EXETER SCIENCE PARK
ENVIRONMENTAL STATEMENT
Non-Technical Summary
May 2009

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<tr>
<th>Report Title</th>
<th>Exeter Science Park Environmental Statement Non-Technical Summary</th>
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<tbody>
<tr>
<td>Document Number</td>
<td>ENV05</td>
</tr>
<tr>
<td>Report Status</td>
<td>Final</td>
</tr>
<tr>
<td>Job No</td>
<td>HPE 98132A</td>
</tr>
<tr>
<td>Date</td>
<td>26 May 2009</td>
</tr>
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1.1 Introduction and Background

1.1.1 Devon County Council is submitting an Outline Planning Application to develop a Science Park at Redhayes, immediately to the east of Junction 29 of the M5, east of Exeter. The Outline Planning Application boundary for the site is shown below:

![Figure 1: Site Location](image)

1.1.2 The Exeter Science Park would be located in East Devon, and therefore East Devon District Council will be the planning authority determining the application. The proposed development site is largely arable farmland at present and is bounded by Tithebarn Lane to the north, field boundaries to the east and by an area of parkland to the south. To the west is the M5 cutting beyond which the land in mixed industrial, commercial and residential use. The application site includes the remains of the former Redhayes house, gardens and driveway.

1.1.3 Under the Town and Country Planning Regulations (Environmental Impact Assessment) (England and Wales) 1999 it has been determined that the Outline Planning Application for the Exeter Science Park requires an Environmental Impact Assessment. Parsons Brinckerhoff Ltd has been commissioned by Devon County Council to undertake the Environmental Impact Assessment.

1.1.4 A Scoping and Methodology exercise was undertaken in July 2008 which outlined what environmental topics should be considered in the Environmental Impact Assessment. An Environmental Statement has been produced to report the findings of the assessment, which identifies the positive and negative environmental impacts of the scheme and recommends measures to lessen those impacts. This Non
Technical Summary outlines the predicted environmental impacts, as documented in the Environmental Statement, in non-technical language.

1.2 Description of the Scheme

1.2.1 The Outline Planning Application document, which is accompanied by Development Framework and Design Codes, sets out the intended arrangement of the buildings and car parking; proposed buildings heights; key landscape features; road, cycle and pedestrian infrastructure and public open space. The Development Framework and Design Codes define the parameters, or limits, for the proposed Scheme and define what has been assessed in the Environmental Impact Assessment.

1.2.2 In response to the Development Framework, an Illustrative Masterplan has been developed for the scheme which is presented as Figure 2. This describes a way in which the Exeter Science Park could be developed and responds to the findings of the Environmental Impact Assessment and extensive consultation with regulatory bodies and members of the public.

1.2.3 The Exeter Science Park once fully developed would cover an area of up to about 26 hectares and would include up to 76,450m² of largely office and laboratory space. The development would be delivered as six distinct clusters of buildings in two phases of development, known as phases 1, 2a and 2b. Phase 1 of the proposed Scheme, which would be developed first near the A30 frontage of the site, includes a hotel and conference centre.

1.2.4 The Exeter Science Park would provide a high quality and healthy working environment for employees and visitors and would provide a range of local facilities accessible to the local community with that would include a café, crèche, gym facilities and areas of public open space.

1.2.5 It is envisaged that development of the Exeter Science Park would commence in 2010 with the first Phase 1 buildings ready for occupation in 2012. It is expected that Phase 1 would be completed by 2015. Thereafter, the rate of delivery of Phase 2 of the development would be in phases subject to market demand with development of the whole scheme forecast to be complete in 2030.

1.2.6 Road access would be from the south via the proposed improvement to the M5 Junction 29, which is not part of this application. No vehicular access would be allowed from Blackhorse Lane or Langaton Lane. Bus only access would be allowed from Tithebarn Lane to the north, until such time as a new access into Exeter from the east is implemented in the future. Parts of Blackhorse Lane and Langaton Lane would become part of the Exeter Science Park during Phase 2 and they would then be closed to vehicular traffic. A replacement route through the Science Park would be available at that time, but would be designed to discourage any rat running.

1.3 Need for the Exeter Science Park

1.3.1 Exeter will be designated as a ‘Strategically Significant City or Town’ in the South West Regional Spatial Strategy (expected to be adopted 2009) and has the potential to be a key economic driver for the South West. The Regional Spatial Strategy plans for housing and economic growth which minimises demand for travel by grouping houses and jobs near to each other.
1.3.2 The Exeter Science Park is one of five significant developments that are proposed in East Devon which include the expansion of Exeter Airport, the development of the Skypark business park, an Intermodal Rail Freight Interchange and the Cranbrook new community, where up to 7,500 new homes are planned by 2026.

1.3.3 Unemployment levels are generally low within Exeter and the East Devon area, however, poor educational attainment levels, low aspirations and poor graduate retention have resulted in a skills shortage.

1.3.4 It is envisaged that the presence of a science park in the Exeter and East Devon area would provide business development and knowledge based skills creation, resulting in wider economic and social benefits.

1.4 Alternatives Considered

1.4.1 The Redhayes site is one of four locations that have been considered for the siting of the Exeter Science Park. The other sites considered were at Newcourt to the south west of Junction 30 of the M5, University Land at Duryard and land at the Skypark business park adjacent to Exeter Airport. These were considered to be the four most feasible sites within the Exeter and East Devon area. The sites were assessed with regard to the area of land available for development, the attractiveness of the environment, accessibility to Exeter City Centre and key local facilities, proximity to the motorway and marketability.

1.4.2 The Redhayes site was chosen by East Devon District Council, in consultation with Exeter City Council and Devon County Council, as it was concluded that Redhayes could accommodate the scale of development required, while offering a more accessible and marketable location compared to the others.

1.4.3 The topography and site features of the Redhayes site have influenced the proposed layout of the development on the site. There are considered to be five distinctive character areas of the site referred to in the Development Framework as the Parkland, Wooded Hilltop, the Ridge, the Southern Slopes and the Northern Slopes. A number of alternative layouts were tested. However, in response to the character areas of the site as well as the archaeology, ecology and transportation consideration it is considered that the best way to consolidate the landscape influences into the masterplan response is to develop a layout in a series of ‘clusters’ to retain as much landscape and open space as possible.

1.5 Sustainability

1.5.1 The Exeter Science Park is proposed to be an exemplar sustainable development; to showcase low and zero carbon development technologies and to meet high standards of environmental and aesthetic design. This would further assist in building the reputation of Exeter as a centre for innovation, quality and sustainability in the South West.

1.5.2 Sustainable design principles would influence all aspects of the Exeter Science Park. This will include responsible sourcing of timber for construction and fit-out, water conservation measures, habitat creation and linkage off site, sustainable drainage design, building orientation for solar gain and green roofs. During operation, facilities for waste separation and storage to allow on-site recycling and re-use would be provided.
1.6 Assessing the Impacts

1.6.1 In addition to planning and sustainability, the Environmental Impact Assessment process has considered a range of topics that are relevant to the proposed Scheme either because of the characteristics of the Redhayes site or due to the nature of the development proposed. These topics are:

- Air Quality and Climate Change;
- Aboriculture (Trees);
- Archaeology and Cultural Heritage;
- Ecology and Nature Conservation;
- Land Contamination / Ground Conditions;
- Land Use;
- Landscape and Visual;
- Noise and Vibration;
- Socio-Economic and Community;
- Traffic and Transport;
- Waste;
- Water Resources; and
- Cumulative Effects.

1.6.2 The Environmental Impact Assessment process identifies ways of minimising any potential negative impacts of a development and in doing so guides the design to reduce those impacts. As a result of the Assessment process, the actual design of the Exeter Science Park has been adapted to include these recommendations in order to achieve ‘mitigation by design’.

1.6.3 These recommendations will also be set out in a Construction Environmental Management Plan for reducing construction impacts, and an Environmental Management Plan for the operation of the Exeter Science Park.

Air Quality and Climate Change

1.6.4 Air quality within the local area is generally good although impacted by emissions from transport, primarily from the road network. There are several residential properties within close proximity of the development site: Sunnymead Kennels, Redhayes Lodge and properties to the western end of Blackhorse.

1.6.5 With the appropriate controls over dust generation during construction, and through the implementation of a Construction Environmental Management Plan, no significant air quality effects are anticipated on local residences. The control of construction
related traffic is discussed further in the Traffic and Transportation section of this non-technical summary.

1.6.6 During operation, impacts could result from changes in traffic flows on the local road network. The assessment of local air quality has involved the modelling of future roadside pollutant concentrations, both with and without the Science Park, up to 2026 when it is expected that the other East of Exeter developments will be present. Pollutant concentrations at all locations for the period modelled remained within the air quality objectives other than at Sowton Lodge. At this location, air quality objectives could be slightly exceeded due to traffic associated with other East of Exeter developments.

Aboriculture (Trees)

1.6.7 Numerous trees, some of which are large and mature and important for landscape, amenity, culture and habitat purposes are associated with the former Redhayes estate and parkland. A number of individuals and groups of trees are protected by a Tree Preservation Order (a protection designation by East Devon District Council). Some of these are located within the Exeter Science Park development site.

1.6.8 Although the scheme has been designed to retain and incorporate existing trees wherever possible, a few trees at the southernmost point of the Redhayes driveway will need to be removed to enable the construction of the access road from the M5 Junction 29 improvements into Phase 1 of the Exeter Science Park. All the trees within the development area that are not to be removed will be protected during construction by means of a Tree Protection Plan and a Construction Environmental Management Plan.

1.6.9 The scheme includes for extensive new tree planting e.g. to reinforce the Redhayes ridge treebelt elsewhere on the site and for new and existing trees to be managed to maintain and enhance their landscape and ecological value.

Archaeology and Cultural Heritage

1.6.10 The archaeological and cultural heritage assessment has identified that the site has potential to contain archaeological deposits from the Iron Age. A series of investigations would be undertaken prior to any ground works commencing for the construction of the scheme and a strategy, agreed with the County Archaeologist as necessary, would be put in place to preserve and/or document findings.

1.6.11 The Redhayes estate is an important part of the local history of Exeter and the measures taken in the design of the scheme to retain elements of the former estate, including the ha-ha and steps, reduce any adverse effects on the cultural heritage of the area.

Ecology and Nature Conservation

1.6.12 A series of habitats and species have been identified as a result of desk based studies and surveys on site, including protected species such as badgers, reptiles, dormice, bats and breeding birds. No impacts on designated sites for nature conservation are expected as a result of the development of the scheme.
1.6.13 Impacts upon habitats and species have been reduced or designed out of the scheme based on the findings and recommendations of the Environmental Impact Assessment. The implementation of a Construction Environmental Management Plan during the construction works and adherence to licensing requirements will further reduce impacts on habitats and protected species.

1.6.14 To off-set the any loss of habitat, and to enable the scheme to deliver long term biodiversity gains, a Landscape Management Strategy will be implemented to replace, enhance and link species and habitats on site with the surrounding area.

Land Contamination / Ground Conditions

1.6.15 Some limited, superficial contaminated material was identified in the former Redhayes house area. This would be removed prior to the construction and the handling, storage and removal of this material would be subject to health and safety and waste management legislation and guidance.

1.6.16 No significant contaminants in the soils at the site have been found which could cause contamination of surface water and ground water.

1.6.17 Following construction of the proposed Scheme there would be no remaining environmental or human health risks associated with contaminated soils.

Land Use

1.6.18 The site consists predominantly of agricultural land together with a modern dwelling (Sunnymead Kennels) and sections of rural lanes which would become part of the Exeter Science Park.

1.6.19 Land-take required for construction and operation of the Exeter Science Park would be contained in the main on land currently owned / controlled by Devon County Council and Eagle One with no official public access. Effects on land used by the community are therefore limited.

1.6.20 The main impact on land use would be the permanent land-take of approximately 21 hectares of predominantly Grade 3a (classed as best and most versatile) agricultural land which would be a moderate adverse impact. Land-take associated with private property would be 0.4 hectares, a slight adverse impact.

Landscape and Visual

1.6.21 Visual receptors include local residents (Redhayes Lodge, Sowton Lodge, Sunnymead Kennels, and properties within the western edge of Blackhorse); properties within the south east fringes of Pinhoe; people working on the Sowton Industrial Estate and Exeter Business Park; travellers on the M5 and the A30; users of local lanes, cycleways and footpaths; travellers on the Exeter – Waterloo railway line; passengers on flights into and out of Exeter Airport; and people visiting centres of informal recreation and open space including Killerton House and Gardens, Woodbury and Colaton Raleigh Commons and Stoke Hill.

1.6.22 The main landscape impact would be the change in landscape character from rural farmland to a campus style development. The design of the scheme has, however, responded to the existing character and landscape features of the site. The design incorporates landscape proposals that would enhance site characteristics and features to help blend with the surrounding landscape. Proposals include substantial
tree planting to strengthen the Redhayes ridge treebelt and to supplement the Redhayes Avenue.

1.6.23 Construction activities would be visible to the residents depending upon their location in relation to the phases of construction and the local topography. Workers and visitors to the Exeter Business Park and Sowton Industrial Estate, travellers on local road including the A30 and M5 and pedestrians using some public rights of way could have views. Construction activities would be partly screened by existing vegetation and trees and hedgerows proposed to be planted prior to commencement of works on site. As the development progresses the Exeter Science Park buildings themselves would provide some screening to later construction phases.

Noise and Vibration

1.6.24 The local area is subject to noise largely from local road traffic on the M5 and the A30 with some additional aeroplane noise from Exeter Airport. The assessment has shown that future noise levels would be similarly dominated by road traffic.

1.6.25 Redhayes Lodge and Sunnymead Kennels are the nearest noise sensitive properties and most likely to be affected by noise and vibration from construction works. The nearest dwellings in Blackhorse may experience some minor noise impacts depending on the nature of the construction activities and wind direction. Noise and vibration impacts during construction would be managed by means of a Construction Environmental Management Plan.

1.6.26 Overall, it is predicted that the Exeter Science Park once built would have no significant impact on noise levels in the surrounding area.

Socio-economic and Community

1.6.27 In East Devon, the in-migration of retired people has determined the strongest feature of the population's age structure, where the proportion of people aged 75 and over in 2001 was almost double compared to Exeter. In addition, the area is characterised by the out-migration of young people due to the lack of suitable job opportunities which has resulted in a low working age population in the area.

1.6.28 The Exeter Science Park would have substantial beneficial economic benefits for the Exeter area and East Devon from increased employment and local purchasing during the construction phase. The construction of the proposed Scheme is expected to involve some £129 million of investment at 2008 prices and to generate the equivalent of approximately 200 temporary jobs.

1.6.29 The Exeter Science Park once completed is expected to generate the equivalent of 2000 plus jobs. The high quality employment that the scheme would generate and business start up opportunities are expected to attract and retain young highly qualified workers and their families. The Exeter Science Park would also provide facilities for the local community including a hotel, café, public open space and cycle and pedestrian linkages which would help promote health and wellbeing.

Traffic and Transport

1.6.30 It is anticipated that the volume of construction traffic would be small compared to that already using the local road network. Construction would occur in phases over a period of 15 to 20 years and it is thus considered that the construction impact on other road users would be minimal. Measures such as fixed access points and temporary diversions would also be in place to ensure that the construction disruption is kept to
a minimum. Tithebarn Lane and Blackhorse Lane would be closed to construction traffic.

1.6.31 In order to encourage the use of public transport to access the site, existing public transport routes would be diverted through the Exeter Science Park. A transport hub would be located within 400 metres of all buildings on the Exeter Science Park such that pedestrian access to all buildings from the transport hub was possible.

1.6.32 As a result of the proposed future M5 Junction 29 Improvements and new roads in support of the new Growth Point developments, impacts resulting from increases from traffic accessing the Exeter Science Park are predicted to be minimal.

**Waste**

1.6.33 Construction of the Exeter Science Park would give rise to waste material which would either be re-used or recycled within the development or elsewhere. A Site Waste Management Plan has been developed which sets out the methods for minimising waste by encouraging reduction, re-use and recycling. Disposal of material would be considered a last option. All waste would be managed in accordance with the relevant regulations.

1.6.34 The waste hierarchy would also apply to waste produced from the operation of the Exeter Science Park which would have strategically positioned waste and recycling areas for the segregation and management of waste. All tenants would be required to adopt sustainable waste management practices. Suitable training, infrastructure and incentives would also be provided.

**Water Resources**

1.6.35 Potential impacts from construction could include the risk of pollution resulting from accidental spillages, increased surface runoff, increased traffic and the reduction of water quality in watercourses from stripped surfaces. These impacts can be prevented through careful planning, responsible waste management and suitable pollution measures which would be implemented through a Construction Environmental Management Plan.

1.6.36 During operation, surface water runoff from the Exeter Science Park would be discharged using sustainable drainage techniques such as swales, soakaways and wet grassland for habitat creation. The use of these sustainable techniques and oil separators would prevent potential water quality impacts to groundwater resources.

1.6.37 As surface water runoff would be discharged largely via infiltration, the Exeter Science Park would not increase the risk of flooding downstream into the Pin Brook and Greatmoor streams.

**Cumulative Effects**

1.6.38 The proposed Scheme is one of a number of major developments planned in the east of Exeter. The other proposed strategic developments include the Cranbrook Community, Intermodal Freight Facility, Skypark, the Exeter Airport Expansion, Clyst Honiton, and the Junction 29 Improvements and associated M5 Junction 29 improvements.

1.6.39 The key cumulative effects arising during construction are likely to be increases in traffic and associated noise, impacts on cultural heritage, landscape and visual
effects, disruption to local services and impacts on waste management facilities in the region.

1.6.40 The Exeter Science Park would provide significant levels of employment which together with the other developments in the Exeter and East Devon Growth Point would result in considerable improvements in social standards.

Environmental Impact Assessment Conclusions

1.6.41 Most predicted likely impacts have been mitigated effectively either through ‘mitigation by design’ as an inherent part of the masterplan process, or through additional mitigation measures such landscape planting or control procedures such as tree protection plans and the Construction Environmental Management Plan.

1.6.42 Following the implementation of the control measures and design features which have been proposed during the Environmental Impact Assessment and which form part of the Exeter Science Park development, it is predicted that no significant adverse effects will remain in the long term.

1.6.43 There will be key beneficial socioeconomic effects of the Exeter Science Park in helping deliver planning objectives at the local and regional level, achieving growth and diversification of employment opportunities.