

Kildean Development Framework

1. The Site

The site at Kildean is located on western edges of Stirling, adjacent to the Raploch area of the city, and Castle Business Park. The site is largely defined by the loop of the River Forth, bounded on the north, east and west by the banks of the River. To the south the site is defined by its boundary with Drip Road and the Kildean roundabout, which gives access onto the M9 southbound, and the A84 into Stirling. The overall area of the loop is approximately 64 hectares and forms part of the large-scale rural Carse landscape.

The land is relatively open and exposed to views from surrounding areas, including Stirling Castle, the Wallace Monument and the nearby M9 motorway. The site is gently undulating, with a convex form and a shallow raised central ridge running in a north-south direction. A number of shallow defiles in the form of drainage ditches run off towards the River. The change in level between the site and the River is most marked at points to the east and west, resulting in river cliffs along part of each of these boundaries.

Existing vegetation within the site is typical of that found within the wider Carse landscape insofar as it exists in the form of a number of hedgerows and some tree planting on the banks of the River. It is this, rather than topography, that controls the visibility of the site and buildings. The most significant area of tree planting is located immediately on the southern boundary, outwith the site, adjacent to the roadside.

The majority of the site is open grassland, with the remains of the former agricultural auction mart occupying the south-eastern corner of the site. Planning permission was granted in November 2009 for redevelopment of part of the current auction mart site, for a new college campus.

Located on the western edges of the site is the Old Mills Farm complex of buildings, some of which are in active residential use. These are accessed off an existing track, to the south, which runs through the western section of the site at present, accessed through a lay-by off the A84. This lay-by also contains a Vehicle and Operator Standards Agency (VOSA) weighbridge. The main site access, which served the former auction mart, is located to the east of the Kildean roundabout. Access around the site and to the riverbank exists in the form of a 'fisherman's walk'. On the eastern side of the site this joins the recently completed Riverside walk through Raploch.

There are a number of significant environmental considerations and constraints that impact on the site. The River Forth, which bounds much of the site is designated as a Special Area of Conservation (SAC), and much of the northern half of the loop area lies within an area of flood risk. This has significant implications for both the developable area within the river loop and the construction of any development on the site.

2. The Development Plan

The Proposed Plan allocates the entire river loop as an Employment Site, in the form of an expansion of Castle Business Park to the south. There is therefore a requirement for development to retain the existing use of the established business park, however it is acknowledging that other, ancillary uses may be appropriate.

It should be noted that in line with Proposed Plan policy and related guidance, contributions may be required to address transport, education or affordable housing issues arising as a result of the proposals. This will be dependant on the nature, size and scale of individual proposals brought forward for the site, and consequently the implications for individual developments should be discussed at an early stage with the Council.

In taking development proposals forward, cognisance needs to be given to the Council's Supplementary Guidance. This should include: SG01: Placemaking; SG02: Green Infrastructure; SG04: Affordable Housing; SG14: Transport: Ensuring a Choice of Access; SG17: Low and Zero Carbon Developments; SG18: Development, Flood Risk and Sustainable Drainage; SG19: Waste Management Requirements for Development.

3. Council's Aspirations for the Site

The overarching aspiration and vision, to be achieved through this Development Framework for Kildean, is the development of the site for a high quality, ecologically sensitive, extension to Castle Business Park, which is well integrated into its surroundings. This will require careful consideration of the types and location of uses on the site, the built form, and the structure and type of open space and landscaping within the site.

Consequently the following objectives are set out below, and should be used to inform detailed proposals for any part(s) of the site.

4. Key Development Framework Objectives

In order to achieve the Council's aspirations in relation to the site there are a number of key objectives that should underpin the development of the entire site. These are outlined below:

- **The development of an environmentally sensitive and robust design solution for the site.** This will be achieved through cognisance of the most up-to-date flooding data and consideration of potential impacts on the Special Area of Conservation. The developable area will be both informed and restricted to areas of land that are not subject to an unacceptable flood risk, nor areas where development of land would have an unacceptable impact on the Special Area of Conservation. Equally it is expected that both during and post construction appropriate mechanisms are in place to ensure that the development and all associated works have no adverse affect on the quality of the Special Area of Conservation.
- **The provision of a strategic employment site benefiting the economic growth of Stirling.** The site is allocated in the Proposed Plan as a strategic employment site, and it is therefore considered appropriate that Class 4 Business be the predominant use on the site, with a limited element of Class 5 (General Industry) use as appropriate where it can be demonstrated that this will not adversely impact on the amenity of adjoining uses and is of a high design standard. An element of mixed use on the site may be promoted, and as such a hotel and/or other appropriate ancillary uses would be considered, provided they do not either singularly, or collectively undermine the overall aspiration and principle of development of a strategic employment site and are provided in an appropriate location within the site. To this end, an element of residential use may be considered, however this will be limited in numbers and to a location that is considered to integrate with the surrounding built form and uses.
- **The creation of a strategic landscape framework that provides an appropriate landscape setting for the development.** In order to assimilate the scale of development anticipated into the wider Carse landscape the provision of an appropriate landscape framework will be necessary. This will respond to the topography, frame views, and

provide a structure to overall development commensurate with the scale of the built development. To do so it will be informed by, and will utilise and augment, existing landscaping within, and surrounding, the site.

- **Provision of a visually and physically integrated development appropriate for the urban edge.** In order to achieve an integrated development it will be necessary to provide a layout and road/footpath network that allows for, and encourages movement to and through the site which links into existing networks and areas such as Castle Business Park and Raploch. Successful integration of the site will also require the uses to be located appropriately within the site, in order that they are complementary and compatible in both use and built form to that surrounding.
- **The creation of a development underpinned by the principles of sustainable development.** This will be achieved by incorporating sustainable design practices into the formulation of all detailed proposals, which through the layout, orientation and design of buildings, use of materials, infrastructure, such as SUDs and inclusion of appropriate on-site zero and low carbon equipment, and mix of uses provides a cohesive balance between social, economic and environmental objectives.
- **The creation of an appropriate, cohesive, and quality built environment.** This will be achieved by ensuring that the scale, design, and building typologies employed are appropriate for the location and surroundings, and respect key views to and from the site. All buildings should be orientated and located so as to aid and reinforce the legibility of the movement and landscape structure within the site, and to help define and enclose streets and other areas of open space. It is expected that a high design standard will be achieved throughout the development.

5. Detailed Design Principles

Within the umbrella of objectives highlighted, and in order to help meet them, there are a number of more detailed principles that should steer and shape development at a more detailed level. These are outlined below.

5.1 Landscape / Open Space:

Landscape forms an important aspect of the character and structure of the existing site and wider surroundings. In order to successfully assimilate development of the scale it will be necessary and appropriate to establish a landscape structure for the entire site. This should be of a similar and appropriate scale to the development proposed and informed by, and connected to, the existing landform and vegetation surrounding the site. The landscape framework for the site is therefore devised from the following three components found in the surrounding landscape:

- native tree cover associated with the river corridor, which extends into the defiles and water courses draining down the convex slopes;
- open pasture and meadow over the flood plain with native species hedges;
- parkland trees, clipped hedges and open space found in the 'designed' landscapes at Craigforth and the existing Castle Business Park.

Taking these aspects forward the Development Framework devises a landscape structure for the site that displays the following features and sets the primary ordering element to the development:

- The open pasture and meadow retained over the flood plain with opportunities to provide informal recreation, and blocks of appropriate tree planting (to break up views of the site from the north).
- Meadow grassland and native hedges as the open foreground to the development edges to the north, east and west, allowing adequate set back a minimum of 25 metres from the River Cliffs.
- Native tree cover extended into the defiles to create open space corridors with a riparian woodland character. These should be a minimum of 32 metres wide to counterbalance the likely scale of the buildings.
- Parkland trees and clipped hedges extending from the designed landscape of Craigforth and the landscape structure established at Castle Business Park. This should be applied to the Drip Road frontage, the site entrances, and internal areas of the development, with boulevard and street trees, clipped beech hedges and maintained grassed strips to road corridors and plot frontages. The site entrances should be marked with a stand of formally planted parkland trees. Native mixed hedges should be planted to outer edges of development along the riverside. This relates the development to the existing landscape features and character of the site and wider agricultural context.
- The provision of appropriate and sensitively located open space within any residential development, commensurate with the scale of the built form and in line with the Council guidelines SG02: Green Infrastructure.

5.2 Movement:

The ability to access and move to and through the site, by foot, cycle, public transport and car, will be crucial to the success of the development, and the aspiration to provide an integrated, sustainable development on the site. Consequently the following principles have been established as part of the Development Framework and should be considered and taken forward in the formulation of detailed proposals for any part of the site.

- To aid legibility and movement through the site there will be a hierarchy of streets established, as illustrated within the schematic Development Framework layouts attached. Key to the establishment of this movement structure is the provision of a principal distributor road through the centre of the site, forming its spine and accessed off the Kildean roundabout. The route, and configuration of this road allows for consideration of a link across the river at a future point. A series of secondary routes are indicated, feeding off the primary route, providing access to the various development 'pockets' with an additional access shown into the site off Drip Road to the east. The design and configuration of the various junctions and/or roundabouts within this movement structure will be established during the detailed planning stage.
- Planning permission has been granted for phase 1 of the main distributor road which is characterised by the following, and should be consistent throughout the overall site:
 - 7.3m carriageway;
 - 2m roadside grass verge either side;
 - 3m footpath / cycle way either side;

- 10m landscape verge with avenue of appropriate boulevard trees either side with hedges with post and wire fences defining limits of corridor.

Beyond the extent of the phase 1 approval, a corridor of sufficient width should be reserved to accommodate an extension of the main distributor road, and to allow flexibility in the future design of the carriageway, footpath/cyclepath, utilities and landscaping.

- The secondary routes will be characterised by the following and consistent throughout the overall site:
 - 6.3m (min) carriageway-the final width will be determined by likely volume of traffic and uses the road is to serve;
 - 2m roadside grass verge either side;
 - 2m footpath / cycle way either side;
 - 5m landscaped verge either side with avenue of appropriate trees species with hedges and post and wire fence defining limits of corridor.
- The movement structure indicated allows for, and positively encourages, linkages between different areas within the overall site, in order to aid permeability and movement throughout, but without undermining or reducing the effectiveness of the landscape framework advocated.
- The provision alongside roadways of both footpaths and cycleways, which meet Council standards, with further opportunities to connect development plots within the site to each other and to the wider surroundings, via footpaths and cycle provision, to be explored and brought forward through detailed proposals.
- The provision of appropriate linkages into the existing road and footpath network, including the fisherman's walk. It is also expected that individual schemes will contribute towards the provision of a new Riverside Walkway.
- Provision for vehicle access to existing residential properties adjacent to the site shall be maintained in an appropriate form.

5.3 Layout:

Two potential layouts have been devised, and which are considered to meet with the Development Plan policies and objectives and principles established within the Development Framework. The difference between the two is limited to changes in the potential location of uses within the site, one scheme including the potential for residential development, and the other not.

The layouts are based on the formation of a series of distinct development plots, counterbalanced by a strong landscape framework, connected by a movement structure which sets a hierarchy of streets, footpaths and cycle ways. This horizontal approach to providing a mix of uses, and development plots within the overall site is considered most appropriate due to the precedent set at the existing Castle Business Park, which developed a 'Parkland' approach to the layout given the proximity to the wider rural landscape. This is equally pertinent at Kildean.

It was also considered a more appropriate approach to the layout than an alternative that promoted a more vertical division of uses throughout the site. This would have resulted in a particularly 'urban' development, likely to be characterised by a more tenemental form of built development, much more associated with, and appropriate for, town and city centres.

On this premise, the layouts are based on the following principles:

- The developable area is restricted to areas outwith the flood plain, set back from the River Cliffs and the Special Area of Conservation;
- In both, provision for 'Business Use' dominates the distribution of uses, in order to achieve the Local Plan allocation as a 'Strategic Employment site'. In cognisance of the urban edge nature of the site, business use has been allocated in positions within the site where the 'parkland' approach will sensitively ease the transition from an urban to rural landscape.
- Both layouts take account of the extant planning permission for the new Forth Valley College.
- Concentration of ancillary commercial uses in the vicinity of the site's frontage with Drip Road. This is the most appropriate location for businesses requiring a degree of 'visibility' for passing trade and positioned between and to link the existing Castle Business Park and the Kildean development.
- Residential use in 'Option Two' is restricted to an area within the site where the use and resultant built form can be successfully integrated into the surroundings and which is within easy walking distance of existing neighbourhood services/facilities.

5.4 Built Form:

The size, scale and location of buildings within the site will have an important part to play in both integrating the development into the surroundings and the creation of a quality environment. The following general principles will apply to all parts of the site:

- Building heights will be limited to two storeys on the outer edges of the development along the riverbank and northern edges of the site.
- Buildings of up to three storeys shall be limited to sites along the main spine road, off the Kildean roundabout.
- Any building on the site to the west of the new spur road protruding towards the Kildean Roundabout, forward of the existing and established building line along Drip Road, will only be considered in the following circumstances:
 - it does not interfere with the structural landscaping to be established at the entrance nor existing trees unaffected by the new access road;
 - it is no more than single storey;
 - it is of sufficient design quality to mark the entrance to a strategically important site.
- The detailed siting and form of all buildings within the site will have been informed by an assessment as to the visual impact of the building in regard to its size, the design and materials to be employed.
- There shall be a consistency of building materials and colours utilised throughout the site. This shall be based on the premise of limiting the visual impact of development and integrating it with its surroundings. Consequently a limited palette of muted colours and materials are expected on building elevations, with roofs of slate grey in colour.

- All buildings shall be sensitively sited and appropriately set back from both existing and proposed vegetation so as to ensure their protection and long term viability.

6. Specific Development Principles: Business Park

6.1 Site Area:

The Local Plan allocates the land as an extension of Castle Business Park, and the intention is to continue the high quality design of the buildings and landscaping, already established. To do so the following principles shall be expected to be adopted and reflected in the development:

6.2 Layout and Density:

As with Castle Business Park the layout within the Business Parks shall be developed to provide buildings that generally front onto roads, and which reduce the visual impact of surface car parking by enclosing them. The position of individual buildings should be considered in relation to its wider visual impact. The development density (floorspace + parking/open space) should reflect that achieved in Castle Business Park.

The land to the north of the site, to the west of the distributor road and within the flood risk area, shall be limited to car parking only.

6.3 Built Form and Massing:

The development will comprise of two and three storey buildings, with a general massing similar to the most recent buildings at Castle Business Park. In order to appropriately limit the visual impact of the development, the maximum building height on the site shall be limited to 12 metres. In order to limit the impact of the roofscape, and reduce the overall height of buildings, development should seek to locate housing for plant and machinery off the roof wherever possible.

In line with the general design principles for development of the site as a whole, two storey buildings shall be located around the perimeter of the site adjacent to the riverside, with any three storey buildings located in the centre of the site framing the central spine road.

6.4 Landscaping:

The landscaping for each building plot, and that of the business areas as a whole will be of a quality, size and scale comparable to that found in the existing Castle Business Park, utilising appropriate species. It will be consistent with the general landscape principles and themes in so much as it anchors buildings to their site, screens car parking, providing a green backcloth and creating outdoor recreational space adjacent to buildings.

6.5 Car Parking and Footpaths:

Car parking will be provided in accordance with Stirling Council guidelines, finished with porous paving as part of the Sustainable Drainage system. Footpaths shall be arranged to suit desire lines, and link to public transport stops and the wider public footpath network both through the site and around the perimeter.

6.6 Materials:

In line with the aims and objectives for the development as a whole, it will be important to ensure that all buildings sit in harmony with the landscape by acknowledging the impact it has on distant views of the site, the choice of materials will have a big part influence on meeting this objective. As such a limited palette of materials, such as high performance acrylic render and/or ceramic cladding tiles, and muted colours should be utilised within the business park, and should complement the materials utilised in other buildings within the site.

Due to the important long distance views, from elevated positions such as the Castle and the Wallace Monument, the roofs of all buildings, and the cladding on them, will have to be very carefully considered. Materials should have a matt finish, and should complement the slate grey colour prevalent in the majority of the surrounding area.

7. Specific Development Principles: Residential Use

7.1 Site Area:

An element of residential use may be considered, provided it is limited to the location indicated in Option Two. Any detailed proposals for the site should respect and incorporate the principles set out below. It is also expected that, in terms of tenure, an element of affordable housing, in line with the Council's established Development Plan policies, will be addressed as part of any proposal(s) for the site.

7.2 Layout & Density:

In order to create a positive and attractive streetscape and to assist with natural surveillance the layout of the residential component will be located, orientated and accessed so as to overlook roads and open space. Wherever possible buildings, and their internal space should be designed to benefit from passive solar gain. In order to reflect the character and layout of surrounding residential areas, it is considered that the most appropriate form of development would be that of the perimeter block and terrace development. Parking can be provided in-curtilage and/or in the form of parking courts and should meet Council standards.

The approach to the layout and orientation of buildings and parking arrangement shall ensure that the streetscape is not dominated by the needs of the car, and is not fronted by rear garden areas or blank elevations. Careful consideration should be given to the layout and orientation of any buildings adjacent to the open space to the east along the river cliffs to ensure that this is integrated into the development and is not cut by a series of rear garden boundaries.

A density of between 30-50 units per hectare is considered appropriate for the site, dependant on unit size and mix, and the resultant impact on layout and the size and scale of the built form.

7.3 Built Form & Massing:

Two-storey development is considered most appropriate for the majority of the site identified as having potential for residential use, with a range of house sizes expected. A limited amount of three-storey development may be considered along side the main spine road, where there is neither adverse visual impact nor an unacceptable impact on the daylighting or privacy of existing residential properties. As with other development on the site, the height of any buildings should not exceed 12 metres.

7.4 Open Space:

The proposed development will be required to incorporate recreational open space and children's play facilities in line the Council's Supplementary Guidance: SG02: Green Infrastructure. Areas of open space and play space shall form an integral part of the overall development, benefiting from natural surveillance from surrounding buildings.

7.5 Landscaping & Boundary Treatment:

The landscaping within the residential development is expected to continue the pattern of the strategic landscaping framework outlined within the Development Framework. It should be used to enhance the streetscape, counter-balancing the built form with appropriate street tree species, whilst also making positive connections to the broader site landscape.

A consistent, and high quality approach to boundary treatment is expected to the frontage of all residential properties. Most appropriate would be hedging, dwarf walls and/or railings, which define the public/private boundary, but which also add to the streetscape and do not hinder natural surveillance. Timber fences can be used to define rear boundaries within the development, however appropriate planted boundaries will also be necessary for more sensitive plot boundaries adjacent to the development rural edge.

7.6 Materials:

The palette of materials should be considered which complement the materials used elsewhere within the site, and which do not detract from the objective of integrating the development into its surroundings. It is expected that elevations will have a predominately rendered finish, with a limited range of muted colours. Roofs should be clad in either natural slate, or a quality slate substitute, and have a matt grey finish.

8. Specific Development Principles: Ancillary Commercial Uses

8.1 Site Area:

The location of commercial uses, other than Class 4/5 Business use within the Business Park area will be limited to areas with a frontage with Drip Road. Acceptable ancillary commercial uses may include hotel/leisure use, restaurant/bar, or Class 3 café. Any retail proposal would have to demonstrate both a need and no adverse impact on the existing local retail provision, in line with relevant Proposed Plan policies. It is expected that any proposal(s) should respect and incorporate the following principles into a detailed scheme.

8.2 Layout:

It is likely that such commercial development will come forward with individual buildings and plots. In all cases it is expected that the buildings will present a positive frontage to the street and public vantage points. Areas of parking, and service areas, including bin stores, should be located away from prominent positions, and where appropriate screened from view.

8.3 Built Form & Massing:

It is expected that the building heights will comply with the overall site development principles outlined above in relation to the built form. Consequently the location of individual buildings in relation to the Drip Road frontage and that of the spine road will determine the general parameters for building height.

In order to limit the visual impact of development, careful consideration of the massing of buildings will be required and the maximum height for buildings on the site shall be limited to 12 metres. In order to limit the impact of the roofscape, and reduce the overall height of buildings, housing for plant and machinery should, where technically feasible be located off the roof.

8.4 Materials:

In line with the aims and objectives for the development as a whole, it will be important to ensure that all buildings sit in harmony with the landscape by acknowledging the impact it has on distant views of the site, the choice of materials will have a big part influence on meeting this objective. As such a limited palette of materials, such as high performance acrylic render and/or ceramic cladding tiles, and muted colours should be utilised and should complement the materials used on other buildings within the site.

Roofs should be clad in materials with a matt, slate grey, finish.

8.5 Landscaping:

The landscaping for each building plot will be of a quality comparable to that expected and stipulated with the Development Framework. It should be consistent with the general landscape principles in so much as it anchors buildings to their site, screens car parking, providing a green backcloth and creates outdoor recreational space adjacent to buildings.

8.6 Car Parking & Footpaths:

Car parking will be provided in accordance with Stirling Council guidelines, finished with porous paving as part of the Sustainable Urban Drainage system. Footpaths shall be arranged to suit desire lines, and link to public transport stops and the wider public footpath network both through the site and around the perimeter.

9. Delivery

It is likely that development of the allocated site will take place in a number of phases, and it is expected that phasing plans will be developed and discussed with the Council's Planning Service. These should seek, wherever possible, to develop out from the southern (Drip Road) end of the site.

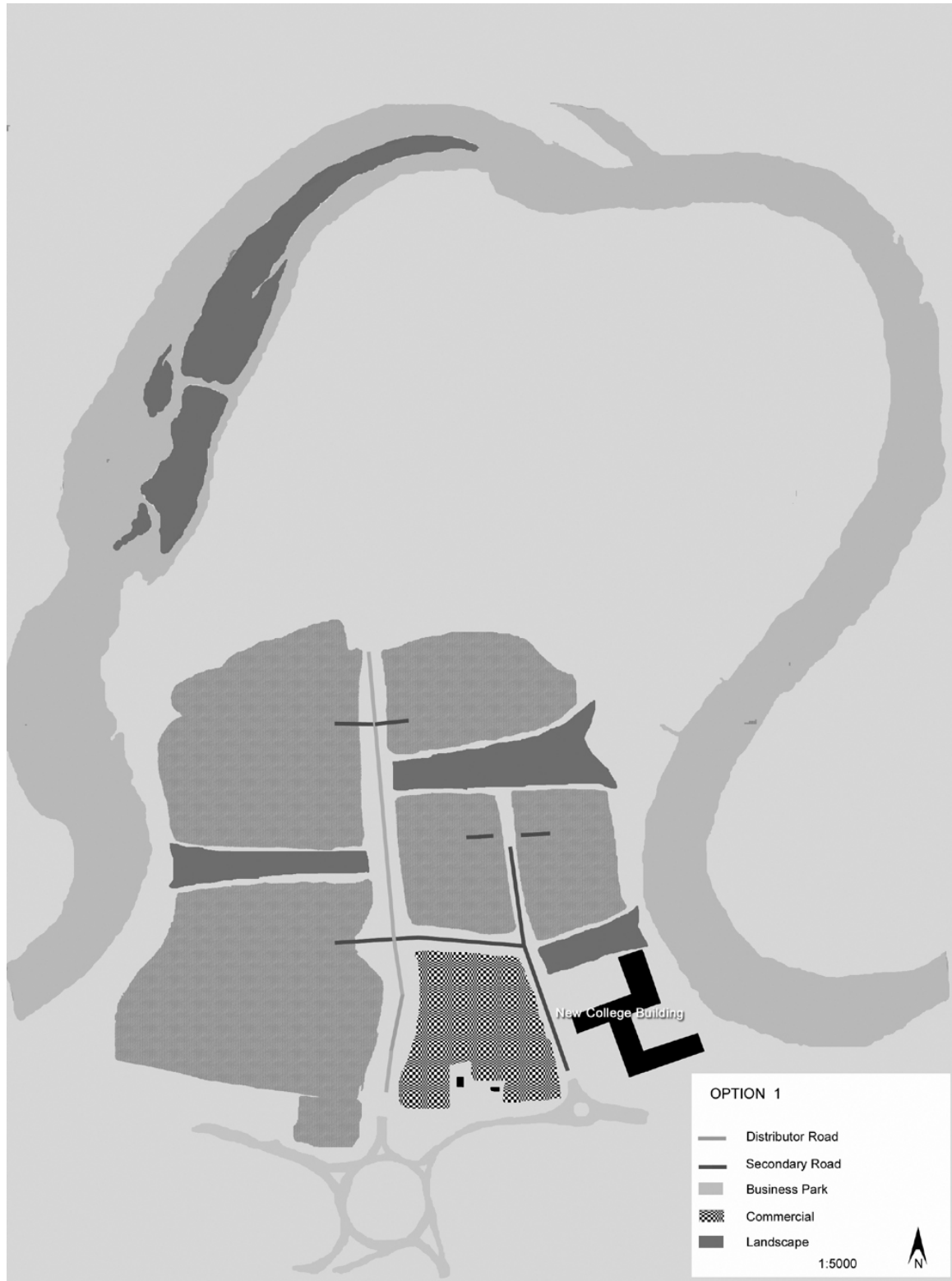
It is also likely that development will come forward through the submission of a number of separate planning applications, for various parts of the site. In such an event, all planning applications should be accompanied by a Design Statement that sets out in detail how individual schemes achieve and meet with the principles established within the Development Framework. Equally detailed landscaping plans and proposals will be expected as part of all development proposals. Planning applications for any site(s) adjacent to areas of structural landscaping shown on the schematic illustrations, will be expected to include landscaping plans and proposals for these areas.

10. Addendum

Kildean Framework for Development Proposals - Schematic Layout Plans:

- **Option One**
- **Option Two – including limited residential development**

Kildean Framework for Development Proposals - Schematic Layout Plans: Option One



**Kildean Framework for Development Proposals - Schematic Layout Plans:
Option Two – including limited residential development**

