PLAY

LAPs
10.73 LAPs will be provided as the smallest scale of play provision, typically aimed at children aged 2 to 6 years old. Normally these would not include formal play equipment but would include informal landscape features such as planting earth mounds or sculptural features to create an imaginative and versatile play environment. LAPs should contain a green buffer around the officially designated site of 5m without compromising visibility and security. Provision of LAPs within the proposed development will be reviewed as part of reserved matters.

LEAPs
10.74 LEAPs require a minimum activity zone of 400m², which will include play equipment for a range of ages. No home will be more than 5 minutes walk (i.e. 400m actual walk distance) from a LEAP. Seating is an important requirement of LEAPS to encourage parent supervision and family use and enclosing the space through fencing or low level planting (with a minimum of two egress points) to provide a sense of enclosure and safety as well as deterring dogs. LEAPs require a 20m buffer zone between the activity area and houses.

NEAPs
10.75 NEAPs require a minimum activity zone of 1,000m² comprising an area of play equipment, structures and a hard surfaced area of 465m². NEAPs require a 30m buffer zone between the activity area and houses.

MUGA
10.76 A new MUGA is proposed as part of the sports facilities for youth provision.

Figure 10.16: Play spaces distribution

Public art
10.78 Cambridge City Council will require a Public Art Delivery Plan secured via a Section 106 Agreement. Development and implementation of the public art strategy will be carried out in consultation with COIC. Cambridgeshire is renowned for the quality of its built environment, exemplified by a rich heritage of world class architecture. Integral to the character of the public realm is the siting and mix of publicly accessible art. The vision is to develop a public art strategy as an integral part of the Cherry Hinton scheme, helping to create a sense of place and distinct identity for the development. The overall aims of the public art strategy at Cherry Hinton are to:

• Enhance and develop the quality, distinctiveness and future heritage of an area.
• Bring social, cultural, environmental, educational and economic benefits to enhance the environment and the lives of the local community
• Contribute to making a high quality, attractive and valued living and working environment
• Delight, inspire and stimulate
• Be functional as well as visually stimulating
• Assist in orientation and interpretation of a place
• Promote social inclusion and community cohesion
• Promoting participation and involvement in the arts and our environment
• Promote innovation and creativity.

Sports
Achieving the aims

10.79 The aims of the public art strategy will be met in a number of ways both in the way that art is presented and located and in the way that the concepts are developed and implemented. Key elements and actions will include:

- Public art to form an integrated part of the townscape of the development
- Public art to be closely integrated into the public realm and landscape scheme
- The creation of a public art trail within the open space network with a variety of pieces, each appropriate to their individual location but with an overall theme
- Public art to appeal to as many of the senses as possible
- The use of prominent locations easily accessible to the public
- To involve the local community, including schools, throughout design and implementation
- The early involvement of an artist to inform and develop the public art strategy.

Developing the strategy

10.80 Public art will take different forms across the site, as set out below:

- A landmark piece of public art in one of the key spaces of the development
- Small scale features within neighbourhood open spaces to aid with legibility and provide identity at a local level.

Landmarks

10.81 A large scale, landmark will form a focal point in the development. It will form an integral part of either the urban fabric or the landscape setting of the development. It will form a contemporary feature, which will relate to the local landscape character and is likely to take the form of a sculpture. A series of local landmarks will be created within the primary infrastructure, for example within the local centre. These could include sculptures which may also be used for children’s play.

Neighbourhood features

10.82 These small scale pieces will be integrated into the neighbourhood open spaces to provide local focal points and identity to these areas. They could include bespoke fencing or railings to children's play areas, small sculptures that could be used for children's play or artist-designed seating.

Country park trail

10.83 These elements will form a trail through the linear park. Each piece will be different and appropriate to its location but they will share a unifying theme. The pieces will closely relate to their landscape setting and the use of natural materials such as stone, earth or timber will dominate. It is intended that the new community and primary school in particular will be involved in the creation and evolution of the linear park trail.

Implementation

10.84 It is intended that the landmark features will be provided at an early stage as part of the infrastructure contract. Neighbourhood features will be created within each of the development parcels, as part of the reserved matters.

10.85 It is proposed that an artist will be appointed to develop the public art strategy following outline planning consent. The strategy will be developed further to inform the strategic design code to be submitted prior to the first reserved matters application.
PLANTING STRATEGY

10.86 The planting strategy has been informed by local landscape character considerations, local landscape guidelines, wildlife safeguarding considerations, ecology needs and design factors such as site topsoil, climate and drainage conditions of the site.

10.87 The ecology assessment advises that native plants should be used for stabilising and improving wildlife habitats. This mirrors the Cambridge Landscape Guidelines (for chalklands), so an appropriate mix and variety of native tree and shrub planting will be used throughout the development.

10.88 The topsoil will be conserved and protected during construction, in accordance with BS3882 for re-use through the landscape areas.

10.89 Generally, trees to be used are to be native species appropriate to the Chalklands character area. As an exception, non-native trees may be required within the streets and urban spaces due to rooting and spatial constraints and where the character of the spaces may require a more ornamental species to be used.

10.90 The location and selection of specific planting types and species for different parts of the site will be guided by safeguarding considerations which is an overriding design factor due to the proximity of the development to the airport. Specific planting guidance relating to wildlife safeguarding is provided at the end of this section.

10.91 The following matrix sets out the key planting principles that will underpin the landscape strategy at Cherry Hinton.

Existing vegetation

10.92 The new planting of trees, hedgerows and other planting will result in significant gains in area of hedgerow, trees and other habitats than currently exists on site. Some site vegetation would be modified, replaced or removed. These are detailed in the submitted arboricultural report and summarised as follows:

- Removal of small sections of hedgerow, some trees and ditches to facilitate development and provide access into the site or allow access between different parts of the site.
- Removal of existing vegetation growing on the banks of the main stream running through the site, to enhance drainage function and replacement with new vegetation along the new stream course.
- Replacement of scrub along the boundary with Cherry Hinton Way and Airport Way with new native hedgerow.

Trees for larger open spaces

10.93 The larger open spaces such as the North Park, West Park, East Park and the Local Centre, will provide opportunities to plant larger species trees which require space to reach maturity. With the exception of the Local Centre, their peripheral location, visible from the surrounding area, means that they have a particularly important role in contributing to landscape character. Trees in these areas should therefore be predominantly native species and should include a proportion of trees such as oak, that will provide long term impact. For the Local Centre, a long-lived large tree suitable for an urban environment, such as London Plane (Platanus Hispanica), Norway maple (Acer Platanoides 'Deborah')

10.94 Suggested tree species: Birch (betula pendula and pubescens), Rowan (Sorbus aucuparia), Manna Ash, Common Alder, Willow (various), Poplar (Populus tremula), Field Maple, Walnut, European oak and Lime (Tilia x europaea).

Trees for medium and small open spaces, green corridors and buffer zones

10.95 There are a variety of sizes of open spaces and green corridors at Cherry Hinton. Some of those spaces may provide opportunities to plant one or more of the larger species of trees listed for larger open spaces, to provide long term impact. However, most of the trees for these spaces are likely to be medium to small. Spaces that relate to the development edge should be planted predominantly with native trees, to enhance local landscape character, but more ornamental non-native trees may be used in the internal open spaces reflecting the urban character of those spaces.

10.96 Suggested tree species: Birch (betula pendula and pubescens), Rowan (Sorbus aucuparia), Manna Ash, Common Alder, Willow (various), Poplar (Populus tremula), Wild cherry (Prunus avium), Crataegus (Hawthorn) Field Maple, Walnut, European oak and Lime (Tilia x europaea) for ‘external’ open spaces with additional ornamental cherry (prunus), crab apple (malus) and ornamental pear (pyrus) Amelanchier (Amelanchier lamarkii).
Street trees - Primary street

10.97 Although the primary street is relatively wide, spatial restrictions and the need for trees which require minimum management/pruning restricts the choice of trees to cultivars that have a form and robustness suited to a street environment. In addition, wildlife safeguarding considerations prohibit the use of dense varieties such as fastigiate hornbeam (Carpinus betulus fastigiata).

10.98 Suggested tree species: Turkish Hazel (Corylus colurna), Field maple street cultivar (Acer campestre ‘Streetwise’), Norway Maple variety (Acer platanoides ‘Deborah’), Italian alder (Alnus cordata), Lime (Tilia cordata ‘rancho’).

Street trees - Secondary and tertiary streets

10.99 The secondary and tertiary streets are of a smaller scale than the primary streets and offer less opportunity for tree planting. Where space allows, trees would generally be small to medium sized species or varieties suitable for street planting.

10.100 Suggested tree species: Birch (Betula ermanii and szechuanica), Rowan, Italian Alder Field Maple (Streetwise), Tulip Tree (Liriodendron), Cherry (Prunus Schmittii, Amanogawa and ‘Pandora’), Amelanchier (Amelanchier lamarkii).

10.101 The species-poor hedgerows and scrub that will be removed will be replaced with an equivalent length of species-rich hedgerow and therefore overall there will be a significant net gain in hedgerow resource.

New hedgerows

10.102 New hedgerows will include:
- 1,290m along the boundary with the Airport
- 877m along boundary with Cherry Hinton Road and Airport Way (partial replacement)
- 220m along northern boundary of Northern Fields
- 112m along Coldhams Lane

10.103 The species mix to be used will mirror that listed in the Cambridgeshire Landscape Guidelines for chalklands. The mix will not result in issues with airport safeguarding as the attractiveness to birds will be controlled through management to restrict the volume (as is currently the case). Hedgerows in these areas where wildlife safeguarding is a high priority will be maintained at a height of 1.8m to ensure they have a relatively low volume and are therefore less attractive to birds. Regular clipping will minimise fruiting, further reducing their attractiveness as a food source. A low hedge bank up to 0.6m high may be employed to gain additional height relative to the immediate surrounding ground levels.

10.104 Hedgerows in the areas where wildlife safeguarding is of a lower priority including the eastern boundary with Cherry Hinton Way and Airport Way may be managed on a more relaxed regime on a 2 to 3 year rotational basis.

10.105 Species mix: hawthorn, hazel, blackthorn, field maple, dog rose, wild privet and wayfaring tree. Hawthorn and blackthorn will make up the bulk of the stock to be planted with the remainder mixed in at lower densities to give five or more species per 30m of hedgerow (the Defra definition for species rich). The new hedgerows will be planted at 5 plants per metre in a staggered double row.
PLANTING STRATEGY

Edge planting

10.106 It is important that planting on the development outer edges reflects the character of the local rural landscape. This is particularly the case on the northern edge interfacing with the countryside and along the boundary with Airport Way. In addition, the boundary with the Airport is tied in with the stream corridor and the sense that the North Park and West Parks have a role in providing a wildlife corridor link between the countryside and Cherry Hinton, which will be enhanced through native planting. The Cambridgeshire Landscape Guidelines for chalklands provides the guidance for planting in these areas. Tree species should include sufficient larger long-lived trees such as European Oak, Common Lime and Field Maple to impart a strong rural character to those boundaries. Shrub species should include those listed under the guidance for new hedgerows. On the southern edges with Cherry Hinton, tree species could include a proportion of the non-native trees associated with urban areas, as listed under the guidance for trees for larger open spaces and trees for medium and small open spaces, green corridors and buffer zones.

Planting along realigned stream

10.107 The current watercourse has some hedgerow and trees along much of its course, but with the provision of the new airport boundary hedgerow which will define the edge of the linear park, it is not necessary or desirable to reproduce this type of vegetation alongside the reprofiled as the result would be two parallel hedges, reducing the perceived extent of the overall open space. However, some trees (species selected in line with the higher priority area requirements) and shrubs will be established intermittently along its course.

10.108 Potential increased attractiveness to birds arising from re-profiling the stream will be mitigated by management of bankside herbaceous vegetation, such as by allowing it to grow long and reducing the availability of long runs of open water to waterfowl. The proximity of human activity compared to current watercourse context, will also reduce attractiveness to species such as Pheasant. However feeding of for example, duck species, by new residents may need to be managed through information provision/education and/or rangering.

10.109 The re-alignment will make translocation of water vole much better by providing a ready-made water course with established vegetation in advance of translocation. Watercourse plants would be selected to encourage water voles. The management regime would also represent an enhancement for water vole compared to the current flailing regime.

10.110 The watercourse will be monitored periodically to assess risk and any suggested measures implemented.

Aquatic and marginal planting

10.111 The strategic landscape will include SuDS features including a number of swales, reduced level basins and urban rills. These will form part of the site-wide sustainable drainage scheme and will also provide important new habitats. Swale bases will be sown with a wetland grass mix and emergent and aquatic plants will also be established, mainly in deeper channels and rills.

10.112 Attenuation areas that flood only occasionally and temporarily in storm events are deemed not to be a significant wildlife safeguarding hazard and this includes the majority of the reduced level areas that will be used as part of the informal recreation space. There are some deeper SuDS areas such as the urban rills that might contain water for a longer period and these will be planted densely to discourage use by waterfowl.
Allotments

10.113 Allotments are not deemed a significant hazard as the nature of their use is that birds will generally be discouraged from them.

Grassland types

10.114 Areas of grassland (not counting the playing fields which are discussed below) will form the majority of the area of the informal open spaces. To ensure the areas are usable, the majority of the grassland will be managed as flowering lawn, except in those areas where anticipated high usage will require a harder wearing grass such as a standard amenity mix.

10.115 However, there will also be areas of different grassland management to provide a diverse range of habitats and provide visual interest. These areas of different grass management envisaged for the linear parks are deemed not to be a significant hazard, due to their small scale and the proximity of human activity.

10.116 The majority of the northern field will be managed as longer grass in a similar way to existing grassland areas within the site; mown at the end of the growing season. Fertility is likely to remain high for several years so that wildflower meadow could not be initially established successfully. This area is intended to appear rural in character and so the longer grass, coupled with mown paths will be an appropriate management, with no extensive isolated areas of grass that might prove attractive to birds. Bird use in these areas will be monitored as part of the management plan and management adapted if necessary.

10.117 Playing field areas will be predominantly regularly mown grass. Management strategies will require occupiers/responsible body to actively discourage the use of these areas by birds.
SPECIFIC SAFEGUARDING CONSIDERATIONS FOR PLANTING

Higher priority areas

10.118 Trees in North Park and West Park and other parts closest to the airport represent the highest priority for wildlife safeguarding, so species and form/variety will be light/open foliaged to reduce their attractiveness as roosts. The number of trees will be appropriate to the spaces function as green informal open space, but dense concentrations of trees will be avoided. As young trees, they are unlikely to present a significant risk, but as they mature and canopies merge, the risk may increase. Therefore as planting matures, there will be periodic monitoring to assess the changing level of risk and take appropriate measures, as and when needed. Where issues are identified, trees could be selectively thinned or selective tree surgery such as canopy thinning or pollarding or coppicing carried out.

10.119 Key safeguarding-related guidance for tree planting in higher priority areas:

- Trees to be predominantly native
- The number of trees should be appropriate to the spaces function as green informal open space, but dense concentrations of trees to be avoided or managed appropriately.
- All planting to be subject to periodic monitoring, to assess the level of risk.
- Where monitoring identifies increasing risk, trees could be selectively thinned or selective tree surgery such as canopy thinning or pollarding or coppicing carried out, to ensure risk remains at an acceptable level.
- Suggested tree species in higher priority areas to be: Birch (Betula pendula and pubescens), Rowan (Sorbus aucuparia), Manna Ash, Common Alder, Willow (various), Poplar (Populus tremula), Field Maple, Walnut, European oak and Lime (Tilia x europaea).

Medium priority areas

10.120 Tree planting in medium priority areas including streets and some open spaces (not adjacent to higher priority zone)

10.121 As for high priority areas, generally species and form/variety should where possible, be light/open foliaged to reduce their attractiveness as roosts, but this will be balanced against other constraints when planting in urban areas. Landscape management will incorporate a regular monitoring of trees to assess the changing level of risk and take appropriate measures, as and when needed.

10.122 Key safeguarding-related guidance for tree planting in medium priority areas

- Layout of trees in streets and urban spaces should be appropriate to the spaces function and to provide an attractive setting; for instance spacing needs to be appropriate, to provide attractive green streets.
- Dense concentrations of trees/overly tight spacing in rows to be avoided. 20m would be an appropriate spacing for trees in streets.
- Consider single sided avenues rather than double.
- Suggested tree species: Birch (Betula ermanii and szechuanica), Rowan, Italian Alder Field Maple (Streetwise) Tulip Tree (Liriodendron), Cherry (Prunus Schmittii), Amanogawa and ‘Pandora’), Acer platanoides (street varieties), Oak and Lime (street varieties), (in larger spaces).
- Where space allows, other trees such as oak may be acceptable and would contribute in the long-term to maintaining landscape character.

Lower priority areas

10.123 Generally trees to be used should be appropriate to the Chalklands character area and/or appropriate in the role of integrating with the existing area of Cherry Hinton. There are no other particular constraints.

10.124 Trees in streets will follow a similar strategy to that for the north west linear park with tree planting at a spacing that is appropriate to provide attractive streets. As that planting matures in the medium to long term, periodic monitoring would take place to assess the risk and advise on any measures to address any identified potential hazard.

Figure 10.17 : Wildlife safeguarding priority areas for planting
10.1 The ES assessment of noise effects suggests the need for noise attenuation alongside Airport Way to reduce noise impacts on the school grounds. The studies suggest a 2m high feature would be required. This would be provided either in the form of earth-shaping to form a 2m high bund, or a 2m high noise attenuation barrier, or a combination of the two. Native shrub planting would be established on the earth shaping and on both sides of the fence (if used), to soften the effects of the attenuation feature and provide additional biodiversity along this boundary adjacent to the Protected Road Verge (PRV ecology designation).

**Figure 10.18: Option 1: 2m high bund with 1 in 3 slopes**

**Figure 10.19: Option 2: 1m high bund with 1 in 2 slopes plus 1m high fence**
Attenuation features comprise part of the landscape framework.
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SUSTAINABILITY

Sustainable principles are fundamental to the development proposals. This section details elements of the proposals that have been put in place to meet drainage and energy objectives.

DRAINAGE

11.1 The site sits within a greenfield area, adjacent to Cambridge Airport, and is naturally draining by part infiltrating and part overland flow routes to the existing ditches and drains within and adjacent to the site.

11.2 Working with the natural water cycles, the proposals will:

- Respect the site’s natural drainage pattern
- Protect, restore and enhance existing ditches and drains
- Ensure effective drainage for the development area and protection for surrounding homes and villages.

11.3 An extensive Sustainable Drainage System (SuDS) will mimic the site’s natural environment. Controls and water quality mechanisms will be put in place to improve the water and provide amenity benefits. The overall aim is to manage surface water run-off down to greenfield levels, incorporating on-site attenuation storage. In doing so, there will be no increase in flood risk in other areas as a result of the development.

11.4 The site has a low risk of fluvial flooding but parts of the site are low lying and located within the surface water flood extent. A collaborative approach will be taken to invest in solutions which work not just for the site but for the wider local area and water cycle.

11.5 The low-lying areas will be raised and flood compensation provided to alleviate flood risk within the development.

11.6 The drainage network which can capture, move, store and release water in a managed way. This is achieved through a variety of drainage features including:

- Urban rills
- Swales
- Bio-retention systems
- Filter drains
- Storage basins

11.7 The proposed drainage systems have been designed to accommodate surface water runoff up to a 1 in 100-year event, include an allowance for climate change. They are designed to be accessible and adaptable SuDS systems, providing a robust, resilient and long-term solution to the development and the local area.

11.8 Further details are set out on page 131 and the submitted Flood Risk Assessment, prepared by PBA.
### LAND TO THE NORTH OF CHERRY HINTON
#### DESIGN AND ACCESS STATEMENT

**Figure 11.1: Storage frequency**

<table>
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<th>STORAGE REFERENCE</th>
<th>1 IN 30 YR DEPTH</th>
<th>1 IN 100 YR + 40% CC DEPTH</th>
<th>1 IN 30 YR DRAIN DOWN TIME</th>
<th>1 IN 100 YR + 40% CC DRAIN DOWN TIME</th>
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Strategic surface water drainage proposals cross sections (plan ©Peter Brett)