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RMJM: King's Buildings Planning Framework

Approved
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The University of Edinburgh

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1

Introduction

1.1 Introduction

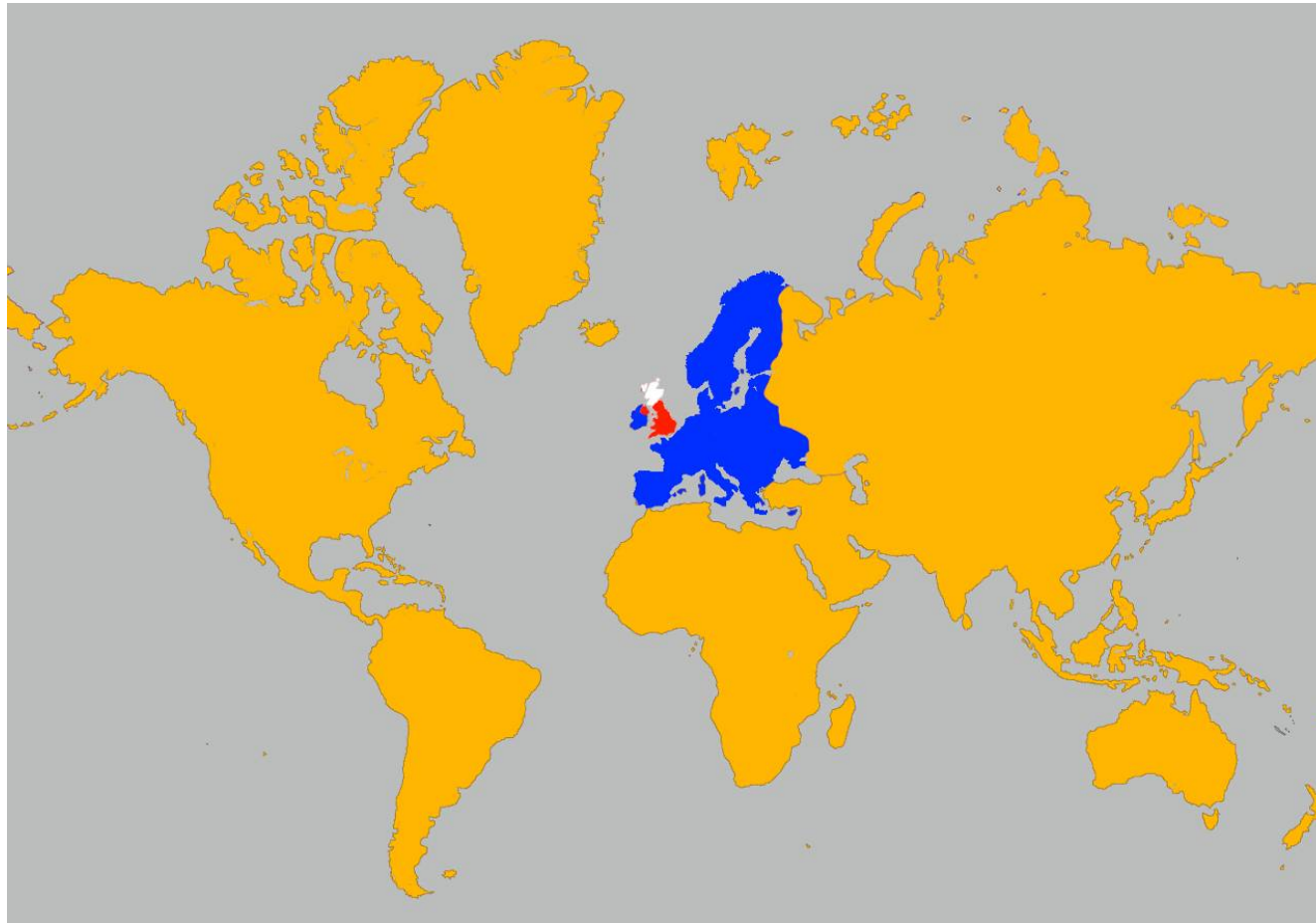
Importance of University to Edinburgh, Scotland, UK and Beyond

The University was founded in 1583 and is one of Scotland's oldest Universities. It now attracts over 25,000 students from 130 countries around the world. The University's alumni community numbers over 150,000 from 240 countries. The University have over 7,500 members of staff housed in over 400 buildings across Edinburgh and is recognised in the world today for it's top class teaching, research, facilities and graduate prospects. Many prominent figures in public life, past and present, were products of an Edinburgh education, such as Alexander Graham Bell, Robert Louis Stevenson and NASA astronaut Piers Sellers. The University became Scotland's first fair-trade University in 2004, and is an award-winning exemplary green institution.

In the summer of 2001 the University of Edinburgh announced its intent to reorganise its Academic Structure. It transformed its 75 departments, 9 faculties and 4 faculty groups into 3 Colleges and 20 Schools. The academic departments located on the King's Buildings campus along with some related activities in the Central Area were to become the College of Science and Engineering. This reorganisation and the academic structure require departments to be co-located into Schools, and take account of the requirement for future expansion. The result of this is that a number of buildings will need to be refurbished, and a number of new student focused learning facilities will be required. This framework provides a context within which the University has the flexibility to carryout future refurbishments, and new developments to maintain or improve its position on the domestic and international stage.

The revitalisation of the academic environments and surrounding public realm of the King's Buildings campus is proposed to be underpinned by this site wide 'Planning Framework'. The land area for this revitalisation plan extends to over 49 acres and is bounded by West Mains Road, Mayfield Road and the Craigmillar Park Golf Club. The framework proposals seek to acknowledge and work with the requirements of the Local Plan, to protect and enhance the listed buildings on the site, and to revitalise King's Buildings campus as a centre for academic excellence. The plan will also ensure the site is integrated into the surrounding context making it an attractive, stimulated environment for students, staff, visitors, and surrounding residents.

1.2 Benchmark



With over 7,500 members of staff and 25,000 students, and a total turnover in 2006/07 of £477M, the University has significant direct and knock-on economic impact both locally and nationally. This puts the University in the top 30 private sector companies. The University has a planned Capital Building Programme of £180M between 2008 and 2010 which will help support the local economy.

As a great civic University, Edinburgh especially values its intellectual and economic relationship with the Scottish community that forms its base and provides the foundation from which it will continue to look at the widest international horizons, enriching both itself and Scotland.

The University has an on-going ambition to be ranked as the top University in Scotland, in the top 5 in the UK, in the top 10 in Europe and within the top 50 in the world.

In the 2007 Sunday Times World University Rankings the University of Edinburgh was placed: -

	No1 in Scotland
	No5 in UK
	No10 in Europe
	No23 in the World

1.3 Aims and Objectives



The aims and objectives of the King's Buildings Planning Framework is to:

Create a campus which reflects the world class ranking of the University of Edinburgh and which will allow the university to maintain and improve its intellectual standards.

Create a framework for the physical long term development of the College of Science and Engineering estate at King's Buildings, with sustainability as a priority.

Create a campus structure plan which reflects the teaching and research needs of the University.

Create a plan which facilitates the co-location of cognate activities and future development of College Schools

Create a coherent campus structure of routes, links and spaces, which have a clearly defined access strategy that prioritises pedestrian, cyclist, disabled and service movement, whilst also catering for essential private vehicular traffic.

Create space for research, spin-out, commercialisation, support, and social functions

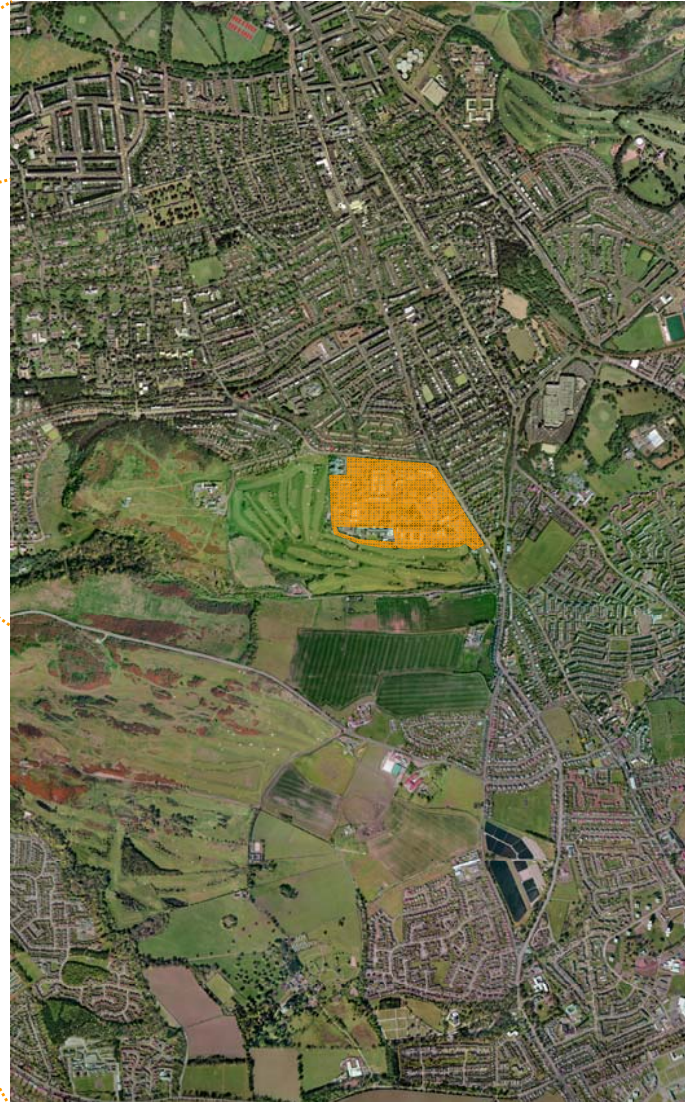
Exceed the statutory requirements and the University's strategic objectives in terms of sustainability

Support the University's travel plan by encouraging a shift from car use to walking and cycling for commuting and work-related travel.

2

Context

2.1 City Context-King's Buildings



King's Buildings is located approximately 2 miles south of Edinburgh city centre, and close to the Braid Hills. It is one of a number of centres of activity for the University of Edinburgh.

Other centres include:

- 1. Central Area
- 2. King's Buildings
- 3. Little France
- 4. Peffermill
- 5. Pollock Halls
- 6. Holyrood
- 7. Western General

The University of Edinburgh also has a campus facility at Easter Bush, Midlothian.

KEY



King's Buildings



Other University locations

2.1 City Context-The Campus Boundary



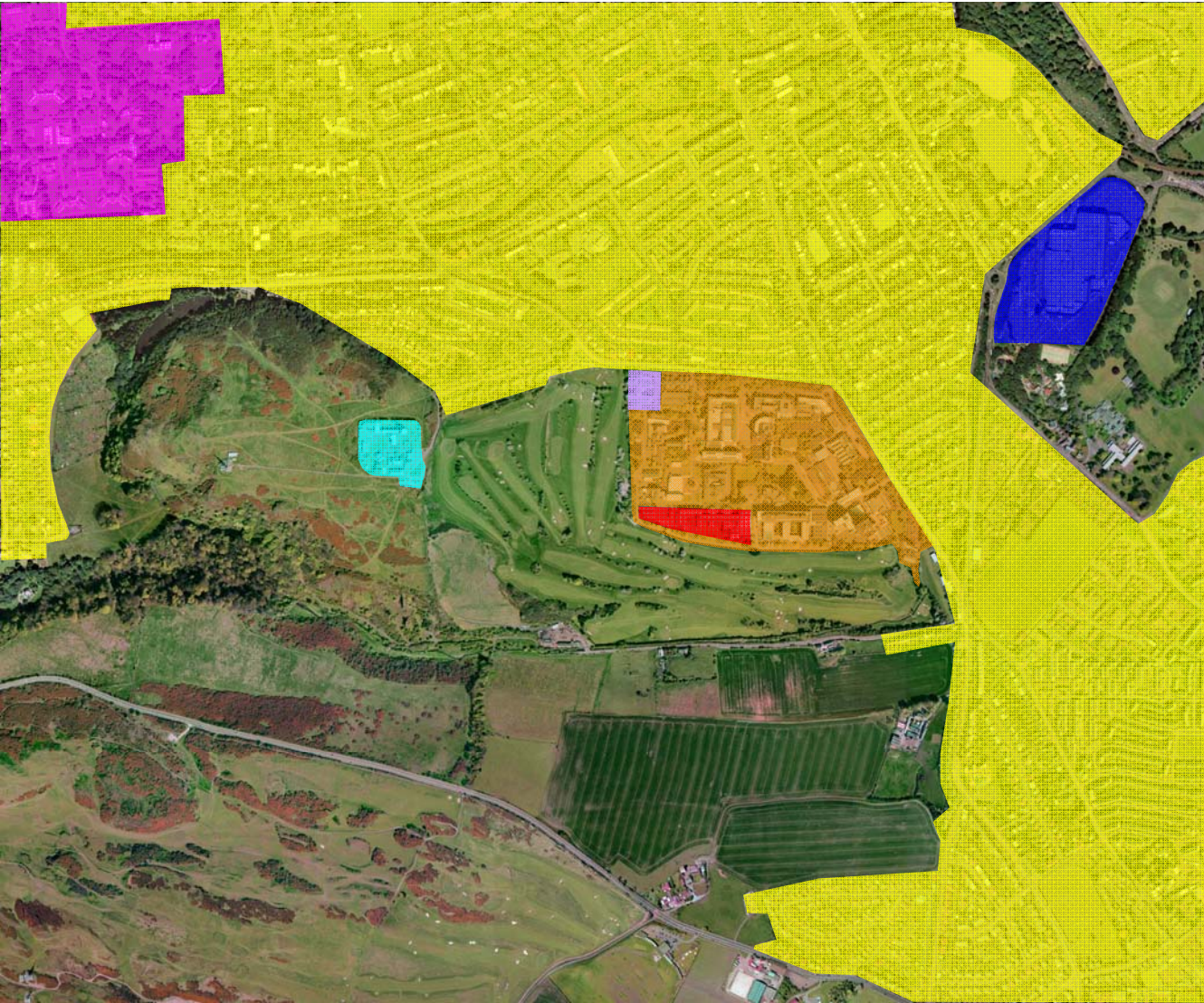
The site is bounded on the east by Mayfield Road which forms part of a major route south out of the city. The Study Area is bounded to the north by West Mains Road and the south by Craigmillar Park Golf Course.

KEY TO PLAN



University of Edinburgh Study Area
173 200m²
17.3 Hectares
43 Acres







2.2 Land Use Context-Surrounding Land Uses



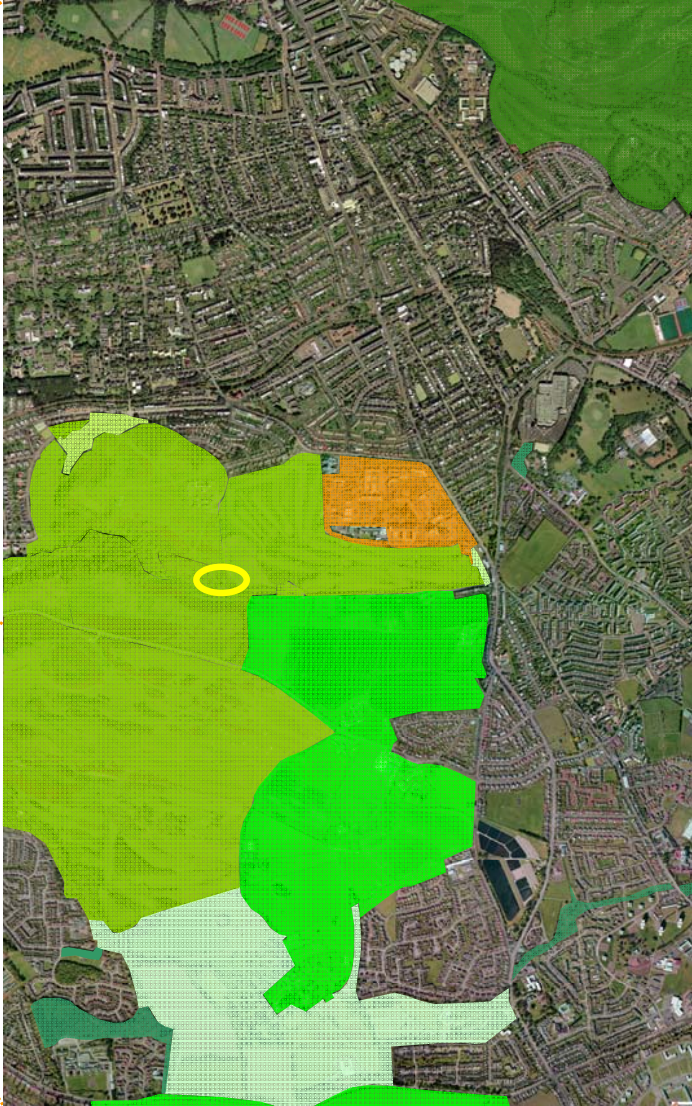
The surrounding, predominantly residential, neighbourhoods of Newington, Nether Liberton and Grange are punctuated by other uses including:

- Cameron Toll Shopping Centre
- Astley Ainslie Hospital
- Royal Observatory
- Grange Cricket Ground
- Scottish Agricultural College (SAC)

KEY TO PLAN

-  University Of Edinburgh Study Area
-  Newington/Grange/Liberton/Residential
-  Cameron Toll Shopping Centre
-  Astley Ainslie Hospital
-  Royal Observatory
-  British Geological Survey
-  SAC

2.3 Landscape Context-Green Belt



The campus is located on the edge of a significant greenbelt zone at the south side of Edinburgh.

The adjacent Green Belt area including Craigmillar Park Golf Course and the Braid Hills, provides a high quality landscape setting and open southern vistas .

This provides opportunities to reinforce the landscaping character of the edge of the site, and improve the environment within the site.

KEY TO PLAN

- Green Belt
- Green Belt, Area of Great Landscape Value, Historic Garden / Designed Landscape-Inventory Site, Scheduled Ancient Monument
- Green Belt, Local Nature Conservation Site, Area of Great Landscape Value
- Green Belt, Local Nature Conservation Site, Area of Great Landscape Value, Local Nature Reserve
- Green Belt, Area of Great Landscape Value
- Local Nature Conservation Site
- SSSI
- King's Buildings

2.4 Sustainability Policy Context



image : Edinburgh Inspiring Capital www.edinburgh-inspiringcapital.com



The Edinburgh Standards for Sustainable Building.

The Standards are about acting locally to make a contribution to improving sustainable development. They bring a range of benefits including energy savings and reduced climate change impacts. Major applications* (for developments of 1000sqm or 10 units or more or sites of 0.5 ha or more) must be accompanied by a Sustainability Statement Form. This should demonstrate how the proposal addresses the Standards under 6 key themes of sustainable building.

Attainment of the Standards will be scored and developments at minimum must achieve the threshold level identified under each key theme.

There are two mandatory standards relating to energy efficient design and on site renewable energy generation. The Standards are based on development industry recommendations for 'best practice'. It is intended that the Standards will be reviewed every two years to take account of changing national targets and developing practice. Other appraisal systems may also be used and the equivalents of BREEAM 'very good' / 'excellent' ratings are expected.

The six key themes:

- 1.Design Quality
- 2.Inclusive safe & healthy environments
- 3.Reduce climate change & increase renewables use
- 4.Use sustainable resources & materials
- 5.Reduce pollution & increase recycling
- 6.Improve sustainable construction & operation

This document provides a long term plan it is proposed that future development proposals should comply the ESSB or other policy and relevant best practice at the time of application.

Scottish Executive Designing Places Policy Statement

This policy statement highlights good use of resources and adaptability of use as two key ways the design of places can make a contribution to a sustainability agenda.

University of Edinburgh Strategic Plan 2008–12

This framework is a tool to meet the university's strategic needs. Several current key targets relate directly to the provision of infrastructure:

- 6.1 increase income per square metre
- 6.3 increase overall building performance (condition and functional suitability), to achieve 90% acceptable standard.

The report further identifies the university's commitment to a sustainable future and sets a target: to reduce absolute CO2 emissions by 40%, against a 1990 baseline.

University of Edinburgh Travel Survey 2007

This study identified a continuing trend towards sustainable transport methods. It identified a "significant reduction in the car mode share at this site, achieved in particular by an increase in the cycling and bus mode share". In particular it makes recommendations to monitor the provision of cycle storage as use increases and to provide measures and facilities to further promote the use of cycles.

University of Edinburgh Travel Plan

This framework should be read in conjunction with the current travel plan as prepared by the University. As this document provides a long term plan, development proposals should meet the recommendations of the current travel plan at the time of application.

2.4 Sustainability Policy Context

The University of Edinburgh's Sustainability Policy

The University of Edinburgh identifies **sustainable development** as development *"meeting present needs without compromising the ability of future generations to meet their own needs"*. **Sustainability** is a process of ensuring the wise use of all resources within a framework in which **environmental, social and economic** factors are integrated. The University is committed to placing sustainability at the heart of its mission:

- making sustainability integral to the delivery of research, teaching and operational objectives;
- taking positive actions promoting continual environmental improvement;
- setting and achieving clearly defined sustainable development objectives and targets

The University undertakes to:

1. Make sustainability a corporate priority

- Encourage students and staff to incorporate informed sustainability perspectives within their work
- Develop the capacities of academic staff to promote understanding of the principals of sustainability

2. Develop and deliver appropriate teaching and research

- Expose all students to concepts of social, ecological and ethical stewardship
- Support and encourage interdisciplinary research into issues of sustainable development

3. Take a leadership role in sustainability

- Set best practice standards, meet or surpass requirements of environmental legislation and commit to a process of continual environmental improvement
- Promote awareness of all legislative, economic, technical and market developments that assist progress towards sustainability
- Establish an Advisory Group to oversee implementation of this policy and associated programmes.

4. Contribute to stable community building

- Build partnerships and create local information and learning networks for sharing experiences and knowledge of sustainable issues with all stakeholders
- Operate in ways that maximise social and economic benefit while minimising any adverse impacts to the local community
- Invest in staff development, value stakeholder involvement and promote social inclusion and equity

5. Maintain and development the University in a sustainable manner

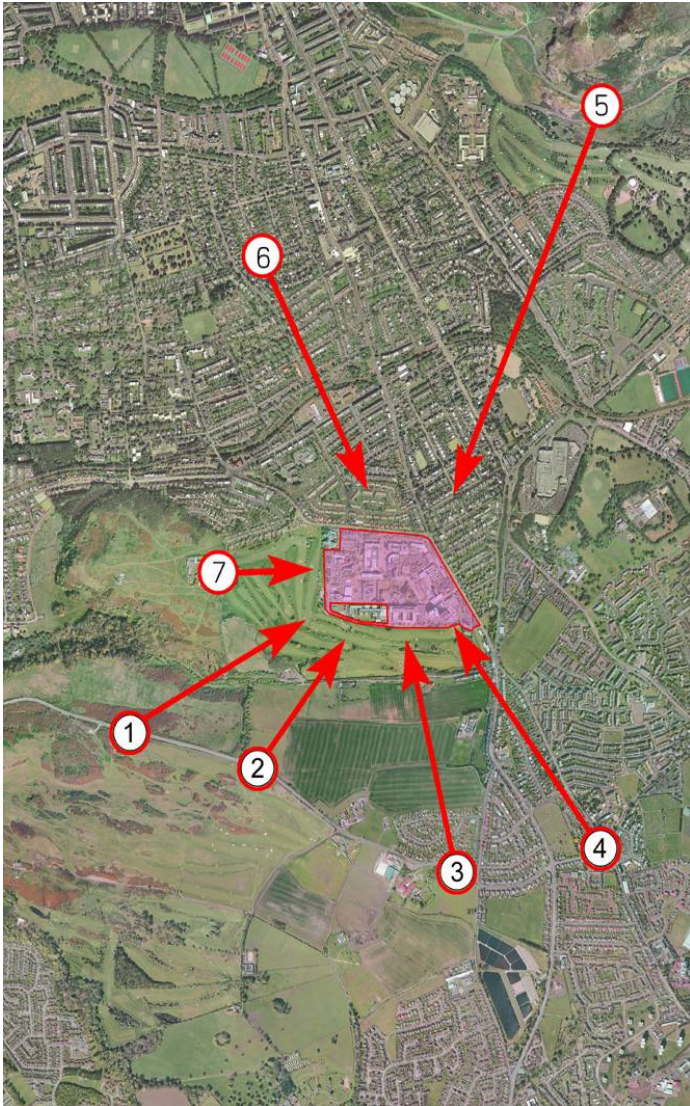
- Promote continual improvement in maintenance practices and establish sustainability guidelines for internal and external design teams and contractors working on new build and refurbishment projects
- Develop procurement procedures with all elements of the supply chain to ensure social, ethical and environmental criteria are integrated into programmes aimed at achieving best value

- Maximise the efficient use of energy and materials, continually improve pollution prevention measures and increase use of renewable resources
- Minimise waste generation in research and teaching activity and encourage repair, reuse and recycling ahead of the responsible disposal of surplus materials
- Promote practical measures to reduce the impact of travel to and between university sites

6. Monitor and report on progress towards sustainability

- Manage responsibly the social, environmental and economic impacts of all University policies and practices and assess potential improvements within the University's decision-making processes
- Conduct reviews of all University policies, management performance standards and operations against internal sustainability targets and best practice standards.
- Make the results of social, environmental and sustainability audits and impact assessments carried out by of for the University available to all stakeholders

2.5 Skyline Context



The following pages describe key views looking toward the campus and its surrounding context.

The campus is visible from the Braid Hills and Arthur's seat. Viewed from the south it is set against the Old Town skyline to the north. Unless viewed from higher ground the campus is less visible from the north with only captured views.

The following pages illustrate these key views.

KEY TO PLAN



University Of Edinburgh Study Area



View from Braid Hills Drive



View from Braid Hills Drive



View from Liberton Drive



View from Kirk Brae



View from Arthur's Seat



View from Dick Place



View from Observatory Road

2.5 Skyline Context

1. View From Braid Hills Drive



2. View From Braid Hills Drive



2.5 Skyline Context

3. View From Liberton Drive



4. View From Kirk Brae



2.5 Skyline Context

5. View From Arthur's Seat



6. View From Dick Place



2.5 Skyline Context

7. View From Observatory Road



2.5 Skyline Context-Skyline Strategy

Guideline for the protection of key views:

The guideline is supplementary to local plan policies that seek to protect the quality of the city's environment. The purpose of the guidance is to provide protection for key views across the city. It does this by identifying and assessing the impact which development proposals might have on the landmark features that make up the iconic image of the city. Landmark features are those which constitute essential components of the image, these include:

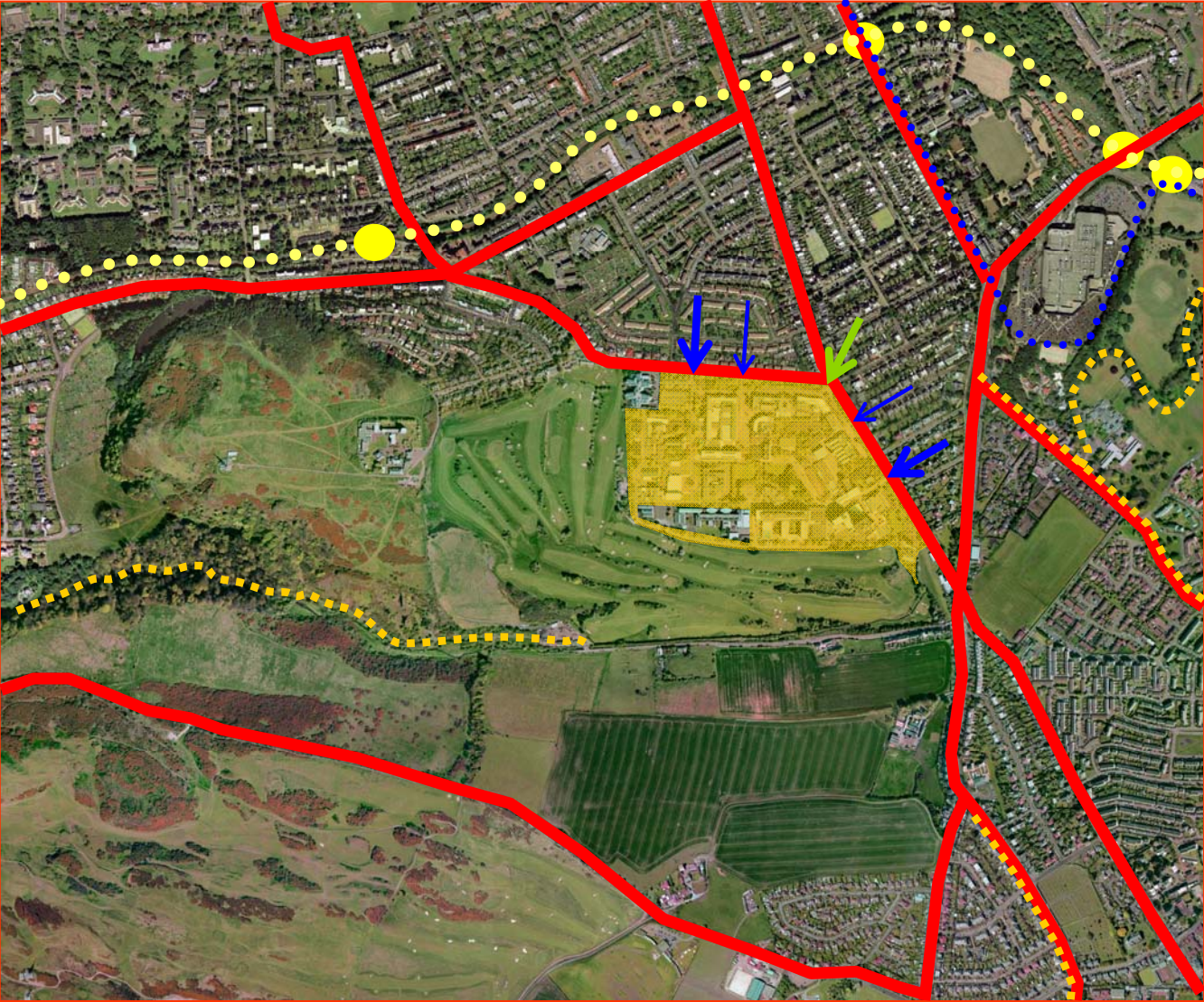
- The Castle, Castle Rock and Tolbooth St John's Spire
- Calton Hill
- The Old Town spine
- Arthur's Seat and the Craggs
- The New Town
- Coastal backdrop and Firth of Forth
- Open Hills
- The Forth Bridges
- Incidentals e.g. St Mary's Cathedral Spires

It is the intention of this framework that future proposals comply with the strategy outlined in the city's guidance. In addition the seven views identified in the previous pages are positions from which the site is most visible, the impact on these views will be considered as future proposals progress.

It is the intention of this framework that future proposals should not negatively impact on the city's skyline.



2.6 Transportation-Existing Routes



The study area is well served by the surrounding network of primary vehicular routes, this provides access to the site via public transport, private vehicles and service access.

Locally there are future safeguards on routes for future railway / tram routes and stations

There are a number of campus entry points on Mayfield Road and West Mains Road, these provide the primary access points for the site.

There are no existing continuous cycle routes connecting the campus with the university's other sites. Improvements to the Cycle network serving the study area, outwith the scope of this framework, are being explored by the City of Edinburgh council.

KEY TO PLAN

- University Of Edinburgh Study Area
- Primary Vehicular Routes
- Primary Pedestrian Access
- Vehicular and Pedestrian Access
- Railway Safeguard
- Station Safeguard
- Tram Route Safeguard
- Designated Cycle Routes

2.7 Heritage-Conservation Areas & Listed Buildings



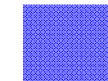
KEY TO PLAN



- Craigmillar Park Golf course
- Area of great landscape value
- Protected open space
- Local nature conservation site
- Green Belt



'Craigmillar Park' Conservation Area



Category B
Buildings of Regional or more than local importance, or major examples of some particular period, style or building type which may have been altered.

3

Site

3.1 Site Analysis & Proposals

This framework document for the King's Buildings campus demonstrates opportunities for the re-structuring of schools and the creation of a long term campus development plan that can meet the future academic needs of the University of Edinburgh.

The intention is not to offer a strategy for wholesale change within the campus, but to maintain and improve the existing character whilst identifying opportunities for future development required to sustain the growth anticipated on campus.

Development of the King's Buildings campus will follow both C.E.C. and U.o.E. sustainability policies and whilst sustainability is alluded to in specific areas of this document it permeates all aspects of the framework. The flexible strategy adopted through this document allows the campus to meet future sustainability targets without compromise to the campus as a whole.

Providing a robust framework requires an understanding of the site in its context at both city wide and local levels. This section outlines the main opportunities identified within the site boundary. The key Concepts that should be adopted to realise the aspirations for the Study Area including:

- Protection of architectural and historical integrity of the campus by retaining and/or refurbishing key existing and listed buildings.
- Identify key development sites that respect the location and scale of historical buildings.
- Develop the hierarchy of existing spaces located around central "Green Heart" area.
- Use the configuration of development sites to provide clear structure to study area and to enhance inter-departmental connections.
- Use the configuration of development sites to enhance links and vistas between study area and surrounding area.
- Restructuring of circulation through site making use of a shared surface approach to allow pedestrian and cycle permeability.
- Encourage and promote hard and soft landscaping improvements within a coherent landscape strategy.

3.2 Sustainability

The City of Edinburgh Council and the University of Edinburgh are committed to social, environmental and economic sustainability in their operations and policies.

Both C.E.C. and U.o.E. have detailed sustainability policies which guide their actions and whilst providing a sustainable future for the King's Buildings campus is a primary aim of this framework, detailed guidance on implementation of sustainability issues is not included in this document. This framework should be read in conjunction with current sustainability policy. This will allow guidance and policy to evolve as standards progressively improve in the future.

The university will take a leadership role in delivering a low carbon estate at King's Buildings by:

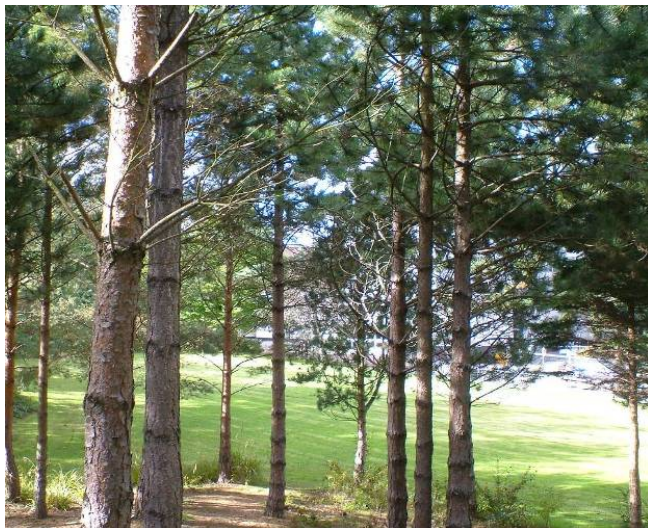
- providing a statement on how any development at King's Buildings will contribute to a low carbon estate
- The university will prioritise low and zero carbon energy sources at King's Buildings
- All developments will be expected to exceed the expectations for minimum recycled-content building materials.
- Site waste management plans will be drawn up for all significant capital projects.

-Campus waste management strategy will be examined in order to maximise levels of recycling

-Improved site circulation infrastructure will encourage increased green travel behaviour

-a travel plan will identify further ways of encouraging 'green' commuting behaviour.

Following completion of a Biodiversity Audit of the site in 2008 the University will incorporate measures to actively promote biodiversity on campus and to carefully control the impact of any capital development work through design and through obligations on contractors






3.3 Site-Existing areas to be addressed



The adjacent diagram illustrates the characteristics of the campus, which the key concepts of the Framework address.

KEY TO PLAN

-  Erosion of mature landscape
-  Ad hoc extensions
-  Site Boundary

3.3 Site-Existing Buildings



- Existing University of Edinburgh Property
- Existing Non-university of Edinburgh Context/Property
- Site boundary

The Site contains the following University Properties












1. STUDENT RESIDENCES
2. WADDINGTON BUILDING
3. WEIR BUILDING
4. CREWE BUILDING
5. SCOTTISH MICRO-ELECTRONICS CENTRE
6. JOSEPH BLACK BUILDING
7. ROGER LAND BUILDING
8. SCOTTISH AGRICULTURAL CAMPUS
9. GRANT INSTITUTE
10. KING'S BUILDINGS HOUSE
11. ROBERTSON LIBRARY
12. KB CENTRE
13. ASHWORTH LABORATORIES
14. ASHWORTH 2
15. ASHWORTH 3
16. KENNETH DENBIGH
17. ELECTRICITY SUB STATION
18. CONCRETE LABORATORY
19. JOHN MUIR BUILDING
20. SANDERSON BUILDING
21. WILLIAM RANKINE BUILDING
22. ALEXANDER GRAHAM BELL BUILDING
23. FLEEMING JENKINS BUILDING
24. HUDSON BEARE BUILDING
25. ENGINEERING LECTURE THEATRE
26. ALRICK/FARADAY BUILDING
27. DANIEL RUTHERFORD BUILDING
28. MICHAEL SWANN BUILDING
29. DARWIN BUILDING
30. JAMES CLERK MAXWELL BUILDING
31. ANN WALKER BUILDING
32. BIOSPACE BUILDING
33. OGSTON BUILDING
34. CHEMISTRY EXTENSION
35. WADDINGTON BUILDING (under construction 2008)
36. MULTI-STOREY CAR PARK
37. GEOLOGY EAST BUILDING
38. MARCH BUILDING
39. FARADAY BUILDING
40. KB BOILERHOUSE

3.4 Site-Existing Campus Form



School Development Precincts

Existing school functions form clusters of activity, these will be rationalised to create zones for co-location of school activity.












-  1. Chemistry
-  2. Geo-sciences
-  3. Biological sciences
-  4. Engineering & Electronics
-  5. Mathematics / Physics / Informatics
-  6. Learning & Support Facilities
-  7. SAC
-  8. Residential
-  9. College Office
-  10. EUSA
-  11. Ad hoc Ancillary Accommodation

3.4 Site-Proposed Campus Form

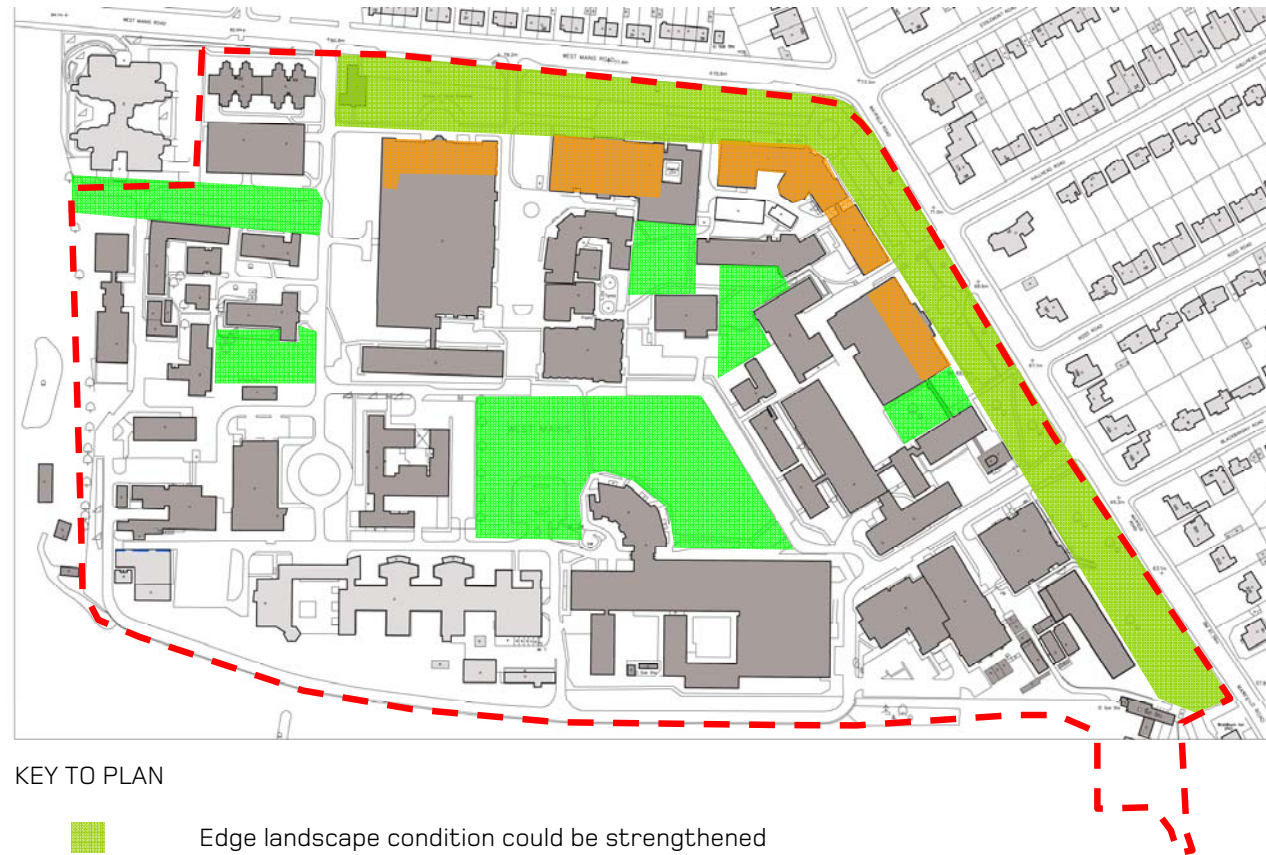


School Development Precincts





Existing school functions form clusters of activity, these will be rationalised to create zones for co-location of school activity.

-  1. Chemistry
-  2. Geo-sciences
-  3. Biological sciences
-  4. Engineering & Electronics
-  5. Mathematics / Physics / Informatics
-  6. Learning & Support Facilities
-  7. SAC
-  8. Residential
-  9. College Office
-  10. EUSA
-  11. Future Expansion Zone

3.5 Public Realm-Existing opportunities



KEY TO PLAN

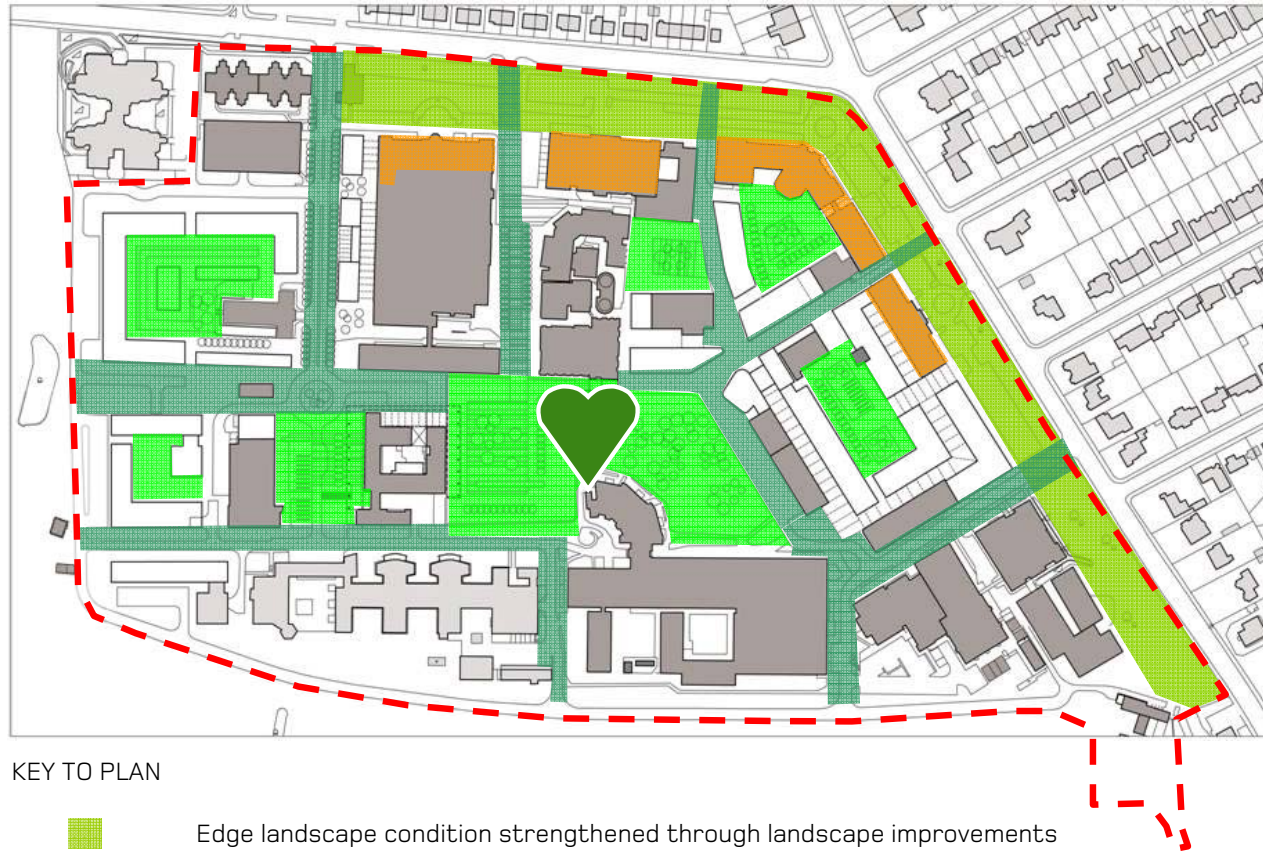
-  Edge landscape condition could be strengthened
-  Open space could be generator for new areas of public realm
-  Unity of street facades, provides entrances to the heart of the campus
-  Site Boundary

A number of informal green spaces and public and private squares are to be found scattered throughout the campus.







The improvement of the public realm and the creation of an improved sense of place for the whole campus are a key aim of the framework. Improvements will aim to reinforce the identity of the campus, and create clear, safe and legible spaces within.

The framework proposes to enhance and strengthen these characteristics.

3.5 Public Realm-Proposed Strategy 'Green Heart'



KEY TO PLAN

-  Edge landscape condition strengthened through landscape improvements
-  Open spaces could form new quadrangles and a green heart to the campus
-  Unity of street facades, provides entrances to the heart of the campus
-  Defined and improved links between heart and edge of the campus
-  Site Boundary
-  'Green Heart' geographic and social heart of the campus

A new "Green Heart" is proposed in the centre of the campus which provides a social space for students, staff and visitors

Improving the public realm, the connections within the campus and the "quadrangle" precincts will improve the sense of place and improve the legibility of key spaces.

Public realm proposals should:

- Develop campus identity and external image
- Retain boulevard character of campus edges
- Create legible, safe and pleasant pedestrian and cycle routes between campus entry points and the quads through the campus centre.
- Reinforce routes and vistas
- Develop an integrated landscape strategy
- Develop arrival spaces at core of campus
- Select landscape materials carefully, to create continuity and reinforce connections through campus

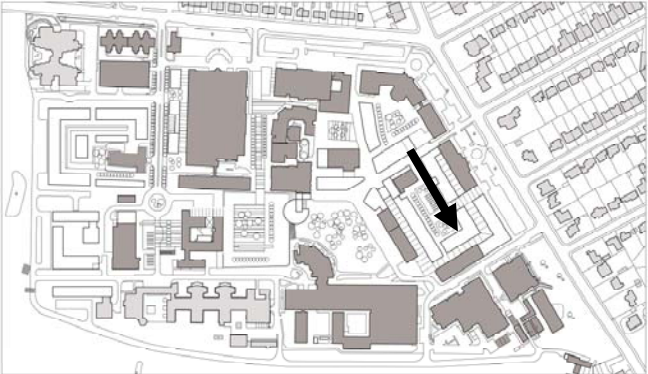
Building proposals should:

- Where possible create internal quadrangles within schools
- Provide strong relationships to high quality external spaces
- Define building lines particularly along main routes and vistas connecting to the heart of the site
- Enclose space with scale & massing appropriate to the function of the space.

3.5 Public Realm-Existing and Proposed



Current



View into court behind Sanderson Building



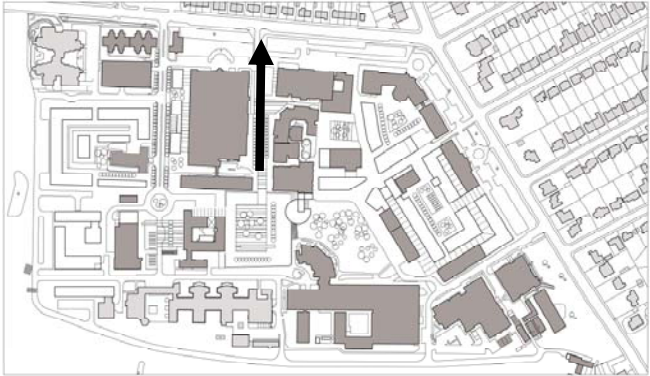
Proposed new landscaped quadrangles

3.5 Public Realm-Existing and Proposed

View north from KB Centre



Current



Proposed new route/vista from the 'green heart' to the edge of the campus

3.6 Corporate Identity - Existing



A (primary pedestrian entrance)



B (primary vehicular entrance)



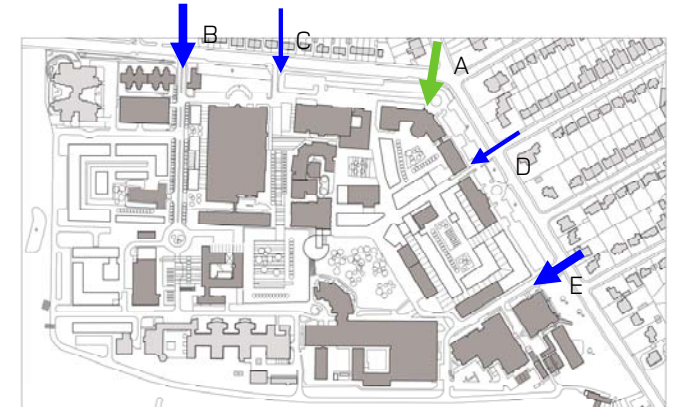
C (secondary vehicular entrance)



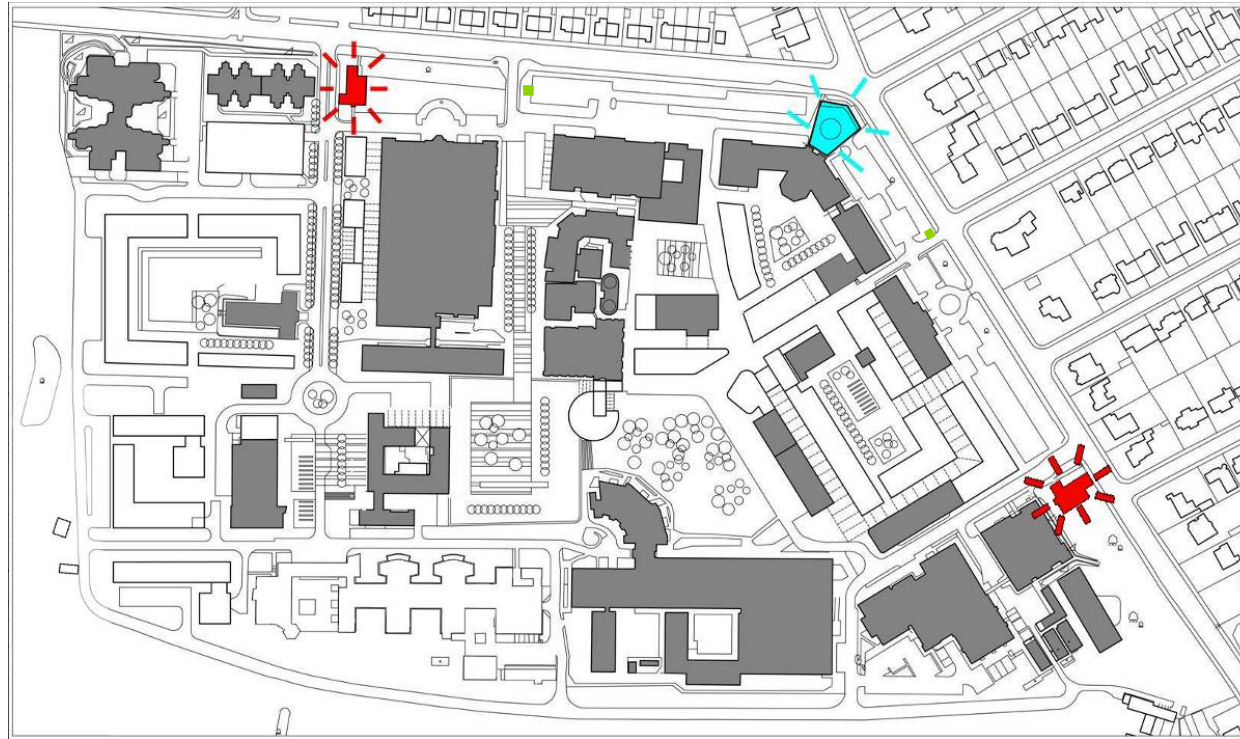
D (secondary vehicular entrance)






E (primary vehicular entrance)



3.6 Corporate Identity - Proposed



-  Key entrance location at major intersection
Primary point of arrival for pedestrians
-  "Key Gateways" to define campus entrances
 - Visiting vehicle entrance
 - Service entrance
-  Secondary access point

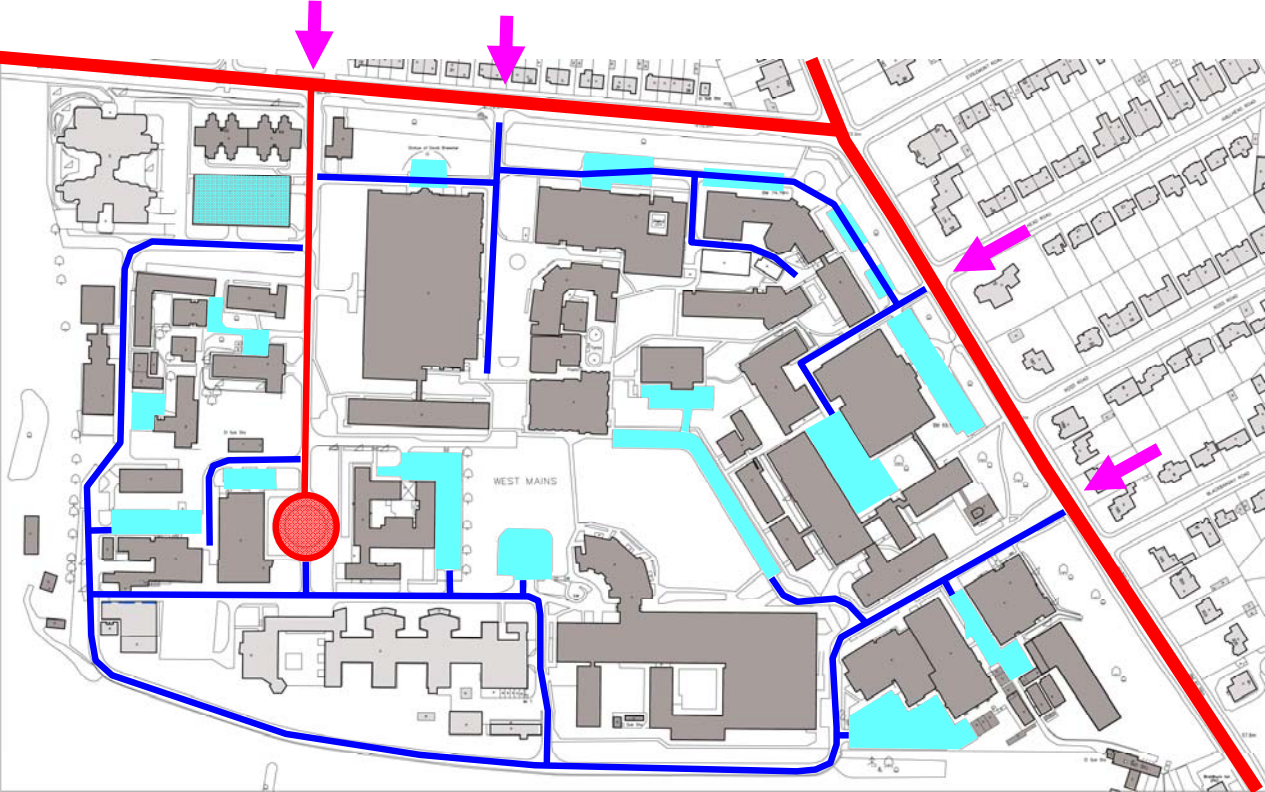
Visual Markers

An opportunity exists to develop key locations on the perimeter of the site to address the main entrance/arrival locations.

These are seen as orientation 'gateways/markers' to allow visitors and users alike to perceive a sense of arrival. They may also be utilised as administration/security points for an expanding campus.

The design of these may range from simple signage through to a manned office or information hub, they should act as visual reference points but not dominate the landscape strip around the perimeter of the site.

3.7 Circulation-Existing Vehicular Routes & Parking



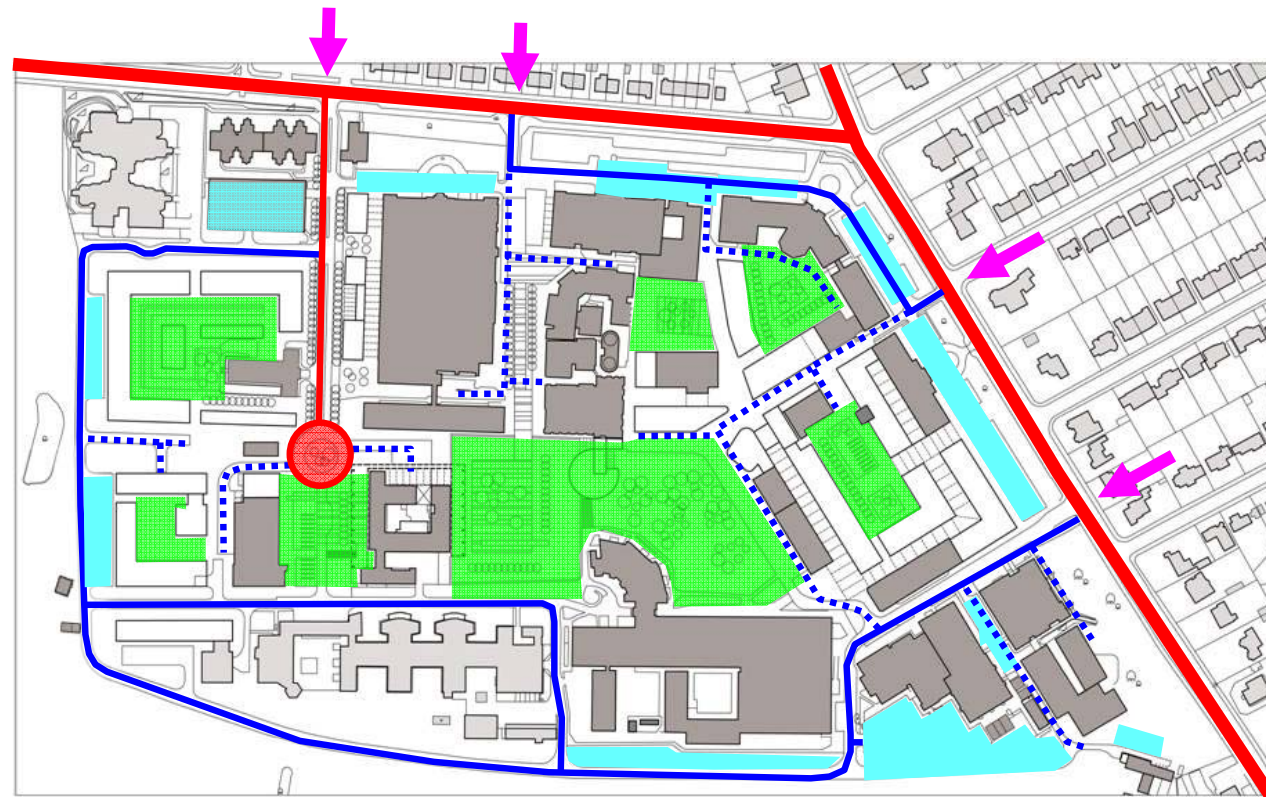
- Vehicular route past the site, including public transport
- Vehicular route within the site, including public transport
- Private and delivery vehicle access
- Mixed mode access
- Bus stop
- Car parking

The KB site currently has over 50 University buildings as well as associated institutions – the Scottish Agricultural College and the British Geological Survey. Over 1500 staff and 5000 students are based at KB. There are currently 1024 car parking spaces including a multi-storey car park. The University of Edinburgh’s travel plan for King’s Buildings seeks to provide for the needs of all staff and students without increasing the overall transport impact of the site. A copy of the Travel Plan for The King’s Buildings, accompanies this document.

The site lies adjacent to primary vehicular routes to the city centre. A dedicated bus service is provided between Edinburgh University Central Area and King’s Buildings. There are several other public bus routes to and from the City Centre running in close proximity to the study area.

There are a number of campus entry points along the north and east edges. The south and west boundaries are closed to access due to the adjacent to Craigmillar Park Golf Course.

3.7 Circulation-Proposed Vehicular Routes & Parking



- Vehicular route past the site, including public transport
- Vehicular route within the site, including public transport & Cycle route
- - - - Delivery, disabled access & cycles only on shared surface
- Access Road
- ← Mixed mode access
- Bus stop
- Car parking
- Landscaped space

The proposal seeks to rationalise the existing network, providing a more structured approach to the campus, through the definition of routes, quadrangles and the green heart, by:

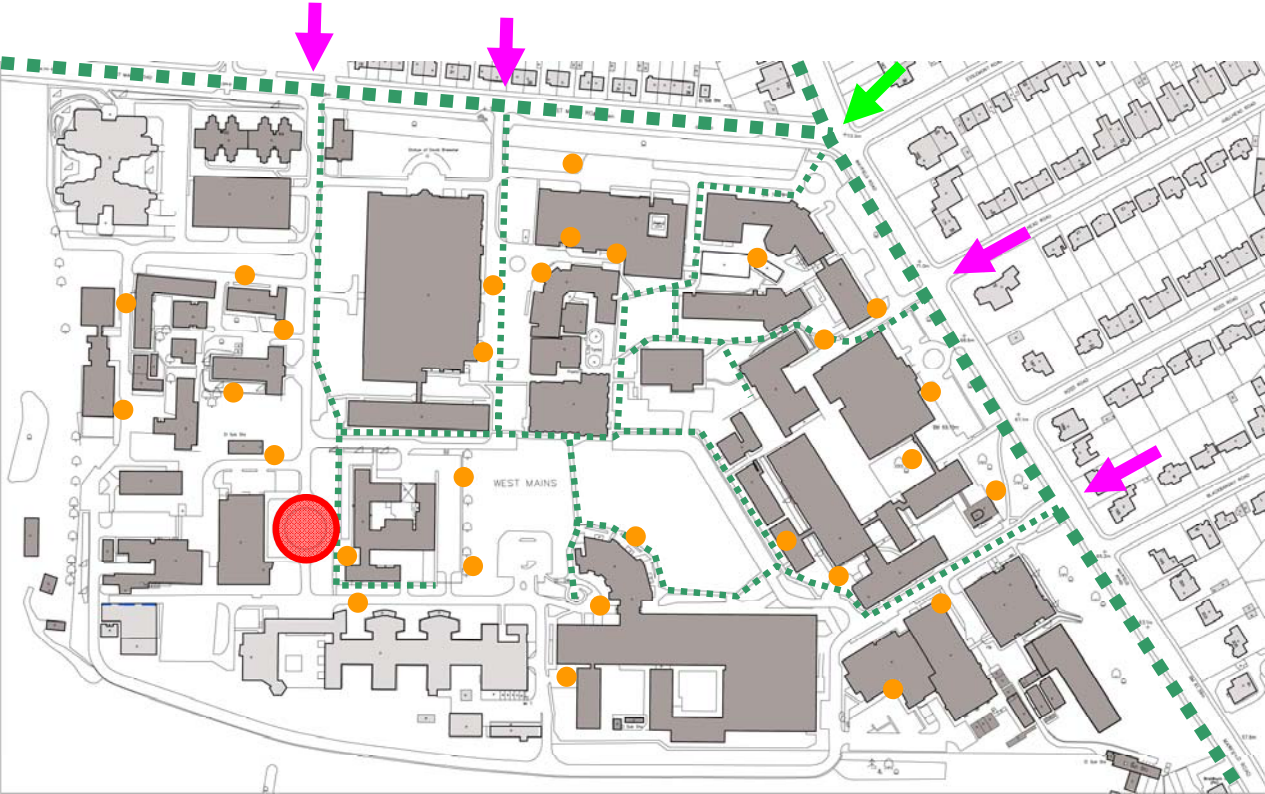
- Relocating parking to perimeter zones to release key areas for development and/or pedestrian activity
- Rationalising service access and routes through campus

Car parking is currently located throughout the site. This framework proposes a consolidation strategy, which includes:

- Relocating parking from key central areas to the campus periphery
- Consolidating parking to existing under utilised multi-storey
- No overall increase in parking numbers from those currently on site.

The University of Edinburgh's transport strategy is contained in a document accompanying this framework.

3.8 Circulation-Existing Pedestrian & Cycle Routes



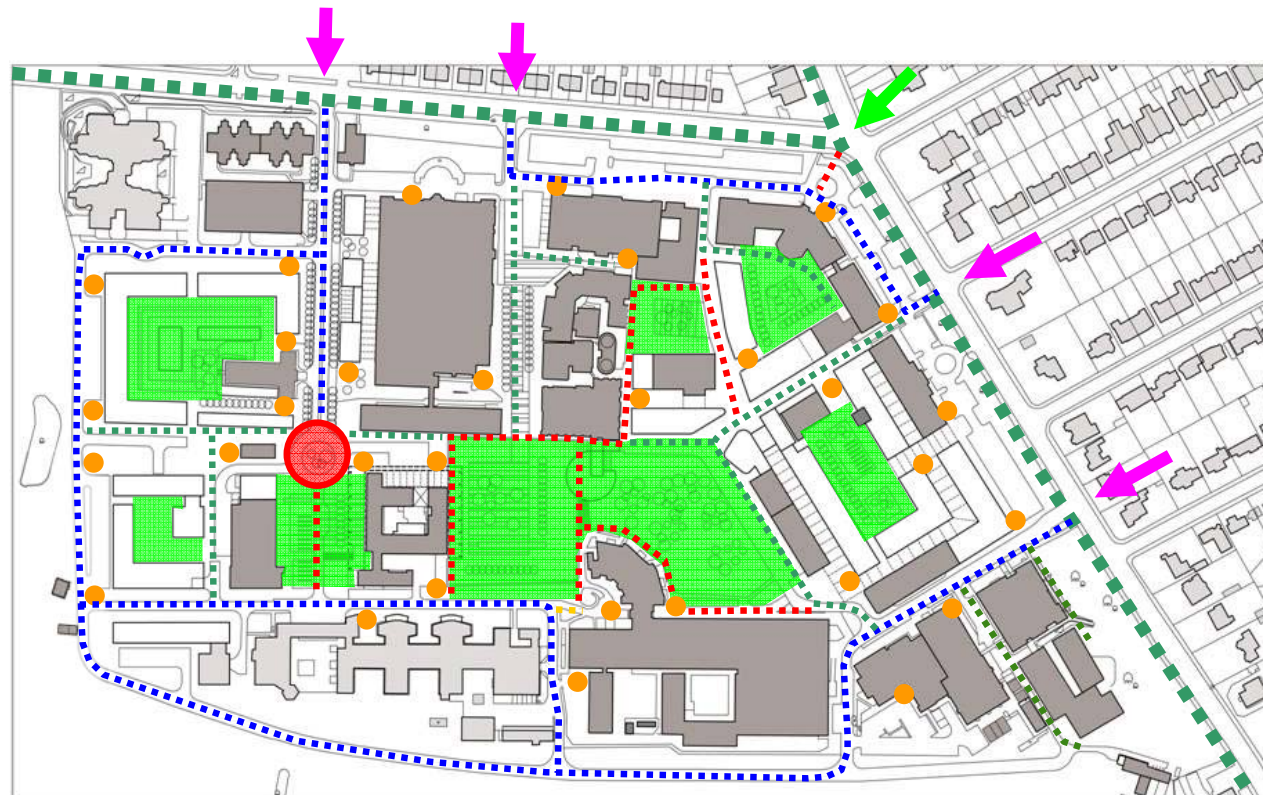
- ■ ■ ■ Pedestrian routes past the site
- Pedestrian routes within the site
- Indicative Cycle storage adjacent to each building
- ← Pedestrian only access
- ← Mixed mode access
- Bus stop

The University encourages sustainable methods of transport and provides secure cycle storage across the campus.

There is, however, a degree of significant pedestrian traffic arriving from the north down Mayfield Road and from the west along West Mains Road. Pedestrian routes within the campus give access to departmental buildings

Cycle access is currently limited within the site to vehicular routes (described in 3.7) due to safety concerns over shared pedestrian/ cycle pathways.

3.8 Circulation-Proposed Pedestrian & Cycle Routes



- ■ ■ ■ Pedestrian / Cycle Routes past the site
- ● ● ● Pedestrian / Cycle routes within the site:
 - ● ● ● - access road
(vehicular priority with pedestrian & cycle provision)
 - ● ● ● - pedestrian/ cycle priority on shared surface
 - ● ● ● - pedestrian/cycle only
- Indicative Cycle storage adjacent to each building
- ← Pedestrian only access
- ← Mixed mode access
- Bus stop
- Landscaped space

The proposal seeks to rationalise the existing network, providing a more structured approach to the campus, through the definition of routes, quadrangles and the green heart, by:

- Creating pedestrian/ cycle friendly zones linking schools to each other, to campus entry points and to campus heart
 - Generally the use of a shared surface approach will give priority to pedestrians and cycles. Where practical separate cycle and/or motor routes will be provided.
 - Best practice in junction design will be implemented minimising hazard to cyclists and pedestrians
 - Ground floor treatments should aim to give visual connection with, and where applicable access to, key routes.
 - Landscape treatment should be used to give definition to route priority and access type.
 - Cycle storage provision will be developed towards providing open access storage adjacent to all buildings.
 - All new buildings will be expected to incorporate sufficient adjacent short-term and long-term cycle storage.
- Along with the development of the travel plan, building on the university's successes at encouraging green travel behaviour and in order to promote cycle commuting the university will explore with the City of Edinburgh council the provision of high quality cycle routes and access points to the campus.

3.9 Site-Heights - Existing

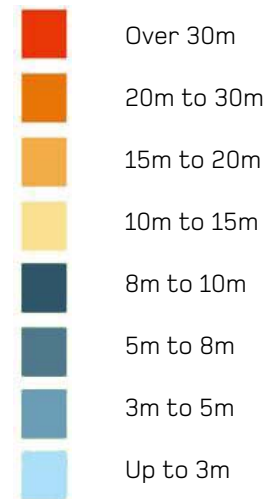


Building heights

A range of building heights exist across the site, and reflect the ad-hoc nature of development. The tallest buildings on the site are generally located toward the south and east.

The location of the tallest buildings is also the lowest part of the site. The site generally falls from north to south. A composition of similarly scaled facades presents an incomplete elevation to West Mains Road and Mayfield Road.

Building heights (above existing ground level)



3.9 Site-Heights - Proposed

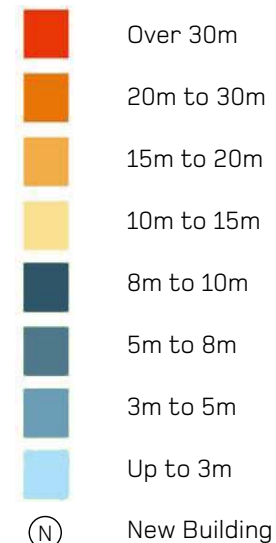


Building heights

A range of building heights exist across the site, and reflect the ad-hoc nature of development. The tallest buildings on the site are generally located toward the south and east.

The heights indicated on this plan are indicative only, and provide an illustration of the strategy where the composition of new development is consistent with the campus as a whole. As each proposal comes forward, they should illustrate their relationship with adjacent buildings and spaces, and comply with City of Edinburgh design guidance.

Building heights (above existing ground level)



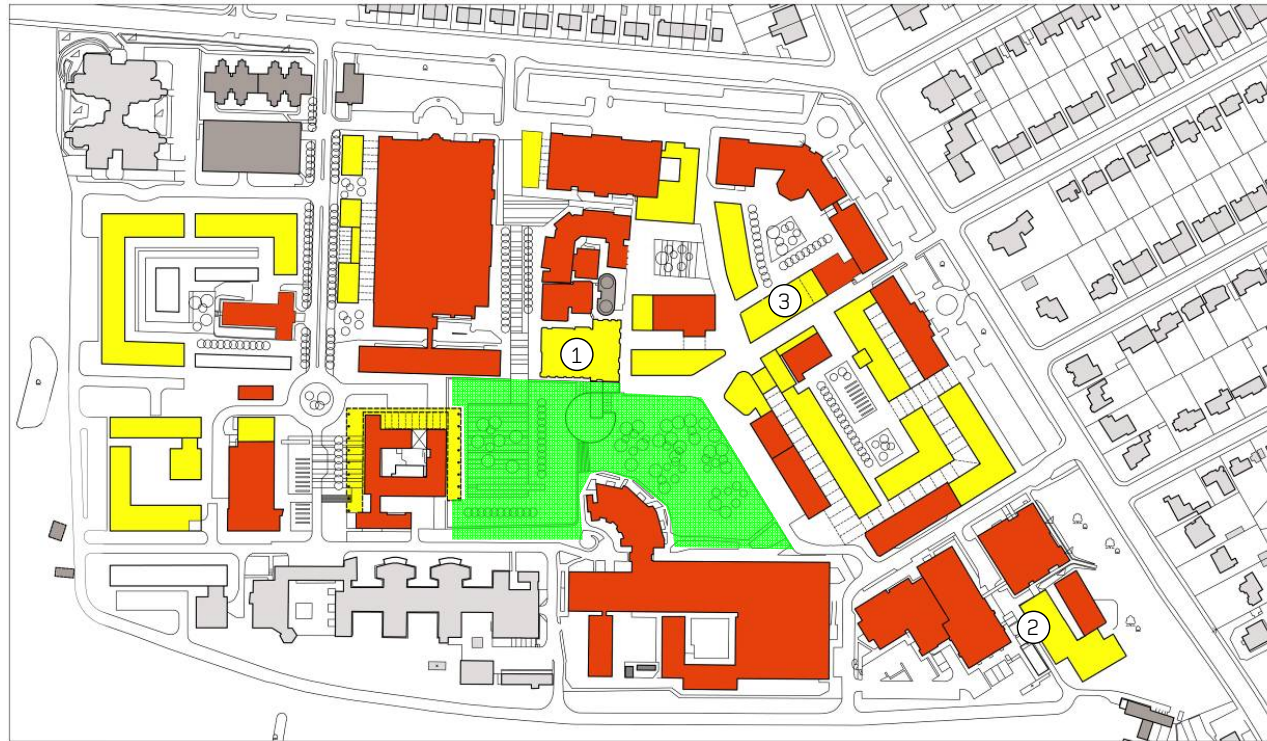
Notes:




1. Heights of buildings proposed in this location should relate to the adjacent Sanderson building to the north. The appearance of a coherent range of related buildings should be maintained.
2. Heights of buildings proposed in these locations should relate to BGS and SAC buildings to the North and South- East of this site. A composition of built elements of similar scale should be created.
3. A single landmark element presents the opportunity for articulating views along a number of key routes into the heart of the campus

4

Development Proposals

4.1 Campus Wide Proposals



-  Existing open space at the heart of the campus and school quadrangle
-  Existing buildings to be retained
-  Opportunity new buildings to provide expansion space for the school

The existing campus would benefit from remodelling to provide:

- Long term expansion potential for the education and research facilities on site
- Improved buildings, circulation and landscape, to create coherent campus environment
- A new administrative centre, library plus a newly developed learning and teaching cluster for the college, all situated around the green heart of the campus.




The long term phasing of development is contingent upon funding, and research / educational need of each of the schools.

In the short term a number of developments are likely to come forward as planning applications, these include:

1. The redevelopment of the Robertson Library (2008 – 2009)
2. Waddington Building Phase 2 (2008 – 2009)
3. Ashworth 4 (2008 – 2009)

4.2 Campus Centre-Learning Support Facilities-Existing



-  Existing open space at the heart of the campus
-  Existing buildings to be retained
-  Removal of low density. Poor quality, ineffective buildings.

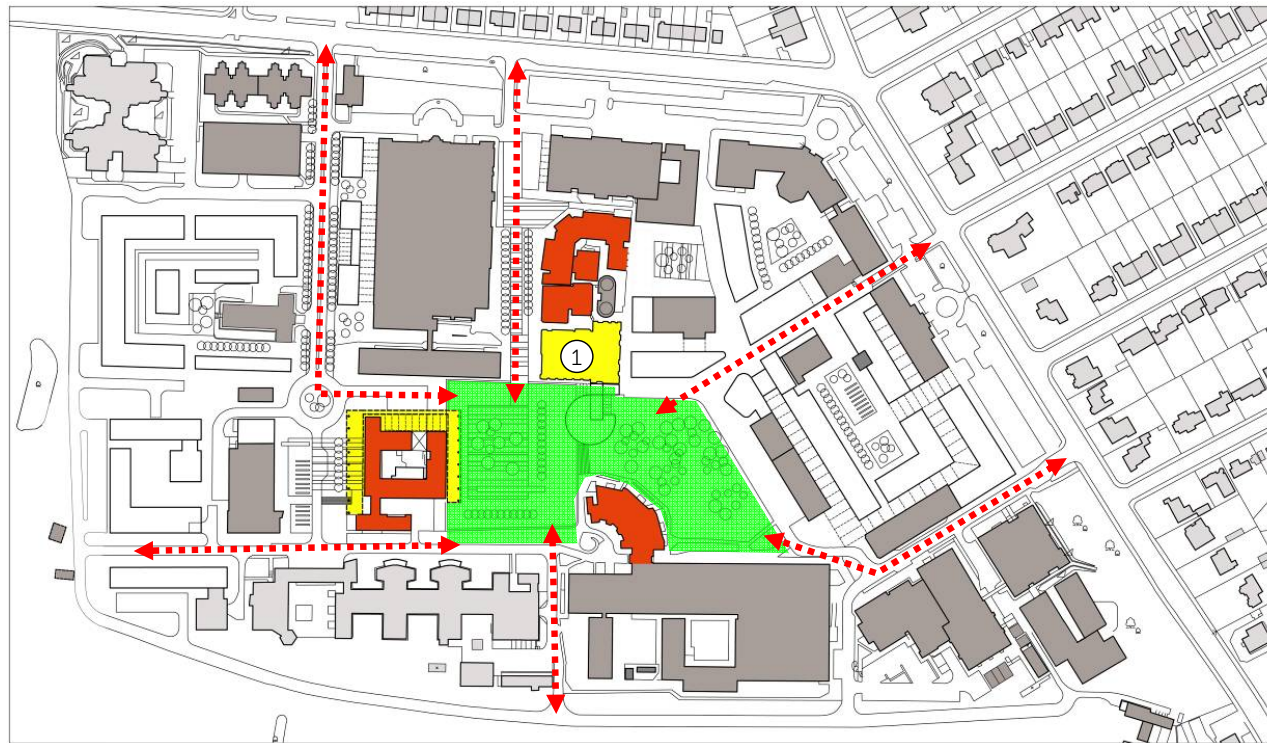
Existing facilities are:

- Dispersed in an ad-hoc manner around the campus
- Housed in low quality buildings nearing the end of their useful lives

The existing centre of the campus would benefit from remodelling to provide:

- A new campus centre that provides administrative, learning and social focus at the heart of the College.
- Revitalisation of existing buildings, circulation and landscape areas to create a coherent strategy, and high quality collegiate centre.
- Student focused learning / study facilities including consolidated library functions
- High quality social / recreational facilities as a key element of the campus environment including the relocation of café, shop, bookshop, and student social space
- Stimulation of campus life beyond 9-6 working day

4.2 Campus Centre- Learning & Support Facilities-Proposed







The proposed centre of the campus is intended to provide:

- A new campus centre that provides administrative, learning and social focus at the heart of the College.
- Revitalisation of existing buildings, circulation and landscape areas to create a coherent strategy, and high quality collegiate centre.
- Student focused learning / study facilities including consolidated library functions
- High quality social / recreational facilities as a key element of the campus environment including the relocation of café, shop, bookshop, and student social space
- Stimulation of campus life beyond 9-6 working day

Note:

1. A planning application for the redevelopment of the Robertson Library is likely 2008-2009




-  Access to the new 'Green Heart' of the campus
-  Existing open space at the heart of the campus
-  Existing buildings to be retained
-  Opportunity for building to be substantially altered or rebuilt to provide new function

4.3 School of Engineering and Electronics-Existing

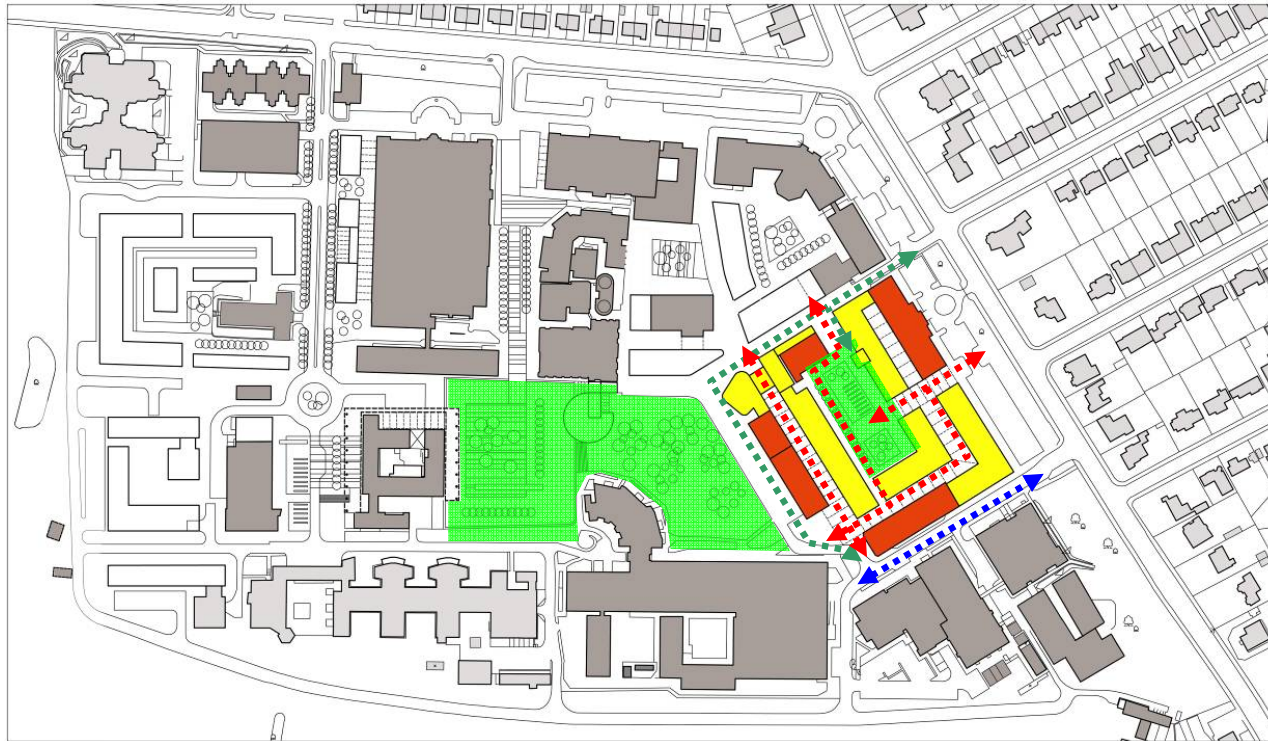


Existing facilities are:

- Located within buildings developed in an ad-hoc manner at the eastern edge of the campus
- Housed in a variety of buildings some of which are nearing the end of their useful lives, and will require demolition or substantial renovation.
- In need of consolidation from buildings of various ages and constructions into more appropriate facilities.




-  Existing open space at the heart of the campus
-  Existing buildings to be retained
-  Removal of low density. Poor quality, ineffective buildings.

4.3 School of Engineering and Electronics-Proposed






The proposed school of Engineering and Electronics is intended to provide:

- Rationalised and retention of existing buildings
- A new quadrangle focus for the school.
- Revitalisation of existing buildings, circulation and landscape areas to create a coherent strategy, and high quality school environment.
- Creation of school focused facilities
- Consolidation of school functions

-  Existing open space at the heart of the campus and school quadrangle
-  Existing buildings to be retained
-  Opportunity new buildings to provide expansion space for the school

Access Routes:




-  - access road (with pedestrian & cycle provision)
-  - pedestrian/ cycle priority on shared surface
-  - pedestrian/cycle only

4.4 School of Biological Sciences-Existing

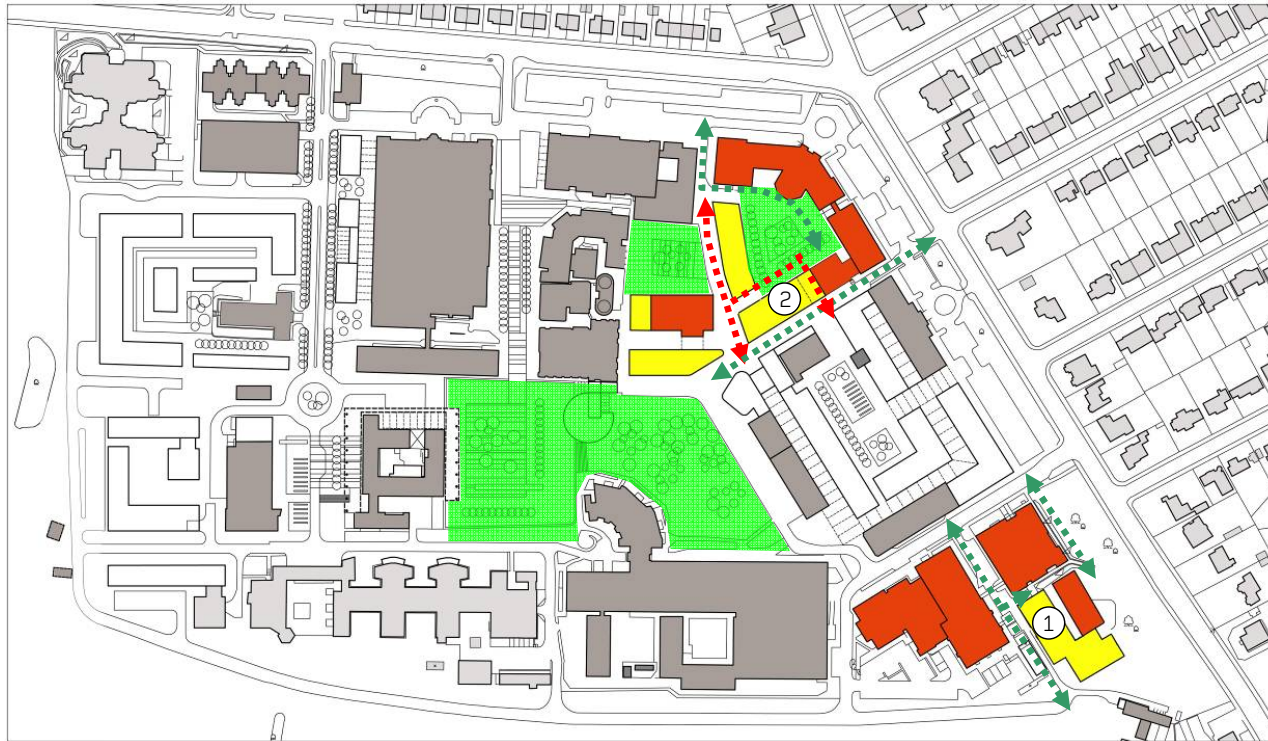


Existing facilities are:

- Located within buildings developed in an ad-hoc manner in the north east and south east corners of the campus
- Housed in a variety of buildings some of which are nearing the end of their useful lives, and will require demolition or substantial renovation.
- In need of consolidation from buildings of various ages and constructions into more appropriate facilities.

-  Existing open space at the heart of the campus
-  Existing buildings to be retained
-  Removal of low density. Poor quality, ineffective buildings.

4.4 School of Biological Sciences-Proposed









The proposed school of Biological Sciences will be formed through the:

- Rationalisation and retention of existing buildings
- Creation of a new northern quadrangle focus for the school.
- Rationalisation of southern grouping
- Revitalisation of existing buildings, circulation and landscape areas to create a coherent strategy, and high quality school environment.
- Creation of school focused facilities
- Consolidation of school functions in two centres

Note:

1. A planning application for the redevelopment of the Waddington Building Phase 2 is likely 2010-2011
2. A planning application for the development of the Ashworth 4 is likely 2008-2009

-  Existing open space at the heart of the campus and school quadrangle
-  Existing buildings to be retained
-  Opportunity new buildings to provide expansion space for the school




- Access Routes:
-  - access road (with pedestrian & cycle provision)
 -  - pedestrian/ cycle priority on shared surface
 -  - pedestrian/cycle only

4.5 School of Geo-Science - Existing

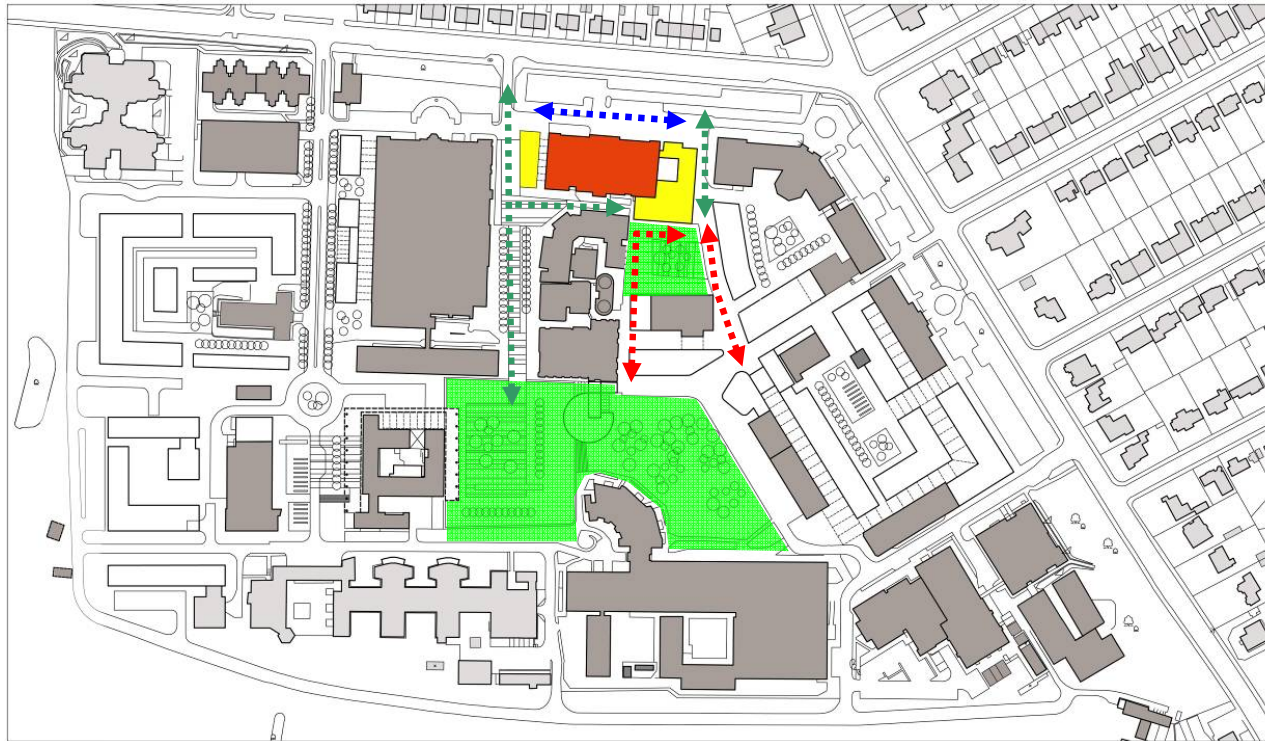


Existing facilities are:

- Located within buildings developed in an ad-hoc manner in the northern area of the campus
- Housed in a variety of buildings some of which are nearing the end of their useful lives, and/or will require demolition / substantial renovation.
- In need of consolidation from buildings of various ages and constructions into more appropriate facilities.
- Split into a variety of buildings across the campus making operations inefficient.




-  Existing open space at the heart of the campus
-  Existing buildings to be retained
-  Removal of low density. Poor quality, ineffective buildings.

4.5 School of Geo-Science - Proposed






The proposed school of Geo-Science will be formed through the:

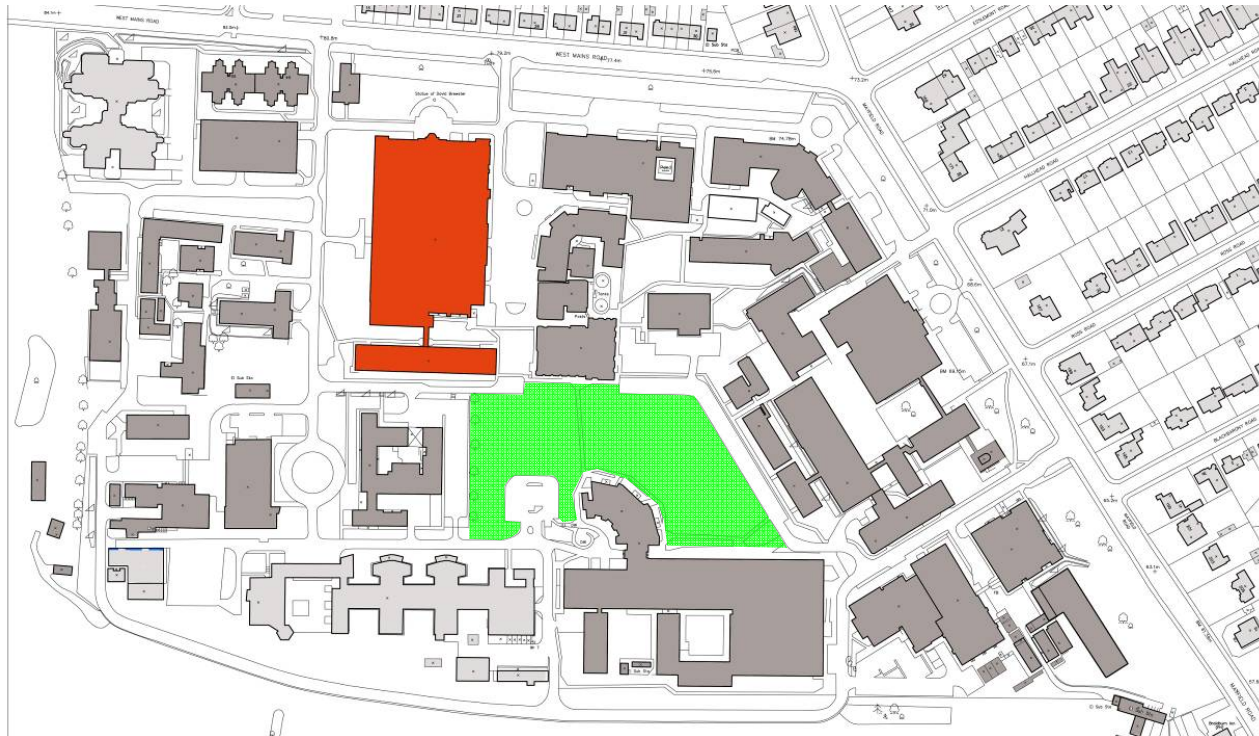
- Rationalisation and retention of existing buildings
- Creation of a new quadrangle to the south of the school.
- Rationalisation of existing eastern grouping
- Revitalisation of existing buildings, circulation and landscape areas to create a coherent strategy, and high quality school environment.
- Creation of school focused facilities
- Consolidation of school functions in one centre

-  Existing open space at the heart of the campus and school quadrangle
-  Existing buildings to be retained
-  Opportunity new buildings to provide expansion space for the school

Access Routes:




-  - access road (with pedestrian & cycle provision)
-  - pedestrian/ cycle priority on shared surface
-  - pedestrian/cycle only

4.6 School of Chemistry-Existing

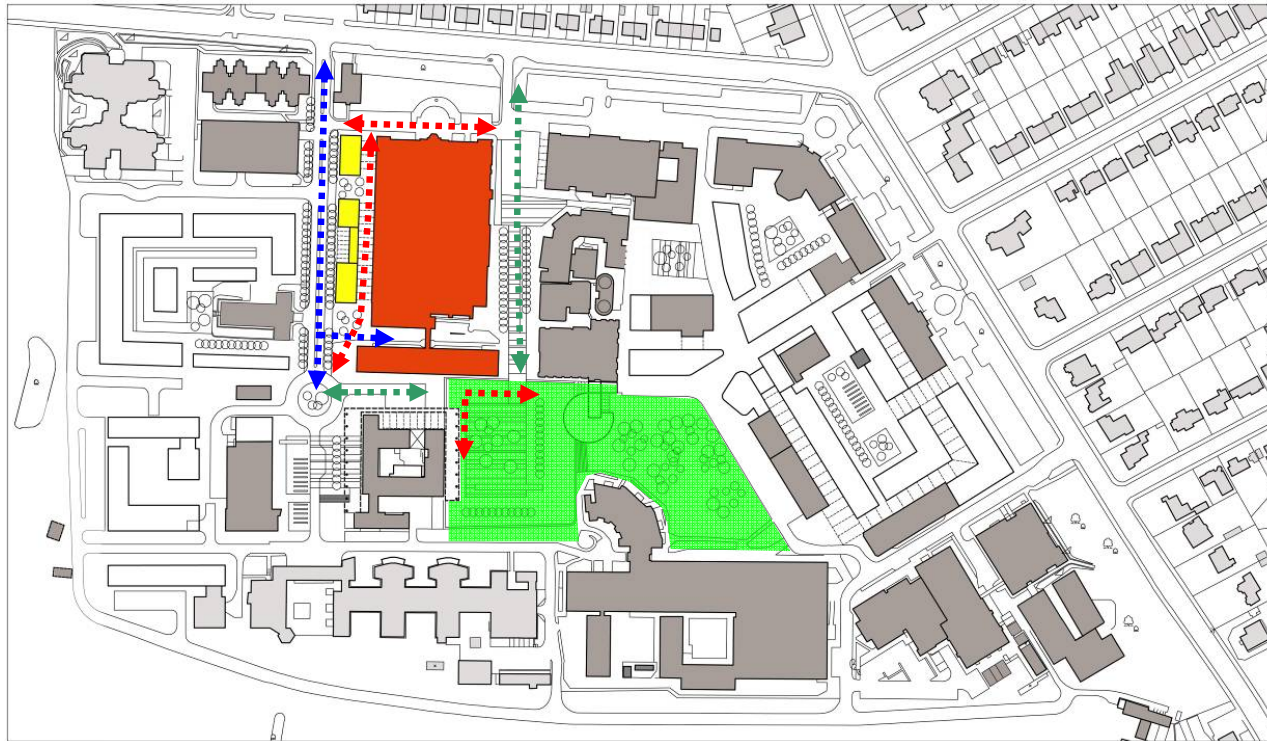


Existing facilities are:

- Located within buildings developed in an ad-hoc manner in the northern area of the campus
- Housed in buildings some requiring renovation.
- In need of additional buildings to support the functions contained within existing buildings




-  Existing open space at the heart of the campus
-  Existing buildings to be retained
-  Removal of low density. Poor quality, ineffective buildings.




4.6 School of Chemistry-Proposed



The proposed school of Chemistry will be formed through the:

- Rationalisation and retention of existing buildings
- Creation of new buildings to the west of the school to create a façade to the boulevard edge.
- Revitalisation of existing buildings, circulation and landscape areas to create a coherent strategy, and high quality school environment.
- Creation of school focused facilities
- Consolidation of school functions in one centre

-  Existing open space at the heart of the campus and school quadrangle
-  Existing buildings to be retained
-  Opportunity new buildings to provide expansion space for the school




- Access Routes:
-  - access road (with pedestrian & cycle provision)
 -  - pedestrian/ cycle priority on shared surface
 -  - pedestrian/cycle only

4.7 School of Mathematics & Physics-Existing

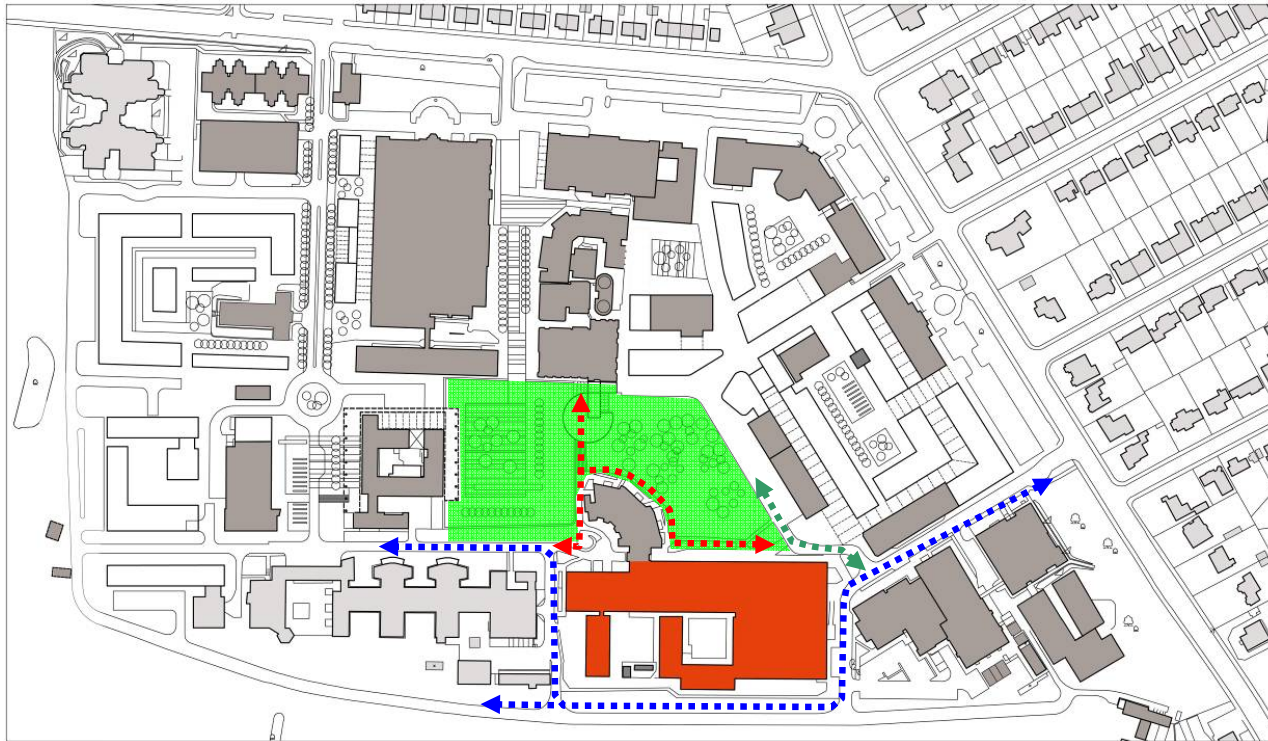


Existing facilities are:

- Located within buildings southern area of the campus
- Housed in buildings requiring renovation / reconfiguration.




-  Existing open space at the heart of the campus
-  Existing buildings to be retained
-  Removal of low density. Poor quality, ineffective buildings.

4.7 School of Mathematics & Physics-Proposed






The proposed school of Mathematics & Physics will be formed through the:

- Rationalisation and retention of existing buildings, with no new buildings proposed.
- Revitalisation of existing buildings, circulation and landscape areas to create a coherent strategy, and high quality school environment.
- Creation of school focused facilities

-  Existing open space at the heart of the campus and school quadrangle
-  Existing buildings to be retained
-  Opportunity new buildings to provide expansion space for the school

Access Routes:




-  - access road (with pedestrian & cycle provision)
-  - pedestrian/ cycle priority on shared surface
-  - pedestrian/cycle only

4.8 Future Expansion Zone-Existing

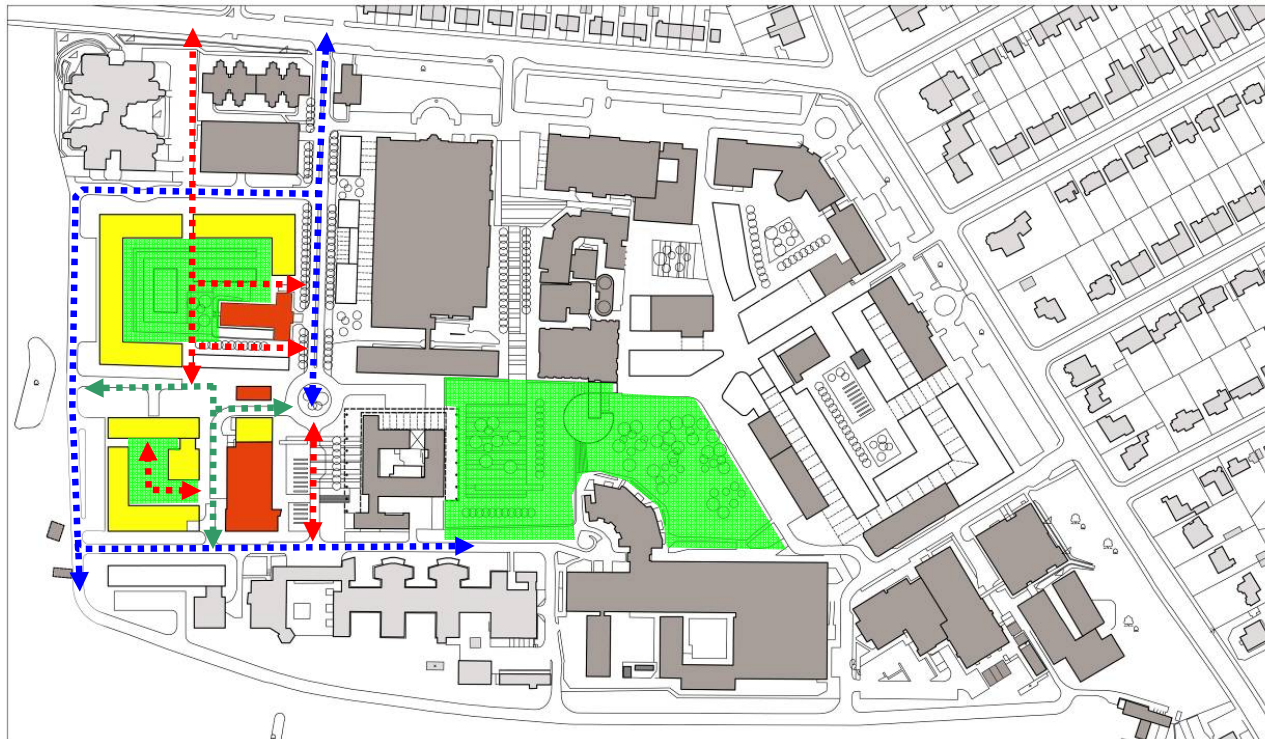


Existing facilities are:

- Located on the western side of the campus
- An ad hoc collection of building with little or no merit
- Housed in a variety of buildings the majority of which are nearing the end of their useful lives, and/or will require demolition / substantial renovation.
- In a location which could provide opportunities for major campus developments




-  Existing open space at the heart of the campus
-  Existing buildings to be retained
-  Removal of low density. Poor quality, ineffective buildings.

4.8 Future Expansion Zone-Proposed






The proposed Future Expansion Zone will be formed through the:

- Removal of low density, poor quality ineffective buildings from centre of site
- Relocation of specific functions to more appropriate locations
- Rationalisation and retention of existing buildings
- Creation of new buildings to the west of the retained buildings to create quadrangle environments
- Revitalisation of existing buildings, circulation and landscape areas to create a coherent strategy, and high quality school environment.
- Creation of school focused facilities

-  Existing open space at the heart of the campus and school quadrangle
-  Existing buildings to be retained
-  Opportunity new buildings to provide expansion space for the school

Access Routes:

-  - access road (with pedestrian & cycle provision)
-  - pedestrian/ cycle priority on shared surface
-  - pedestrian/cycle only

4.9 Benefits of the Framework

The aims and benefits of the King's Buildings Framework are to:

- Create a coherent framework which will support long term academic development
- Address the future expansion and co-location requirements of the College of Science and Engineering
- Consolidate and enhance links and routes throughout the campus
- Address car parking provision and access throughout the campus
- Redefine pedestrian and vehicular gateways onto the site
- Enhance the identity of the College through environmental improvements
- Develop the College Centre as a shared support facility
- Be aligned with the University's objectives and obligations regarding sustainability