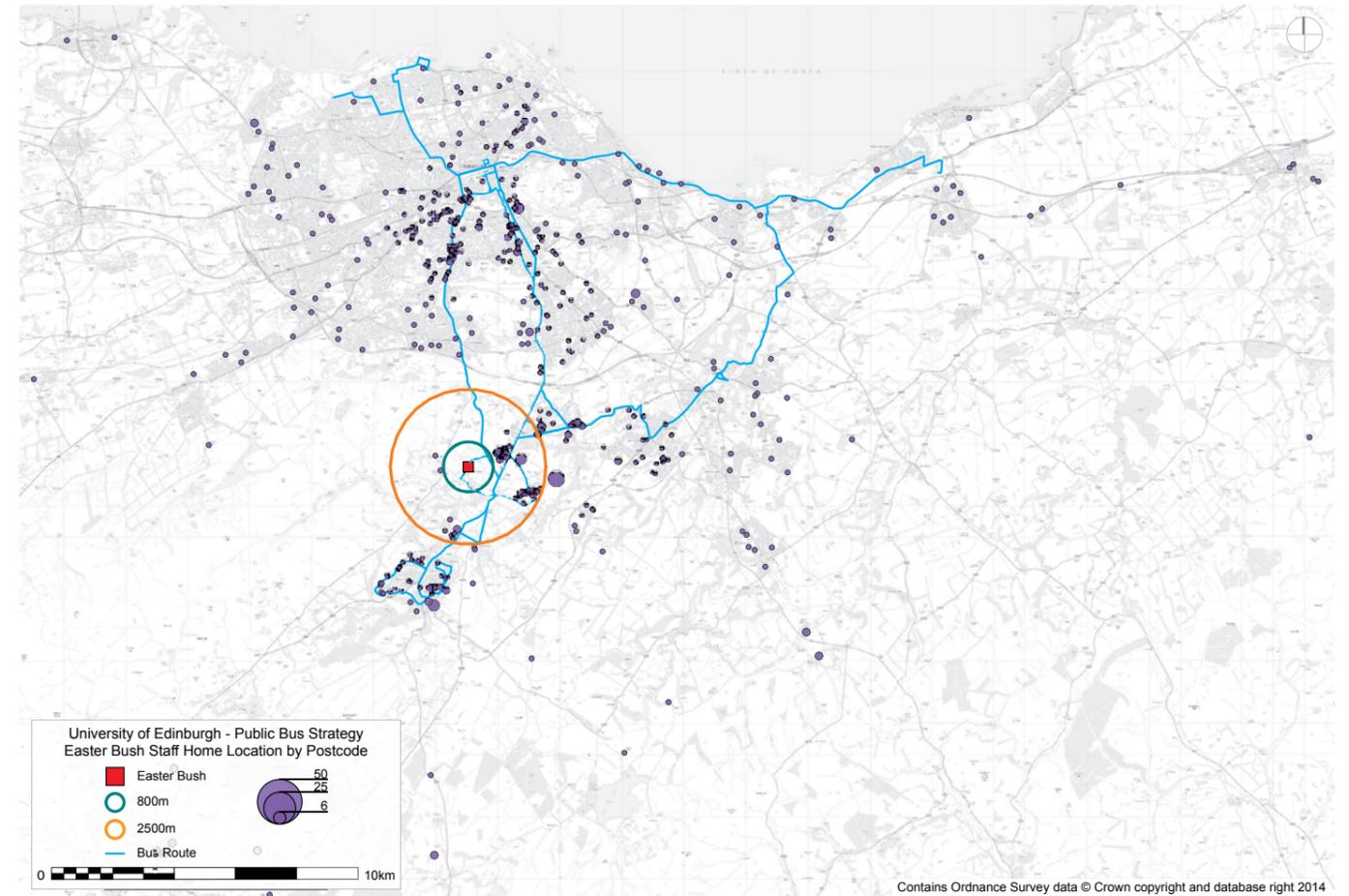
Mode Share	Easter Bush		SRUC	Technopole
	Staff	Students		
Bus	20%	52%	8%	16%
Rail	1%	1%	0%	0%

Sources: 2013 Travel Survey Report; 2014 SRUC Travel Survey; Edinburgh Technopole Occupier Transport Habit Survey 2014

Mode Share	UoE		SRUC	Mode Share	Technopole
	Staff	Students			
Car driver alone	51%	13%	68%	Car	67%
Car driver with passengers	12%	16%	12%		
Car passenger	5%	11%	2%	Car share	6%

Sources: 2013 Travel Survey Report; 2014 SRUC Travel Survey; Edinburgh Technopole Occupier Transport Habit Survey 2014

Top: STAFF home post code locations
Bottom: STUDENT home post code locations



Access to the Campus

The Easter Bush Campus can only be entered by two entrances, one to the North and another to the South.

The majority of campus users access the campus by the North entrance as it is the most accessible from the North, East and West of the campus, where, as the diagrams on the previous page show, a significant portion of campus users have their home address. The South entrance is predominantly used by cars and service vehicles coming from the Midlothian area and the South.

Lothian Buses 15, 37 and 67 enter the campus by the North entrance when travelling from Edinburgh City Centre, and by the South entrance on their return to the City Centre.

The cycle route from the Central Area, that follows sections of off-road cycle paths enters the campus by the North entrance, running alongside Bush Farm Road from the main junction at Seafield Moor Road. The share of users cycling to the campus (4% for staff and 4% for students) is good considering the location of the Easter Bush Campus.

Only 4% of staff and 1% of students walk to the campus from their home location, due to its semi-rural location. Those who do, tend to follow the same route as cyclists, entering the campus by the north entrance along the shared cycle path. Pedestrians entering the campus by the south entrance tend to come from the bus stops at Gowkley Moss Roundabout, serviced by Lothian Buses 40 and 47.

KEY

Vehicle routes from;

- Edinburgh & West Lothian
- Edinburgh & East Lothian
- Midlothian & East Lothian
- Midlothian & Borders
- Local

