LANDSCAPE STRATEGY

10.30 The development of the site provides the opportunity to create an attractive green framework of public open spaces and wildlife habitats and to encourage sustainable lifestyles. The landscape strategy has been informed by the studies of the existing landscape character and visual context of the site and surrounding area. It will be built around the existing landscape, enhanced with new landscape features and integrated with the drainage strategy. It will provide linear parks, pocket parks, formal and natural play, and allotments in line with policy requirements and as set out in the Cherry Hinton SPD. Key objectives of the green infrastructure strategy and the design response, are summarised as follows:

Making best use of the existing landform and drainage pattern to achieve an efficient landscape and drainage strategy

10.31 Landform and the need to retain and integrate the natural drainage of the site, requires the location of new drainage features mainly towards the western and north western edges of the site, but also drainage features towards the eastern boundary. The features required by the drainage strategy have been integrated into the landscape, particularly in the linear parks on the western and eastern boundaries and in the central square. The streets and other open spaces also include drainage features.

To address and mitigate any identified effects on the local landscape character and views; integrating any measures with flood mitigation, attenuation and drainage.

10.32 The LVA finds that the effects of development on landscape character would be limited to the direct effects on the character of the site itself and on the character of the immediate landscape context. Effects on views would be limited to views in close proximity to the site as it is visually well-contained by the surrounding development and vegetation. The design process has included consideration of local landscape character and views, including the arrangement of the development to retain significant vegetation, distribution of building height to mitigate visual impacts and use of mainly native planting to reflect local landscape character. The cultural heritage assessment reports no significant effects on designated assets.

To promote the biodiversity of the local area

10.33 Within the framework of the wildlife safeguarding requirements, avoidance or reduction of impacts on the ecology of the site has been a major objective during the design of the proposals. Vegetation, which is of significant biodiversity and landscape value has been retained and integrated into the design. Specific enhancement measures include new hedgerows, the re-profiling of the stream to provide ideal habitat for water vole and a diverse range of landscape types compared to the current agricultural land use. The ecology chapter of the ES details enhancement measures, new habitats and improved management of existing habitats.
An attractive setting for both the existing settlement of Cherry Hinton and the proposed development

10.34 The open space strategy includes a number of interlinked green spaces including community gardens, allotments and the primary school playing field to provide an attractive green interface between the existing edge of Cherry Hinton, and the new community. The shared open spaces that extend through the new development will benefit the existing community as well as the new.

A strong gateway to Cambridge

10.36 The development provides an opportunity to design a new green gateway to Cambridge. The ecological constraints and need for drainage along the boundary with Cherry Hinton Way and Airport Way require a degree of set-back of the development and this linear zone of landscape will provide a strong green corridor, both visually from the point of view of road users and practically, from the point of view of cyclists and pedestrians who will be able to use a quieter, safer, more attractive route, away from the traffic.

Create a series of public open spaces for all abilities and promoting health through physical activity

10.37 It is important that the new community of Cherry Hinton provides sufficient space for recreational activities for all abilities. Varied public open space will be provided at walkable distances, catering for all age groups and which promotes physical exercise, health and wellbeing.

To retain all public rights of way and create new routes improving connectivity with the wider environment

10.38 The proposals achieve an excellent degree of connectivity including the retention of the existing public right of way and providing the desired network of pedestrian/cycle routes through the new open spaces, between Coldhams Common/Cherry Hinton and Teversham.

Green streets

10.39 The primary, secondary and tertiary streets to be designed to incorporate tree planting, which will help to break up the on-street parking and soften the street scene. The primary and secondary streets in the lower parts of the site, will also accommodate urban rills that will be vegetated.

Playful landscapes

10.40 Naturally the design will ensure that the required provision of play space is included, but it is intended that in addition to this formal provision the network of landscape corridors and spaces will present opportunities for natural play and in themselves be ‘playful’ landscapes.

To create a landscape which responds to the Wildlife Safeguarding area surrounding Cambridge airport and discourages birds from establishing in habitats, especially immediately adjacent to the airport

10.41 The proposals include a planting strategy developed in liaison with the airport’s consultants that addresses wildlife safeguarding issues whilst provides for long term monitoring and appropriate management to achieve an attractive landscape without undue additional risk.
North Park

10.42 Inspired by the linear characteristic of fen landscapes which are found across Cambridgeshire, North Park forms an integral element of the proposals and a soft interface between the new urban form and Cambridge Airport. The park integrates flood mitigation and amenity space to create a vibrant, diverse and valuable open space for both existing and new residents.

10.43 This section of park links Coldhams Lane with Airport Way. It is the widest section of open space in the route and accommodates and enhances the route of the existing public right of way and provides other new pedestrian and cycle routes. The existing stream corridor is re-profiled to meet requirements of the drainage strategy. The attenuation features are integrated into the spaces to become dual function usable open space. The space will provide a strong buffer between the airport and the development.

10.44 The new boundary fence on the boundary of the airport will be replaced with a new security fence 2-3m high to BS BS1722 with purpose built measures to minimise its use as perches/staging posts. Cameras will be located at changes of direction and at regular intervals. The new fence will be located 3m beyond the site boundary within airport land. A new hedgerow will be located on the site boundary.

10.45 The new boundary hedge will be limited to 1.8m high and maintained as a regularly clipped hedge (which reflects the existing hedgerow management on this boundary). Given the management of the hedgerow a more diverse native species-rich hedgerow could be planted. In order to raise its height relative to the new security fence to help screen it from the development site, it would be possible to locate the new hedge on a bank. This hedge will provide a natural enclosure to the park whilst gaps at strategic locations will allow views across the airfield.

10.46 Boundary adjacent to airport including hedge could be managed by airport to ensure safeguarding measures remain acceptable.

10.47 The design marries the naturalistic character of the re-profiled stream with strong geometric forms that cross the corridor. The underlying strong geometry to some of the pathways and areas of planting running counter to the main linear axis will provide strong and direct connections with the adjacent development and create a strong sense of place and special character. The geometry will also help make strong links with other open spaces either directly integrated with adjacent spaces (including adjacent LEAP areas and the central open space) or indirectly via tree-lined streets.

10.48 The linear park will provide a large area for informal recreation comprising a series of useful multi-functional and attractive spaces along the linear park. This will include informal lawn areas, mini-meadows, a copse, an orchard, natural play features and a streamside walk.

10.49 The planting will consist of predominantly native planting to enhance specific elements of biodiversity, whilst restricting attractiveness to particular species that present a risk to wildlife safeguarding, particularly along re-aligned stream corridor.
Key components

1. Informal lawn area
   Flexible amenity space for informal recreation and relaxation.

2. Enhanced public right of way
   Providing improved pedestrian and cycle links through the linear park.

3. Open space including formal play area
   Strong link to adjacent linear park.

4. Flexible storage channel
   Planted with marginals, creates an attractive yet functional drainage feature.

5. Re-profiled water course
   Realigned to make the best use of the existing space, planted with marginals and native plants.

6. Boardwalks and viewing platforms
   Provide engaging crossing points over the SuDs features.

7. Integrated attenuation basins
   Combining informal amenity space and flood attenuation.

8. Mini-meadows
   Small, natural, wet, dry and wildflower meadows provide visual and sensory interest.

9. Coppice
   A small area of managed native planting periodically cut back for harvesting and biodiversity benefits.

10. Maintenance strip
    3m maintenance strip - occasional vehicular use for airport operation.

11. Proposed hedgerow
    Encloses the linear park with gaps to allow occasional views to the airport.

12. Play features
    Grass mounds, tunnels, stone boulders and tree trunks arranged at key nodes within the linear park encourage imaginative play, achieving an inclusive and active open space.
West Park

10.50 This part of the linear park continues the key roles of providing a green setting to the development, providing an area of informal open space and a buffer to the airport. The area is also a key component of the Coldhams Lane – Airport Way footpath/cycle link and provides a minimum 20m width linear park. The linear park incorporates a gas pipeline, located approximately 10m from the site boundary in order to maximise potential for planting and a variety of useable spaces. Strong geometry underlying the design, will continue the special character of this westerly section of the linear park. The primary street corridor extends into and runs within, the easternmost 150m length of the linear park, but the majority of the park will be vehicle free.

10.51 This section of linear park lies adjacent to two adjacent urban spaces and the designs of those spaces which include a local area of play, will integrate seamlessly with the linear park.

10.52 This section of linear park includes a number of 8m width flood attenuation swales to be designed as useable spaces with a strong relationship to the adjacent development.
East Park

10.53 The south east linear park will be a key informal open space alongside the Cherry Hinton Way Road/Airport Way Road corridor. It will provide a series of useful and attractive spaces and act as a quieter alternative to the pedestrian/cycle routes along the roadside. It will also provide a strong green setting for the development and an appropriate gateway to Cambridge, reflecting the transition from rural to urban landscape semi-rural transition and gateway between the more rural character beyond Cambridge and the urban area of Cherry Hinton.

10.54 The residential development has been set back from Cherry Hinton Road/Airport Way and from the designated ecological habitats located along the roadside. The existing scrub vegetation on the boundary will be replaced with new native hedge planting and trees which will enhance the biodiversity of the road corridor.

10.55 The distinctive naturalistic character of the intervening area with more ‘organic’ forms to the spaces, will distinguish it from the north west linear park with its more geometric layout. The spaces will integrate wide but shallow swales, an important part of the drainage strategy, making them useable spaces for informal recreation. The houses fronting the development will, in conjunction with the new hedge on the boundary, create an intimate, enclosed character to the linear park.

10.56 The new hedge, new native tree planting and the different areas of grassland will result in an enhanced level of biodiversity for the area and the roadside verge grassland comprising the County Wildlife Site will be protected by the new hedge.
Northern Fields

10.57 This area will function predominantly as informal open space and a buffer of rural character between the development and the agricultural land beyond. With the exception of the existing stream corridor that will be retained, the area is currently featureless, so there is opportunity to create significant areas of new woodland and scrub, meadow grass and new footpath/cycle routes. Allotments in the southern part of the area would provide an appropriate buffer between development and the rural character of this area. The predominant character of this area of the linear park will be grassed meadows, wildflowers, extensive with occasional tree groups and areas of scrub. The area will form a contrast to the linear park to the west which will have more of a ‘parkland’ character.

10.58 Overall, it is anticipated that the north west linear park will form a particularly rich open space that offers a wide range of opportunities for play, walking, cycling, quiet and contemplation. A sensitive approach to the retention of existing vegetation and proposals for new, appropriate habitat creation will help assimilate the new development in its landscape and ecological context.

10.59 The 1.8ha area would be designed as informal open space and involve minimal intervention from its current form. The material for the proposed cycle/pedestrian route within the green belt is a stone mastic asphalt using 6mm local golden gravel (or similar). This is a material / finish used elsewhere by CCC Highways. It is suggested that the lighting is addressed through the use of solar studs in order to limit any impact whilst providing safe and secure access.
Local centre

10.60 The local centre is located on an important node for movement through the development, providing key access to the linear north west linear park and will perform a variety of functions.

In addition to its role as a central meeting and activity place and location for local shops and services, the space includes the main play area. This neighbourhood equipped area for play (NEAP) will be a minimum of 1,000m² in area. It will include an area of play equipment catering for different age groups and a fenced kickabout area.

The green space also includes a small park which also has a drainage function in extreme weather events. This comprises deeper channels that will take flood water up to in a 1 in 30 year event and the wider area that would hold water only in events exceeding a 1 in 30 year event.

10.61 The re-profiled stream passes through the local centre and will be an important focal point for the space.

Figure 10.12: Sketch view of Local Centre
Play park

10.62 The two play parks are medium sized urban parks enclosed on three sides by development and open to North Park and West Park. They will both accommodate local equipped areas of play (LEAP), see further details on page XX. The play areas are located within shallow basins which are part of the drainage strategy. These basins will hold water only very occasionally during a flood event that exceeds 1 in 30 years. Rain that falls in events up to 1 in 30 years will be stored in adjacent urban rills, which are not included as part of the usable open space.

Green links

10.63 In addition to the open spaces described above there are a series of green links and corridors, which will provide connections between the green spaces.

Allotments

10.64 Allotments have been provided in close proximity to overlooking homes and will be accessible for both new and existing residents. The provision of allotments across the site is approximately 1.1ha, with one area adjacent to the existing area of Cherry Hinton and the other in the area bounding the open space to the north of the site.

10.65 The area of uncultivated land in the southern part of the area will be restored and enhanced to provide allotments or community gardens and also provide an important open space linkage between the existing neighbourhood at Cherry Hinton and the new development.

10.66 Adjacent to the allotments fruiting trees create an informal community orchard with strong association to the existing allotments.
Other open spaces within development area

Pocket parks and small play areas (Local Areas of Play - LAP) are located within the development parcels. In order to maintain an even distribution, additional spaces (from approximately 0.05 to 0.15ha) for informal recreation have also been included. These will provide an easily accessible and useable space in close proximity to all homes. These spaces are similar in size to similarly functioning spaces in other successful Cambridge developments.

- Designed to provide usable open space
- Informal in appearance
- Use of native trees, shrub planting and low hedging, with amenity grass
- Opportunity for informal, natural play spaces and neighbourhood meeting areas.

DRAINAGE STRATEGY

10.68 From the outset of the design process, the landscape and biodiversity strategy has been developed alongside the drainage strategy so that they are fully integrated. The drainage strategy is described in detail in Section 11 and illustrated in figure 11.1. The following key elements of the drainage strategy are very important in influencing the landscape character of the open spaces:

Re-profiled stream

10.69 The section of existing awarded watercourse passing through North Park needs to be re-profiled in order to provide the necessary flow and capacity characteristics. This has provided the opportunity to re-align its course to make best use of the landscape. It also results in a more attractive habitat for wildlife including the water vole. The stream will become an important feature of North Park. A re-profiled section also passes through the central square and is integrated into the design, making it a very distinctive and attractive space.

Swales

A maximum 26.6m width linear strategic swales are required in the North Park and East Park open spaces, to attenuate development generated surface water runoff at greenfield rates prior to discharging into the re-profiled watercourse. These would be up to 1m deep with shallow sloping sides. Deeper channels up to 1m depth are located within the strategic swales and will provide attenuation and conveyance of surface water for up to the 1 in 2 year event. For storm events in excess of the 1 in 2 year surface water will overtop the proposed channels and flow into the base area of the main swale. With the main swale not being utilised for surface water associated with the more frequent events (up to the 1 in 2 year event) this allows for part of the swale to be counted as additional useable space within the development.

10.70 A basin area with a deeper channel has also been incorporated into the local centre, where it will be used as a small urban park adjacent to the central play area and ball-court (both of which will remain dry in all flood events up to above the 1 in 100 years plus climate change event). The basin, like the strategic swales in the North and East Parks, will store development generated surface water in events exceeding the 1 in 2 year event and include a deeper channel of up to 1m depth located along the outer edge of this space, which will store and convey the surface water up to the 1 in 2 year event. A potential option for the surface water drainage is for underground storage to be incorporated within the central space which would allow for the basin area to only be utilised in events exceeding a 1 in 30 year event.

10.71 The two play parks adjoining the North and West Parks are designed to store water only in events exceeding 1 in 30 years.

Urban Rills

10.72 Urban rills up to 8m wide are provided within the western part of the site to attenuate and convey surface water runoff up to the 1 in 100 year plus 40% climate change event. Smaller urban rills also a feature in some of the streets leading towards West Park. These will be densely planted with aquatic and marginal planting.

Figure 10.15: Typical cross section through green corridor adjacent to existing vegetation