5.2 Academic structure



Lancaster University Masterplan John McAslan+Partners

Proposed academic structure

Mainly occupied by Faculty of Science & Technology

Mainly occupied by Faculty of Arts & Social Science

Mainly occupied by Management School

Residential

An academic structure based on the existing and new building blocks is established to not only structure the built form but also the internal organisation of the University. This would not regulate the identity of Colleges, but rather support a variety of characters across the campus.





6.0 Masterplan

Lancaster University

John McAslan + Partners

Masterplan

6.1 Landscape

The commissioned masterplan by John McAslan and Partners builds upon the historic linear concept of the 1960s masterplan and aims to create a distinct structure upon which future development can be based. This is achieved through strengthening the existing short access roads, creating new links to the main pedestrian spine and re-inforcing building frontage through selected demolition and new-build.

The masterplan aims to create a unifying framework to improve the quality of the public realm while keeping the identity and variation of colleges across the campus.

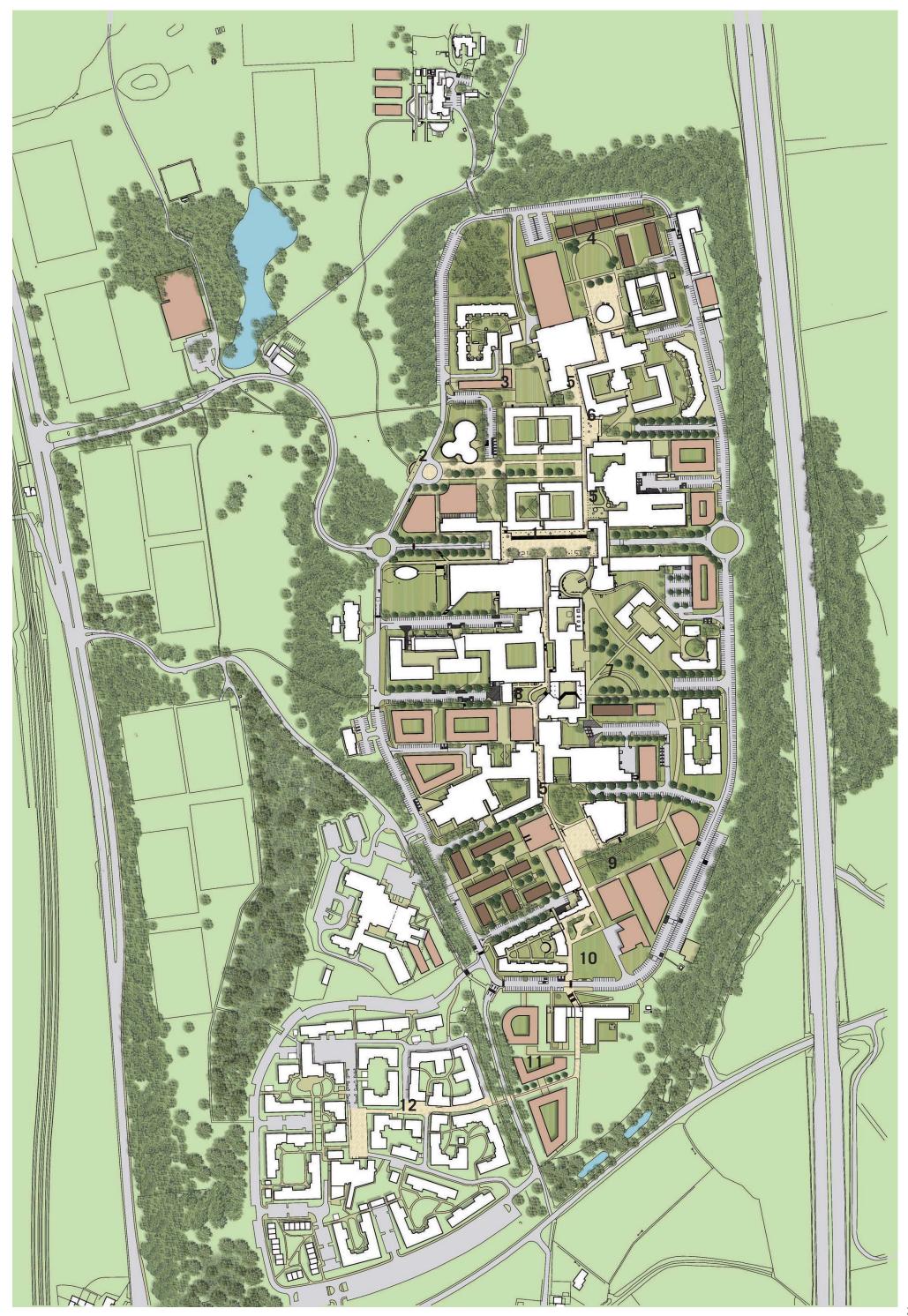
A new entrance is created between the Chaplaincy and the existing reception building, which is replaced with a new more prominent reception building that will clearly mark the entrance. A drop-off roundabout is integrated into the new landscape design connecting through to the Spine. The new plaza at County College and the newly defined square in front of the George Fox Building along with Alexandra Square provide fixing points to invigorate the Spine, which extends through InfoLab21 to link the new development to the South and Alexandra Park with the core campus.

Key to Masterplan

- 1 Remodel Alexandra Square
- 2 New entrance with welcome flags and redesigned access and drop-off point
- 3 Re-design access and parking to Great Hall
- 4 New plaza to new residential development
- 5 Repave spine, replace existing canopies with light/transparent structure (as in Landscape Plan)
- 6 Create new secondary pocket square to link 'green fingers' following demolition of annex building
- 7 New collegiate lawn with steps as meeting point
- 8 Create new link with 'green fingers'
- 9 Establish new public space incorporating existing coppice
- 10 Keep lawn area for views to InfoLab21 and surrounding landscape
- 11 New development
- 12 Improve link to Alexandra Park

General:

- New tree planting to access roads to establish 'green fingers'
- Establish footpath system to playing fields, the Science Park and the new sports centre
- Densified woodland planting as in Landscape Plan



6.2 Built structure

The masterplan shows an indicative proposal of what could be built on the campus in the future. It aims to create a unifying framework that will improve legibility and connections throughout the campus.

Some of the shown new buildings are already in a planning stage like the ISS building and the new sports centre. All other proposed buildings define the built structure, frontages and public space of the campus. Although there are ideas of how these buildings can be filled, the briefs, budgets and programmes will develop with the further expansion of the University.

Lancaster University Masterplan John McAslan+Partners









Precedent images for the public realm

Areas:

New / Existing

Note:

- New areas based on 2,3 and 4 storey heights generally
- Existing academic areas taken from JMP space audit
- Approximate gross internal floor areas

A - **11,747 m2** (Housing) (3,671m2 footprint) **4,768 m2** (Academic) (1,768 m2 footprint) 13,110 m2 (Mainly housing)

B - **13,920 m2** (5,187 m2 footprint) 12,582 m2 (Management School)

C - 15,262 m2 4,943 m2 (Library footprint)

D - **7,289 m2** (1,315 m2 ftprt)
-**2,900m2** (Proposed demolition)
14,745 m2 (Bowland College; excl. Chaplaincy and University House)

E - **1,572 m2** (655 m2 ftprt) 1,056 m2 5,542 m2 (Great Hall)

F - **7,643 m2** (Housing) **2,208 m2** (Academic) (2,760 m2 ftprt)

G - **498 m2** (Support Services) 17,138 m2 (Mainly housing) 8,819 m2

H - **5,864 m2** (Academic) (2,278 m2 ftprt) 13,944 m2

I - **1,200 m2** (Administration) (1,200 m2 ftprt) 12,618 m2 (Housing)

J - **1,659 m2** (Academic) (1,037 m2 ftprt) 7,830 m2 1,731 m2 (PSC building 3 storeys) 12,065 m2 (Housing)

K - **14,766 m2** (Academic) (7,654 m2 ftprt) 7326 m2

L - **8,570 m2** (Academic) (3,571 m2 ftprt)

M - Alexandra Park

N - **734 m2** (Conference centre)(918 m2 ftprt)

O - **5,885 m2** (Sports Centre)

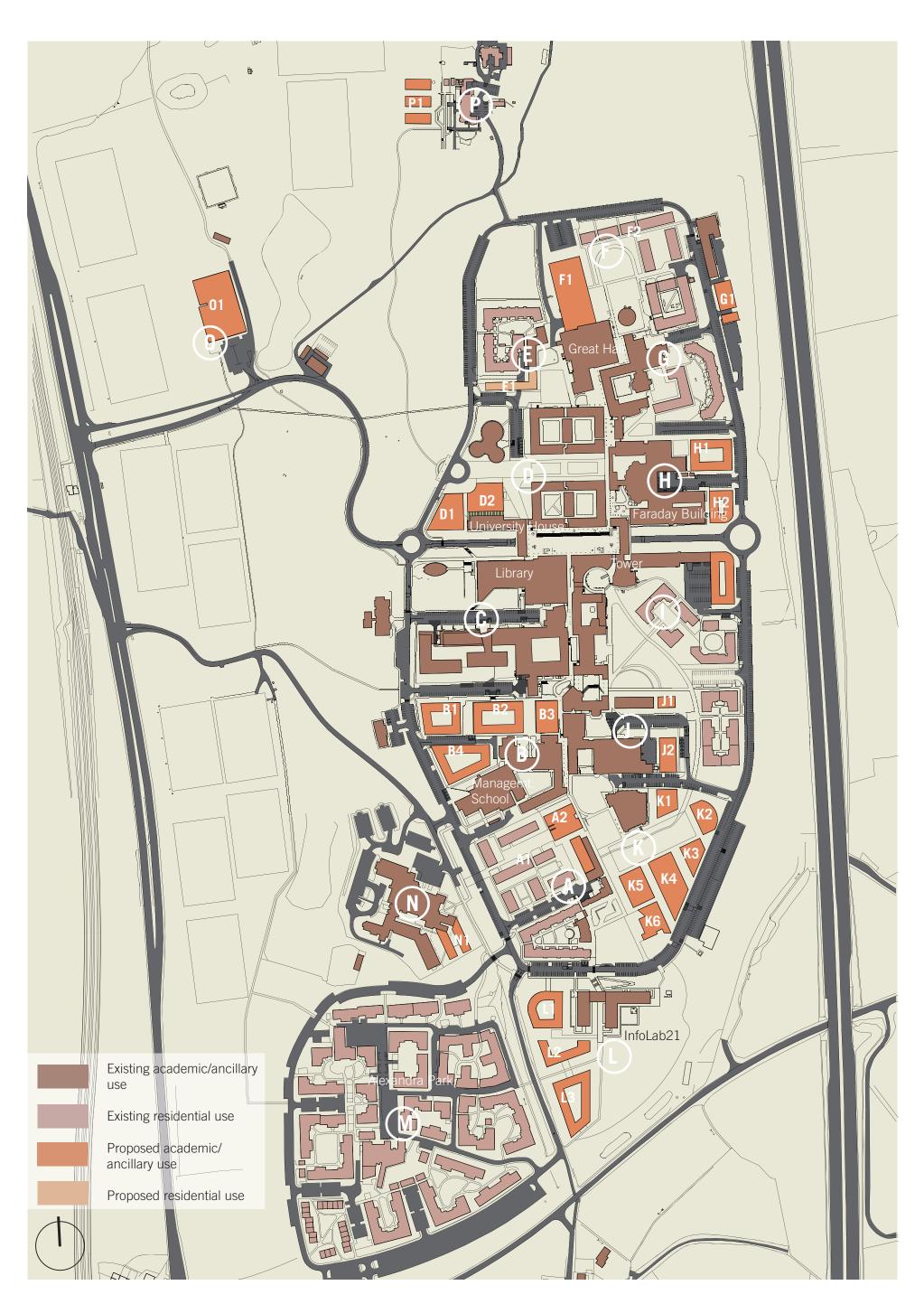
P - **864 m2** (Academic/ancillary)

TOTAL: **89,187 m2** (36,303 m2 ftprt) of which 19,390 m2 new housing

80,802 m2 (academic only excl. sportscentre, library, Great Hall complex, info lab, LEC work shops)
55,070 m2 (housing, excl. Alexandra Park)

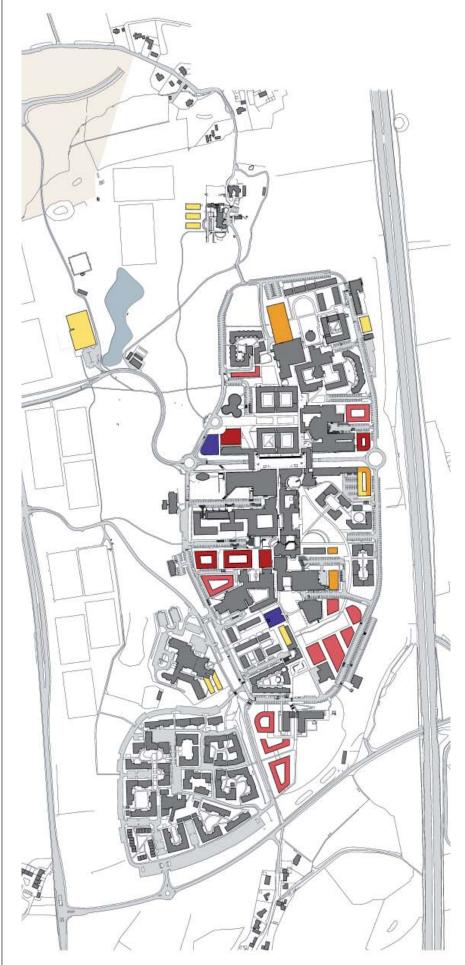
Public Space

16,730 m2 'spine' area incl. new terminating squares to North and South 4,700 m2 new entrance ~210 new trees (excl. woodland)



6.2 Built structure - heights and design guidance

Lancaster University Masterplan John McAslan+Partners



The new buildings should respond to their context in height and massing as well as in the choice of material for facades. Building heights for newbuild vary from one to four storeys depending on the context and use of the proposed buildings.

Buildings set in the surrounding landscape like the new sports centre or a possible conference centre extension to Bailrigg House affiliate to the sloped terrain and are kept low to maximise views up the hill.

The extended support services building is a compact two-storey construction as are the proposed buildings set at the back of the current engineering building.

All new buildings in the core campus (blocks B, D and H) should include a set back alignment with the original 1960's buildings design and take reference from the materials used such as yellow brick. The top floor should be rendered or clad in white and broken up with grey metal panels to blend in with the rest of the campus buildings.

The new development to the South-East (K) and towards Alexandra Park (L) should be of a high architectural quality with robust, long-lasting yet sustainable materials and of a modern, minimalist design that supports the character of the campus (like the recently finished third phase of the Lancaster Environment Centre).

If existing buildings from the original 1960's design are demolished it should be ensured that the elevations are re-instated and match the renovated facades elsewhere on the campus.



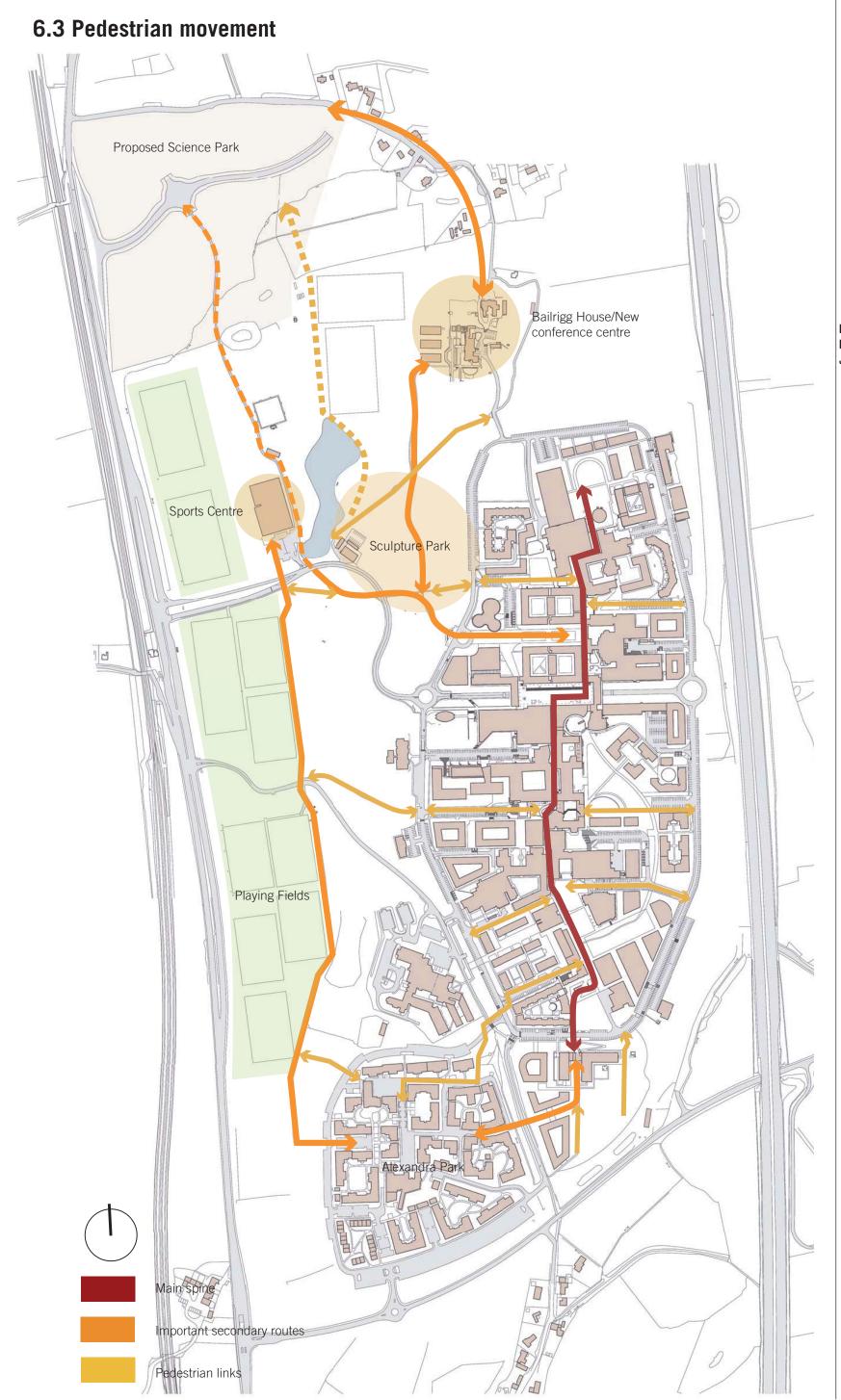
1 to 1.5 storeys

2 storeys

3 storeys

3 storeys with set back 4th storey

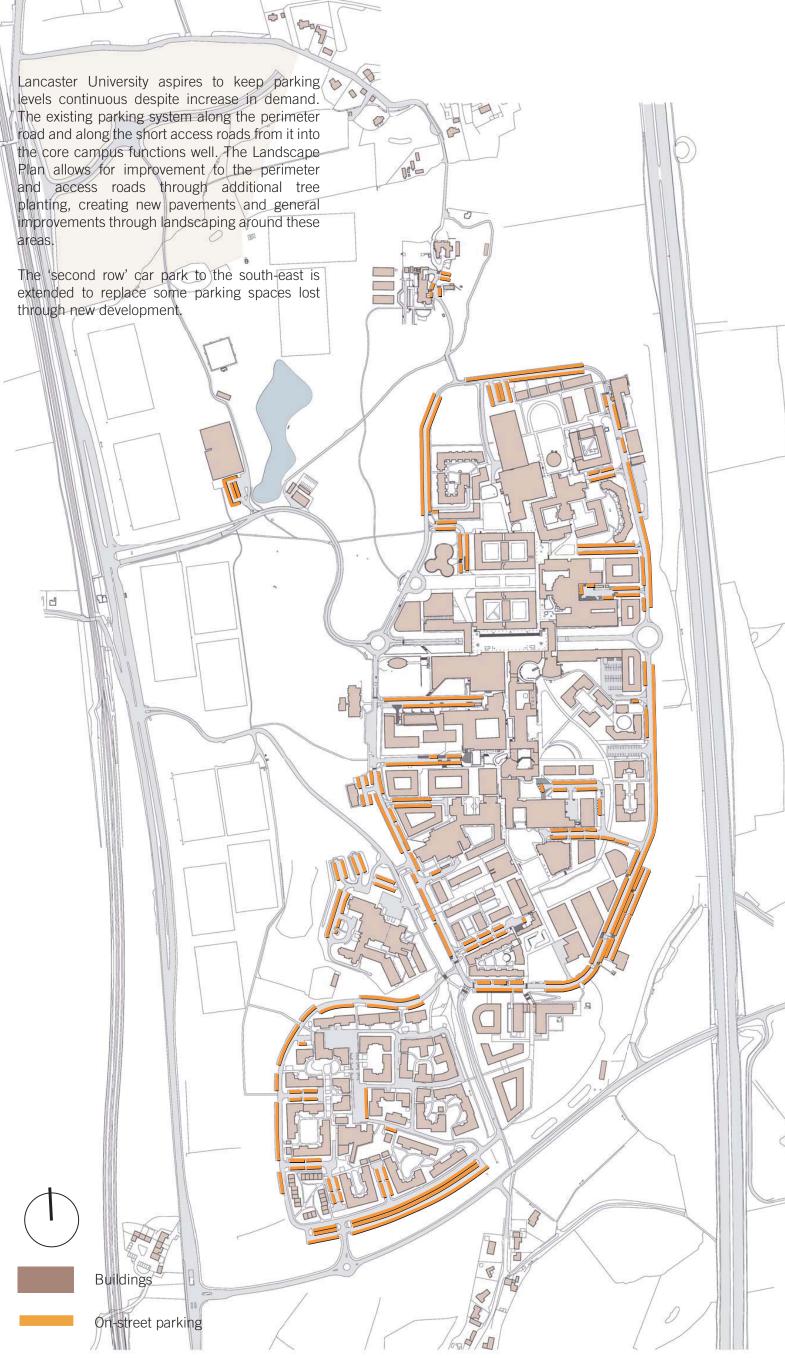
4 storeys



6.4 Parking

Lancaster University Masterplan through new development.

John McAslan+Partners



6.5 Sustainability

Lancaster University aspires to be a 'sustainable, medium-sized and academically excellent institution' as stated in the University Strategic Plan.

Arup Associates were recently commissioned by the University to establish a sustainable energy infrastructure strategy to update and review the use of energy. The final report is due to be delivered by the end of 2008. Details of the draft report can be found in section 8.3.

The University encourages living on campus by continuously renewing and renovating residences, thus providing a variety of accommodation. This supports the Transport Plan which aims to reduce the amount of car usage to and from campus.

The Landscape Plan allows for additional Sustainable Urban Drainage Systems (SUDS) infrastructure including the enlargement of Lake Carter and an additional SUDS pond to the southern boundary adjacent the Hazelrigg Lane. To further improve the ecology of the campus a biodiversity plan has been commissioned. This will be discussed by the Estates Committee in early 2008.



Lancaster University Masterplan John McAslan+Partners



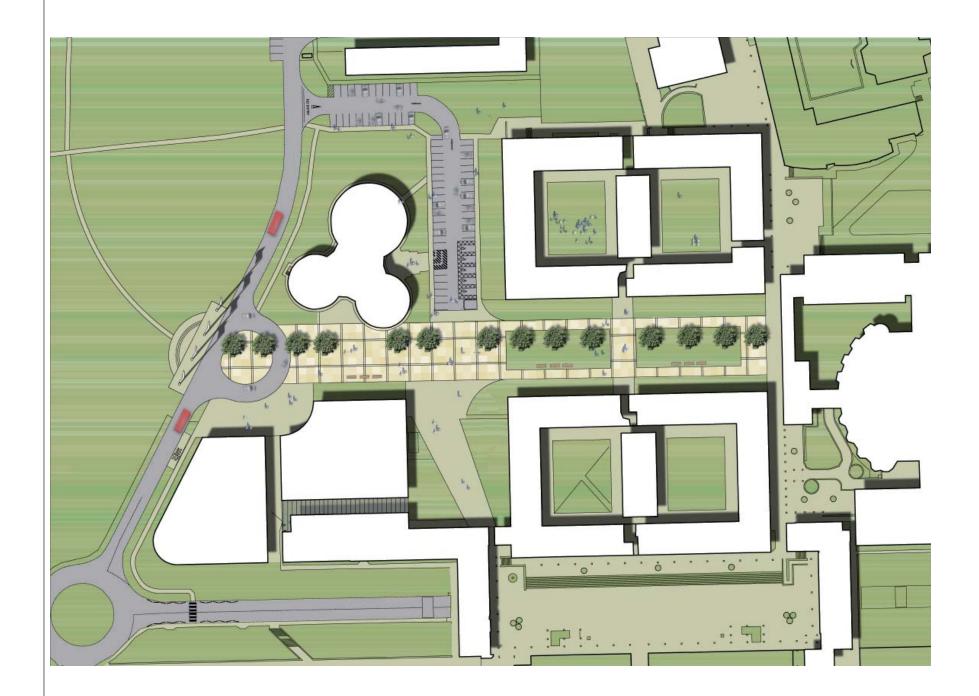
Lake Carter

6.6 New entrance

There are two main public spaces to the masterplan design of the overall campus. A new entrance will be created next to the Chaplaincy by demolishing the current conference centre. This will, along with the new reception building, create a significant change to the image and first impression of the campus.

A drop-off roundabout off the perimeter road will lead east to a paved area lined with trees and seats incorporating two lawned areas between the Bowland College buildings joining the central spine.

The Chaplaincy gets a new plaza and entrance and its setting will be established as one of the outstanding buildings on the campus. In addition a viewing plateau with flags marking the entrance will be created on the opposite side of the perimeter road which then links into the wider pathway system.



6.7 Alexandra Square

The second important public space is Alexandra Square, which is the heart and main mixing point for the campus.

A design competition has recently taken place to refurbish and enliven the ground floor of Bowland College at the northern edge of the square. The brief is to create a new welcoming learning zone for students and staff including a cafe area that spills out onto the square. The atmosphere is to be an open environment, with soft wheeled furniture and wireless access.

Although the square functions quite well in terms of usage there are some issues that would improve its performance.

The surrounding set back commercial premises should be re-addressed for better presentation on the square and the entrances and stairs to and from the underpass should be remodelled to be lighter structures to allow light to below. The existing ramp arrangement would be improved by replacing the brick walls with light and transparent railings.





7.0 Costs and Capital Investment

7.0 COSTS AND CAPITAL INVESTMENT

7.1 Refurbishment programme

The graphic to the right shows the intended programme for refurbishment of the University's estate. The bars and social spaces of the colleges have a separate refurbishment programme as shown below.

Lancaster University Masterplan John McAslan+Partners The extent of any demolition works will need to be carefully considered for each building and the perceived provision for departments reviewed.



Completed refurbishments
Upcoming refurbishments
Long-term refurbishments

Refurbishments - College Bars and Social Spaces

1	Fylde Grizedale Bowland	2007 - 2009
2	Furness Pendle Graduate	2010 - 2012
3	Cartmel Lonsdale County	2013 - 2015

7.2 Costs



Improved campus image



New Residences



Refurbishment of colleges and public realm



New Postgraduate Statistics Centre

The projected cost of implementing in full the 2007 – 2017 Masterplan is £420m.

The estimated cost of development is based upon current day prices, with no allowance made for inflation. This has been prepared by Gardiner&Theobald LLP.

All costs are inclusive of fees, contingency and VAT

The headline costs are broken-down as follows: -

Demolition £ 2m

New Build Academic £228m

Refurbishments Academic £130m

Refurbishments Residential £ 25m

Public Realm £ 11m

Infrastructure £ 24m

TOTAL £420m

The costs for each individual project will need to be confirmed by an early feasibility study as each phase is drawn forward from the Master Plan as a specific project. New build projects will be assessed as and when academic developments require.

The Capital Programme, as currently planned is sufficient to enable all refurbishments to be executed during the 10 year period, 2007 – 2017.

8.0 REFERENCE DOCUMENTS

8.1 Travel Plan



Public transport between the centre of Lancaster and the University campus has been improved in 2005 through the introduction of an additional bus route and bus stops.

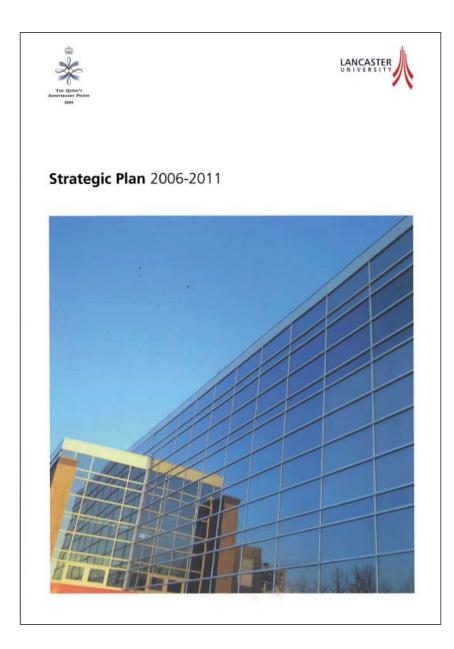
The Travel Plan established in 2004 will be reviewed and republished in 2008 and copies can be obtained from the Estate Management website:

www.lancs.ac.uk/depts/estates

The main objective is to 'reduce the adverse environmental impacts of transport at the University'. The Travel Plan promotes car sharing, public transport, walking and cycling to reduce dependence on car travel.

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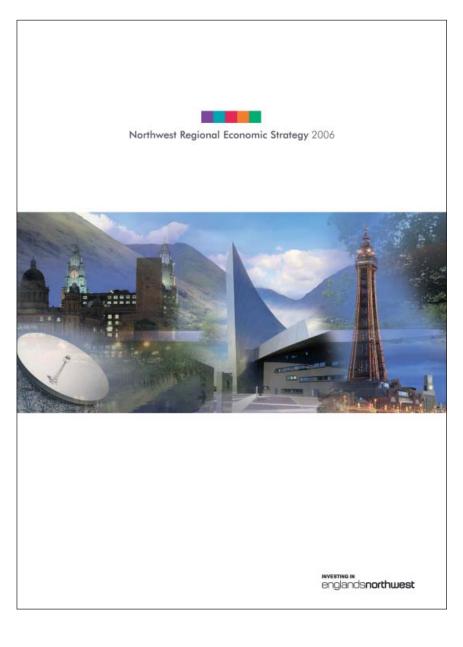
8.2 Strategic Plan



The Strategic Plan sets out the objectives of Lancaster University. With respect to the campus a summary of these are:

- The production of an estates development plan with a five year investment programme linked to the strategic objectives
- The promotion of a culture of continuous improvements and student-centred service
- The improvement of the condition of the existing estate in a financially and environmentally sustainable way
- Supporting the development of the University with world class staff, an outstanding campus and excellent support

8.3 Regional Economic Strategy - NWDA



Lancaster University is noted in the RES as a strategic regional site. The regional assets and opportunities include:

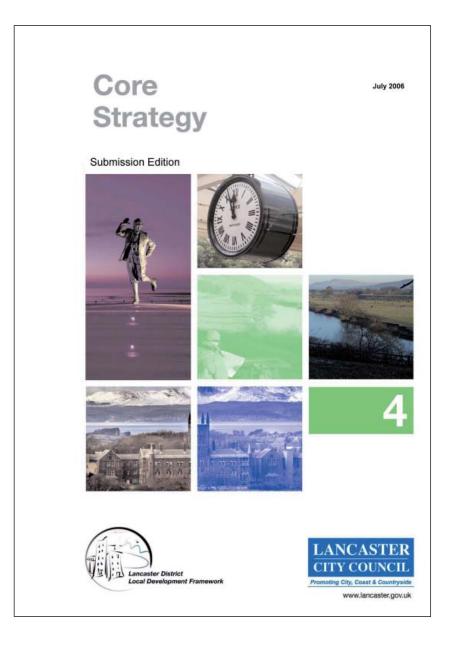
- The highest number of people with graduate level skills outside London and the South East
- Above average levels of business Research & Development (R&D) per head of population, driven by a core of world class companies
- World class centres of excellence in 14 Higher Education Institutions (HEI)
- Significant growth opportunities around Lancaster (among others)

The strategy's objectives are among others:

- Develop higher added value activity through innovation
- Support knowledge transfer
 - Enhancing Business/HEI collaboration and knowledge transfer
 - Investigate providing Higher Education Innovation Funding (HEIF) type incentives to businesses to work with HEI
- Develop and exploit the science/HEI base
- Promotion of science
- Support of science based clusters/sectors
- Support the development of major research concentrations and knowledge centres (for example, InfoLab21)

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8.4 Lancaster District Core Strategy



In the Core Strategy Lancaster University is designated as a knowledge nucleus under 'Employment'.

The strategy sets out the following objective for Lancaster (among others):

- To develop the Higher Education and Knowledge based industries sector by expanding the University
- To develop the Lancaster Science Park for linked knowledge based industries
- To master plan the development of other educational institutions in partnership with local communities
- To focus most student housing on campus and in places with good public transport links to HE institutions

Lancaster University

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Masterplan

8.5 Sustainability Report



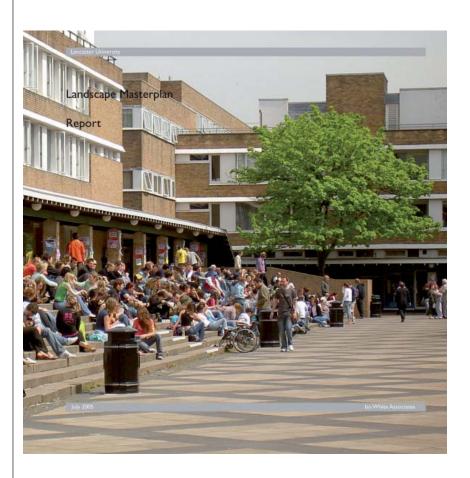
A Sustainable Energy Infrastructure Study is being completed by Arup Associates (due December 2007).

This will review the issues of a sustainable energy concept comprising:

- Energy strategy concept options
- Concept options feasibility testing
- Lifecycle Business case
- Project Implementation Plan

The report undertakes a strategic campus review in respect to energy consumption while looking at possible alternative energy technology infrastructure systems.

8.6 Landscape Plan



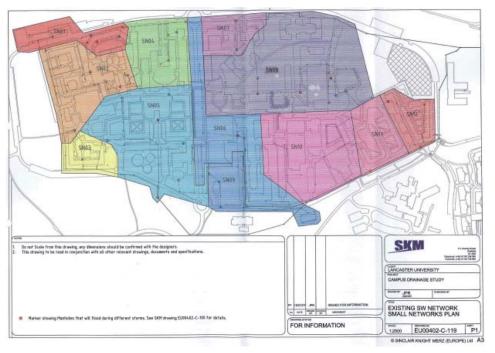
The Landscape Plan by Ian White Associates from 2005 sets out the parameters for:

- Woodland management and creation
- Campus landscape maintenance
- Sports fields rehabilitation
- Perimeter road and parking area improvements

It also includes detailed plans and material specification especially relating to the renovation of the spine and the canopies.

The Landscape Plan introduces a Sculpture Park set to the north of the enlarged Lake Carter including pathways to Bailrigg House, Chaplaincy Centre and Alexandra Park.

8.7 Drainage Report



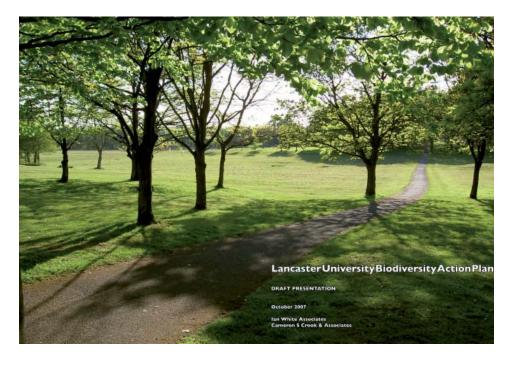
Despite its hill top location the University has had some serious flood problems. A drainage report has been set up to address these issues and its recommendations are being implemented.

In particular with any public realm or landscape works the drainage report needs to be taken into account.

Attenuation of drainage water is integral to development planning.

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8.8 Biodiversity Plan



The draft biodiversity plan was received in October 2007, this will be discussed and submitted to the Estates Committee in 2008.