Macaulay Land Use Research Institute

Craigiebuckler Planning Brief

December 2005
1. Purpose and Background

Purpose

This planning brief, for the Macaulay Land Use Research Institute’s Craigiebuckler site, has been prepared with a view to securing the support of Aberdeen City Council for an overall development framework to guide and manage the long term development of the Craigiebuckler site. Such a framework will make a positive contribution to securing the scientific and financial future of this important research facility. The agreed planning brief will form the context for subsequent planning applications for individual development projects at the site.

The planning brief reflects the Institute’s strategy of seeking to create, at Craigiebuckler, a broad centre of excellence in environmental research, management and business. The Institute would intend to progress the further development and management of the site through a subsidiary company of the Macaulay Development Trust (the Trust), a registered charity with the sole purpose of supporting the development of the Institute.

Background

The planning brief builds on earlier technical consultations with the City Council’s planning and transportation officers. That consultation process highlighted a number of areas that needed to be assessed in more detail. These were:

- **The preference for a simple approach to the planning brief document.** This request has been taken into account with this brief now having a short, clear format.

- **The necessity for a Transportation Assessment (TA) to justify the scale of development.** There was a concern that the local road network might not be able to cope with the associated increase in traffic. A TA was commissioned, with an expanded scoping stage to check the local network capacity against this emerging brief, and the outcome of the TA scoping report is included in this planning brief.

- **Whether the site could physically take the scale of development proposed.** The concern was not the principle of the developments, but rather, whether the building developments and car parking could be physically fitted into the available land. To address this concern the planning brief is now supported by more detailed "block plan" drawings for each proposed development area.

- **The involvement of the local community.** The Institute has already been consulting its own staff. The Institute is committed to future active facilitation in the local public participation that will be organised by the City Council Planning Department in line with the Council’s own standard procedures

This planning brief has addressed each of these areas and it now represents the Institute’s preferred development framework for the Craigiebuckler site.
2. Site History

The Institute's Craigiebuckler site originates from the 1870's when John Couper used the profits from his family civil engineering business in China to develop the Craigiebuckler Estate and to plant many fine tree specimens from across the world. This created the landscape setting that exists today.

The Estate was acquired by the Macaulay Institute for Soil Research, with funding from T B Macaulay (an expatriate Scot born in Canada), to establish a soil research and demonstration station. The original Craigiebuckler House was retained and the main Institute facilities were developed in the northern part of the site following a financial support agreement with the then Scottish Office.

The Institute changed its name to the Macaulay Land Use Research Institute in 1987 when it merged with the Hill Farming Research Organisation (originally based in Edinburgh). In 1992/93 the Institute disposed of the northern part of the site for residential accommodation, and the current facilities were built adjoining the original Craigiebuckler House.

Two additional areas of land were disposed for residential development in 1997 (to the east of Macaulay Drive) and in 2000 (the central frontage on Countesswells Road).

3. Site Description

The Craigiebuckler site is shown on Drawing 1. It is located to the west of the City Centre, near the western boundary of the existing urban edge. The site area is approximately 10.58 hectares (26.1 acres) gross.

The site boundaries are defined by Countesswells Road to the south, Macaulay Drive and the eastern edge of the pond area and the former walled garden to the east, an unadopted lane to the west (beyond which is an extensive housing area), and by housing to the north (beyond which is a green corridor that was the route of the long abandoned Culter by-pass road project).

As a consequence of its development history the site is irregular in shape. The main Institute facilities are located at the northern central area, ancillary facilities are in the north-east corner and there are two undeveloped plots facing Countesswells Road. The entire site is heavily landscaped with an impressive range of native and exotic tree species. The Trust has commissioned a full, detailed tree survey and a copy of this has been lodged with the Council’s Planning Department. The management of the existing landscape at Craigiebuckler is overseen by an Environment Committee drawn from the Institute’s staff.

4. Planning Policy Background

All planning applications for future development on the Craigiebuckler site will be determined in accordance with the Development Plan unless material considerations indicate otherwise. The Development Plan currently comprises the Approved Aberdeen and Aberdeenshire Structure Plan 2001 – 2016 (also known as North East Scotland
Together or NEST), and the Adopted Aberdeen City District Wide Local Plan 1991. Under the Adopted Local Plan the Craigiebuckler site is allocated under policy ER1, Further Education and Research uses. In March 2004 the City Council approved a new Finalised Draft Local Plan and this has been placed on deposit in August 2004. This new Plan allocates the Craigiebuckler site under Policy 41 “Existing Community Sites and Facilities”. It is considered that this planning brief will comply with the emerging Development Plan policy framework.

All of the trees on the site are protected by a Tree Preservation Order (TPO) and all new development must be located or carried out in such a manner as to minimise the loss of and impact on the trees.

5. The Proposed Development Scheme

Development Zones

The range of possible development projects has been assessed through the drawing up of detailed block plans showing how both buildings and car parks could be incorporated within the site. The broad focus of the new projects would be the provision of additional research and related facilities for the Macaulay Institute and partner organisations, and the provision of offices/labs for other environmental agencies, organisations or companies. These development projects would envisage the number of people working on site increasing from around 300 to around 700 over the next 5 – 10 years (depending on the detail of the projects). As a result of this assessment work it is now proposed that development should only be considered within three development blocks. These development blocks are:

- **Drawing 2: Development linked to or adjacent to the south-west corner of the main Institute building.** The main Institute facility consists of the original 2 storey Craigiebuckler House, a substantial modern building on five levels and surrounding an open courtyard to the north and west of the House, and a small single storey eastern extension to the main building. It is proposed to develop an additional 3 storey building immediately adjacent to or adjoining the south-west corner of the existing main building. This new building could also involve the use of the courtyard. This new building is currently envisaged as the proposed location for the ACES (Aberdeen Centre for Environmental Sustainability) project which is a collaboration between the Macaulay, The University of Aberdeen and The Centre for Hydrology and Ecology of the Natural Environment Research Council. Thus, it would be used for science research, administration and support facilities. It is intended to minimise the impact on the existing main car park which will be retained.

- **Drawing 3: Development of the south-west field fronting Countesswells Road.** This is currently an open aspect, grassed field with a significant tree belt to Countesswells Road. It is proposed to develop a total of two or three 2 storey business park type buildings, split between either side of a new one-way access road, in a way that respects the topography of the site and that will create a high quality environment. Car parking will be distributed around the buildings and there will be high quality hard landscaping finishes.
- **Drawing 4: Development in the north-east corner.** This area currently houses the Institute’s ancillary facilities including garages, greenhouses and a modern office/residential block. Over time it is proposed to rationalise these facilities into a more modern layout and to introduce one or two single or two storey buildings, possibly as extensions to the existing Cunningham House, to accommodate an expanded nursery, additional student/visiting worker hostel provision, science and commercialisation functions. The Trust’s Board and the Institute are of the view that development in the north-east corner is a longer term project. There are no development proposals for the open space area in the far north east corner.

The Trust currently has no plans to release any further parts of the Craigiebuckler site for residential development. However, should this strategy change in the future, the potential for releasing all or part of the north-east corner for residential development would be the first option that would be explored.

**Design Principles**

A series of design principles have been developed to guide future developments on the Craigiebuckler site. These are set out below under a series of headings.

- **Design Guidance.** The fundamental principles of any development on the site will seek to address the following design objectives
  - Creating a 21st century environmental research campus/centre of excellence in line with the long standing reputation of the Macaulay Institute
  - Ensuring that sound environmental sustainability principles are built into the overall development of the site and the proposed individual developments (using BREEAM assessments in the latter case)
  - Maintaining, managing and enhancing the diverse range of protected trees in the site, and respecting the existing range of flora and fauna, so as to maintain the special environmental quality of the location
  - Improving the accessibility of the site
  - Minimising the impact of development on adjacent residents

- **Layout and Materials.** It is intended that the layout of new development will be in accordance with this planning brief. Individual development projects will seek opportunities to incorporate sustainable design principles – in the use of energy, materials and insulation – and sustainable management of the construction sites. The existing palette of building materials, mainly stone, slate, glass and claddings, will be enhanced by a limited range of additional materials and textures to add a little variety to the site in a coherent manner and to maintain the mature feel of the site. Overall the intention would be to develop the buildings as pavilions within a landscape, using a limited palette of high quality, sustainable materials.

- **Landscape and Boundary Treatment.** Currently the site is well screened, especially at the boundaries, from the neighbouring housing. The current boundaries to Macaulay Drive, to the northern boundary of the Wimpey housing, and to the housing to the north will be unaffected by the proposed development blocks. The main central section of the site from the pond to Craigiebuckler House will be unaffected. However, it is inevitable that the implementation of the three development blocks will impact on some existing trees within the site, especially on the western boundary, the
Countesswells Road boundary and the western boundary of the Wimpey housing. The existing trees are protected by a TPO, and the Council have advised that the value of the trees on the site lies in the overall effect that they create throughout the estate, rather than in any individual specimen. In recognition of this the Trust has already enhanced the tree planting subsequent to the sale of ground to Wimpey, and more recently the Trust commissioned a full tree survey of the site (in March and April of this year) to inform future tree management. It is also the intention of the Trust to commission the design and implementation of an overall tree enhancement and planting scheme for the whole estate. Part of this scheme would include the provision of 5 metre wide tree belts on the western boundary and on the boundary with the western edge of the Wimpey housing. This planting scheme would be submitted for the approval of the Council as Planning Authority, and the implementation would be phased around the development programme. In this way the Trust would make a positive contribution in the evolution of the landscape of the estate. In addition the Macaulay or subsequent developers should reconfirm ownership and re-commit to maintenance of half of the lane on the westward boundary of the estate which divides the Trust from the established Pinewood/Countesswells residential area.

- **Scale and Density.** The site is surrounded by relatively low density housing. Neighbouring buildings are generally 2 storey, with some 3 storey apartment blocks. The main Institute building itself is a more substantial building. This has been reflected in the approach to the development blocks. A 3 storey building is proposed adjacent to and linking with the main Institute building, the buildings in the south field would be 2 storey and it is probable that buildings in the north east sector would be of residential scale and 1 or 2 storeys. The provision of this limited amount of new development within a 10.58 hectares site will give a low density layout.

- **Sustainability.** The design and layout of the buildings and the management of the site (including the existing pond) will demonstrate the intention of the Trust to meet the standards of sustainability that are promoted by Aberdeen City Council. Specific actions will include
  - The use of building and landscape materials from sustainable sources
  - Requiring contractors to manage their sites within the BREEAM guidelines
  - Optimising energy efficiency in the new buildings through addressing design issues such as orientation, use of solar heating and shading, use of the building mass in energy management, and maximising natural lighting and ventilation
  - The management of the landscape as a means of enhancing the local wildlife habitats
  - Minimising the use of impervious hard surfacing with a preference being given to more natural or porous surfaces, the recycling of grey water and the diversion of run off water to a SUDS system rather than to gullies and road drains
  - Minimising traffic generation and movement through Green Transport Plans that will address both commuting and operational travel requirements

**Access and Transportation**

- **Transportation Assessment.** As indicated a TA has been commissioned. As part of that TA scoping work an initial road based assessment was made of the proposed development blocks. The purpose was to establish whether there was any
major constraint within the network capacity that would affect the principle of the proposed development. This work focussed on the performance of the signal controlled junction at Countesswells Road and Springfield Road. Initial testing determined that, under a worst case scenario, a no net detriment solution can be found to accommodate the full proposed development. That solution incorporates some minor work on the junction approaches and re-staging of the traffic signals. Therefore, the conclusion of the TA Scoping study is that the network capacity does not act as a constraint on the proposed development of the Craigiebuckler site in line with this planning brief. This conclusion has not yet been accepted by the Council who wish to consider the result of the full TA study. It should also be noted that, pending the completion of the full TA and its assessment by the Council, it has not yet been agreed by the Council that the proposed scale of development is “policy compliant” in terms of their sustainable development policies.

- **Access and car parking.** The current access to the Institute is from the Macaulay Drive/Countesswells Road junction, and then via an unadopted two way, but narrow, driveway to the main car park and main building entrance. This routing results in a mixing of two way flows of both residential and Institute traffic. It is considered that any future development at Craigiebuckler should involve the creation of an additional access so as to provide better separation of traffic flows. The preferred access strategy for the future development of the site is:
  - To provide a new, one way, in only access to the south field development block from a new junction on Countesswells Road, with both a design geometry and traffic calming to reduce traffic speed, with a shared surface cycle path and a remote footpath link
  - The location of this new access has been chosen to minimise tree loss in the tree belt facing Countesswells Road
  - Linking the new access road to the existing driveway, which will become an exit only route, along with minor improvements to the existing driveway
  - A possible, but much less favoured alternative, would be the provision of a new signalised junction on Countesswells Road, at the same location as above, but with a two way road access as far as the existing main drive
  - Integration of the new remote footpath with existing pedestrian routes so that there are convenient and safe pedestrian routes between the facilities on site
  - A review of existing cycle shelter provision along with the inclusion of staff showers in all new buildings
  - Expansion of the existing car parking provision (149 spaces in the main car park, 17 visitors spaces, 21 overflow spaces and 70 spaces in the North-east corner) to around 422 spaces through retention and expansion of the main car park, provision of a new overflow car park at the new access point, car parking at each building plot in the south field and distribution of the remaining provision throughout the site and in the north-east corner
  - The development of Green Transport Plan principles through the TA and the adoption of Green Transport Plans by the occupiers of the new buildings
  - Possible minor improvements to local public transport facilities if recommended in the TA

This access strategy will require to be agreed with the Council as part of the TA study. In particular the parking provision will require too comply with SPP17 and be linked to sustainable transportation initiatives.
• Accessibility for all. It is important that access to the developments is provided for all sections of the community. Therefore, the layouts of the new developments should incorporate
  o   Footpaths that are suitable for prams, double pushchairs and wheelchairs to pass easily
  o   Dropped kerbs at crossing points
  o   The provision of ramps in addition to steps where appropriate

Infrastructure
• Drainage. Best practice will be adopted in dealing with foul and surface drainage and it is assumed that the occupiers of the proposed new buildings will all wish to have grey water harvesting and recycling installed. For the new buildings the proposals are as below
  o   Foul drainage will be taken to the existing sewers in Countesswells Road or Macaulay Drive
  o   Storm water drainage will be managed by a SUDS system with a proposed pond being located to the east of the existing overflow car park. Consideration is being given to whether to have a single or multiple SUDS system in the estate.

• Services. An initial assessment of the existing services (gas, electricity, telecommunications and water supply) has confirmed that there is adequate spare capacity to support the proposed range of developments. The provision of new services will be by means of underground supply. There is unlikely to be a need for a new electricity sub station on site as the existing supply has ample capacity. New service routes will be designed so as to not impact on landscape provision.

6. Conclusions

Summary

This brief has been prepared to set out the land use planning principles that will guide the MDT’s proposals for the future development of the Macaulay Institute’s Craigiebuckler site. The overall proposals, incorporating the various elements described in this planning brief, are shown on Drawing 1. Once this planning brief has been agreed with Aberdeen City Council it will form the framework for future individual planning applications. It has been agreed with the Council that the process of considering, consulting and approval of the brief can be programmed at the same time as the outstanding TA issues are being studied and discussed.
Appendix 1

Drawings