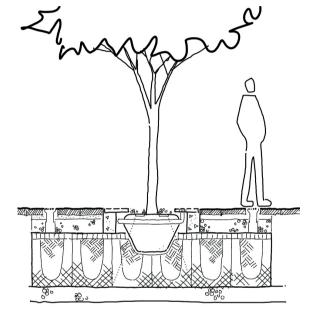
9.2 Making space for trees and planting

DC.40: **Trees**

To ensure trees are successfully integrated within new development, designers must ensure that sufficient space is allocated for trees and planting at early design stages. Tree placement and species selection must ensure trees can mature comfortably and all street trees must have a a suitable shape and ultimate size for their setting.

Tree planting in paved areas should ensure root zones, utilities and below ground infrastructure are coordinated. Tree pits should incorporate tree cells to achieve the required root soil volumes beneath engineered surfaces. This is especially important for larger/mature street trees. Designers should also consider opportunities for connected tree pits to maximise potential stormwater attenuation and accommodate long-term root growth.



Tree cells beneath an engineered surface enable healthy tree growth



Clear stem trees along a street



Paved tree surround with permeable surface and adequate space for growth

DC.41: **Planting**

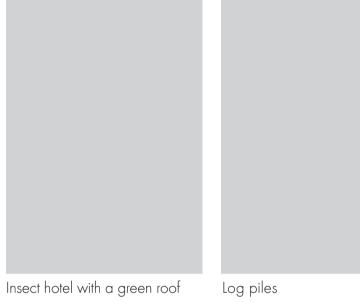
Like trees, the provision of planting must be balanced with development and space for vehicles to ensure high-quality residential amenity, habitat creation, and extensive stormwater attenuation are provided.

To achieve healthy growth designers must ensure the soil and subsurface growth conditions are suitable to planting and potential stormwater attenuation requirements.

Planting must also be appropriate to its character and function. E.g. robust plants should be used in high footfall areas or planting that can capture pollutants should be used adjacent to busy vehicular streets.

Plant species must also be selected to support wildlife and biodiversity. Over-provision of mono-cultural grasslands within large open spaces and private gardens should be avoided.

Planting can be expressed in many forms including swales, rain gardens, low-level planting, and hedging/privacy planting but, critically, it must be integrated to ensure longevity. Planting with more intensive maintenance requirements, such as green walls or hanging baskets are not generally recommended



Varied surface and log piles on dry meadow roof

Bird and bat boxes could be provided within trees or on buildings adjacent to wildlife habitats

9.3 **SuDS**

DC.42: **SuDS**

New development in DPGV should embrace a comprehensive approach to water management through the integration of Sustainable Drainage Systems (SuDS) with reference to the Surrey Local Flood Risk Management Strategy. Critically, designs must ensure no increase in flood risk from new development and should, wherever possible, reduce existing risk.

Designs should consider flood risk management at early stages, and should promote and protect green & blue corridors. Within the wider landscape, this means providing integrated attenuation within open spaces such as the Country Park and Community Parks. Whilst at a more localised scale this means providing multi-functional SuDS that delivers drainage, biodoversity enhancement, water quality improvement and amenity benefit. SuDS features could include: tree pits/trenches, rain gardens, swales, channels, rills, permeable paving and de-paving.

For more information on water management at the building scale please see XXX.



Rain gardens with drainage inlets. Credit: City of Portland



Permeable paving and understorey planting



A depayed pocket park with natural play features



Swales and tree planting along a major street North West Cambridge, project by AECOM



Street swale adjacent to car parking



Connected rain gardens with bridges

9.4 Biodiversity and habitat

DC.43: Biodiversity and habitat

Ecological improvements should be woven into spaces in different ways with designers seeking opportunities to increase tree and under storey planting, sustainable drainage, and habitats for a wide variety of species.

New trees and planting should include a mix of native and ornamental species. Native tree species will support a wide range of birds, insects and small mammals, maximising the biodiversity of the site, whilst the ornamental species will increase the length of the of the flowering and berrying season.

Plant species should include nectar and pollen-rich plants for the new landscaping scheme to provide foraging habitats for insects and pollinators, that at the same time are source of food for birds and bats

Planted rooftops should also be used to improve biodiversity while improving the environmental performance of a building. In addition to planting, green roofs should have micro-topography including depressions for water accumulation and aggregate mounds to provide habitats for insects and birds. Selected roof areas which are not accessible to residents could be brown roofs and include habitat features such as insect hotels, dead wood piles, bat tubes and bird boxes.



Insect hotel with a green roof



Log piles



Varied surface and log piles on dry meadow roof



Bird and bat boxes could be provided within trees or on buildings adjacent to wildlife habitats

9.5 Play and recreation

DC.44: Play and recreation

Play is an essential way to make DPGV welcoming for everyone, especially children and young people. New development should seek to provide inclusive play suited to young people of all ages, genders and abilities, as well as promoting sports/recreation for adults. Play should reflect themes related to the site's heritage and should use be sensitive to natural environments.

Designers should follow LPP1 policy LRC1 and Fields in Trust guidance, referring to section 4.4 for guidance on distribution. Play should be formed of the following types:

Locally Area for Play (LAP): for under 5s, should focus on both dedicated and incidental play, and should be located within 1 minute's walking distance.

Local Equipped Area for Play (LEAP): for 5-11s should be formed within dedicated local play spaces within 5 minutes walking distance, providing 'equipped' play opportunities either through conventional play equipment or natural play elements.

Neighbourhood Equipped Area for Play (NEAP): for 12-18 year olds, should provide more substantial equipped play and recreation facilities while accommodating children of different ages and genders. Neighbourhood play should be within 15 minutes walking distance.

Play could include natural features (e.g. rocks, boulders or tree trunks), 'traditional' play features - (e.g. slides or climbing frames), and bespoke features (e.g. paving patterns, interactive artwork or water features).



Water can be used as a play feature in multifunctional public spaces



Timber play feature in a green open space



Imaginative play equipment could reference the heritage of DPGV



Rain garden play Credit: Robert Bray Associates



Equipped play and recreation space. by Atelier Jacqueline Osty. Credit: Arnauld Duboys

9.6 Public art

DC.45: Bespoke public art stategy

Public art can be beautiful, imaginative, and should be used to highlight the unique qualities of DPGV and its heritage. Artwork should therefore be sensitively curated and integrated throughout the site.

Artwork should be purposefully designed for DPGV, ensuring the type, size and materials are appropriate to the site's natural and cultural heritage. Designs should be interesting and expressed through a variety of forms E.g. glazing, metalwork, sculpture, relief sculpture, lighting, paving patterns or land art. Designs that also have functionality should also be promoted.

Importantly, public art should be principally positioned and curated to:

- Reinforce character: e.g. artwork that responds to the materials, built forms, urban/suburban character or natural landscapes
- Aid wayfinding: e.g. artwork as a destination, to mark thresholds between areas, or as markers within the public realm
- To bring variety and interest: e.g. artwork as a trail through the country park or along a key pedestrian route, or artwork to mark a key vista.

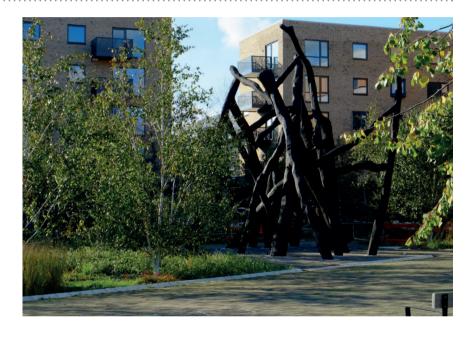


Fig 32 Figure number caption



CHARACTER AREAS DESIGN GUIDANCE

- 10 BUILT CHARACTER AREAS
 DESIGN GUIDANCE
- 10.1 Overview
- 10.2 Business park
- 10.3 Village centre
- 10.4 Canal basin
- 10.5 **Typical neighbourhood**
- 10.6 The Woods
- 11 LANDSCAPE CHARACTER AREAS
 DESIGN GUIDANCE
- 11.1 Overview
- 11.2 Landscape character: study area A
- 11.3 Landscape character: study area B

10 BUILT CHARACTER AREAS DESIGN GUIDANCE

10.1 Overview

10.1.1 Character areas

This section contains character studies for a cross-section of key areas across DPGV. Five "built" areas have been selected which correlate broadly with the neighbourhood character and placemaking framework in section 4.4. The approximate location of the character area studies in relation to the indicative masterplan framework are illustrated on figure 33, and listed below for reference:

- 1 Business park (section 10.2);
- 2 Village centre (section 10.3);
- 3 Canal basin (section 10.4);
- 4 Neighbourhood (section 10.5); and
- 5 The Woods (section 10.6).

For each area the following design and development guidance is provided.

- Urban design guidance relating to streets and movement, character and scale; multi-functional landscape and public realm; and land uses and activities. Please refer to Part C for further guidance on key design aspects.
- A high-level illustrative sketch masterplan drawing which is provided for reference alongside the guidance.

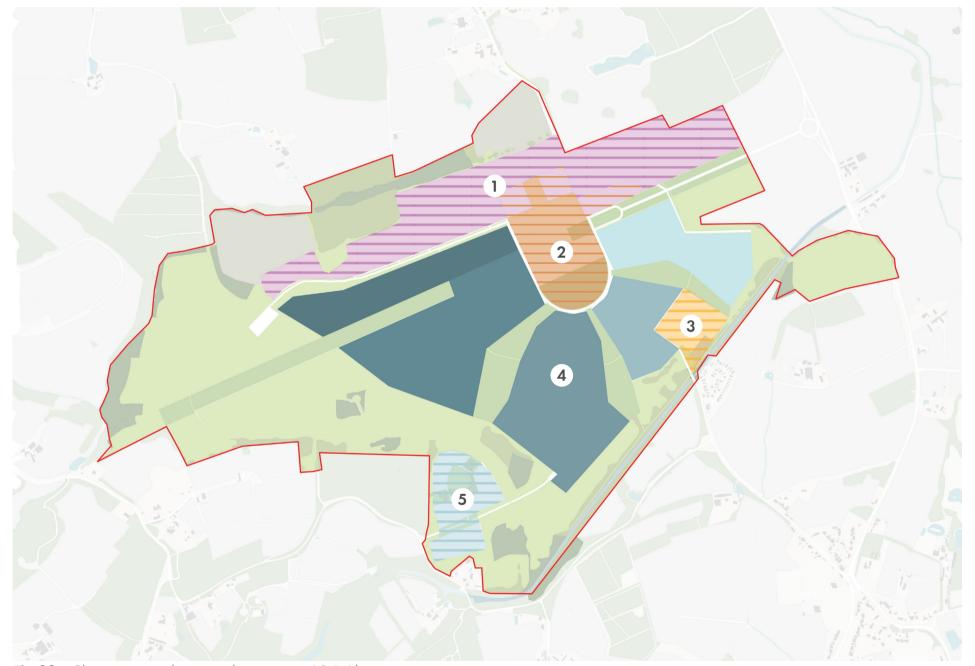


Fig 33 Character area locations (see section 10.1.1)



10.2 Business park

Vision

DPGV will continue to grow as a regionally significant centre for employment, with a focus on the expansion of the existing business park. The village centre will straddle the employment area, creating opportunities for a vibrant mix of uses, and a greater sense of civic life at the interface between the centre and the business district. The wider business park will include flexible parcels for a wider spectrum of employment activities, with a focus on high value productive enterprise.

Figure 34 shows an indicative layout plan of the Business Park area. The annotations on the plan provide an overview of some of the key opportunities and design considerations that any proposals coming forward will be expected to respond to.

Streets and movement

1 Pedestrian links should be created between the Business Park, village centre, runway park and adjacent landscape areas. Workers will be encouraged to use the village centre and move about by foot as much as possible.

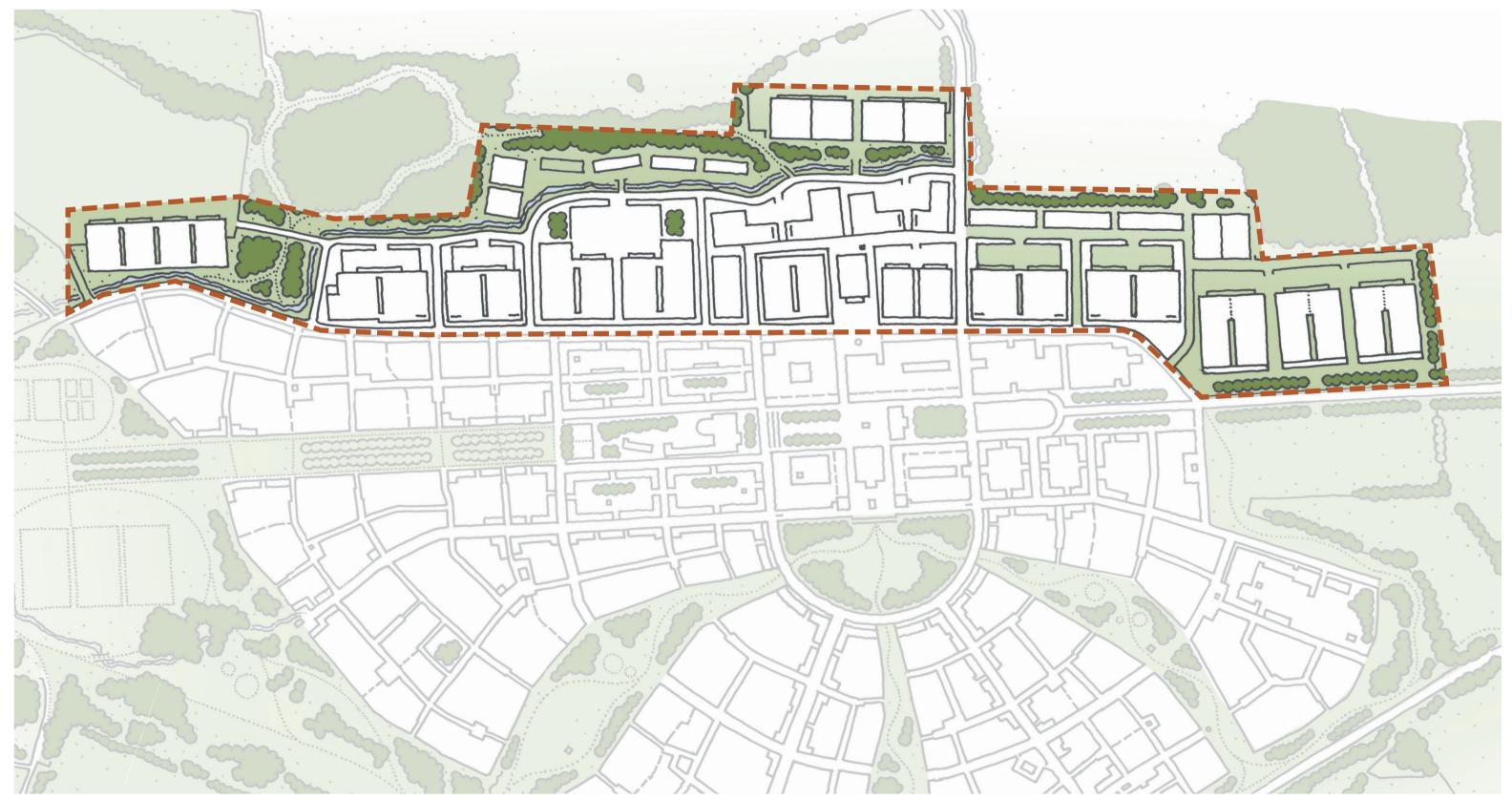


Fig 34 Indicative layout for the business park - this will include a range of retained buildings and new floorspace

- 2 Proposals must place an emphasis on achieving sustainable travel patterns. This should be supported by Green Travel Plan initiatives. The business park must benefit from easy walking and cycle routes, ample cycle parking, accessible connections to the proposed bus route and provision for electric vehicle charging.
- **3** Proposals must deliver convenient and safe access for commercial vehicles, minimising conflict with residents and visitors.
- 4 An integrated approach to parking, servicing and deliveries will be required, with vehicles including HGV's kept separate from key public routes and spaces. The detailed approach to HGV routing will be agreed through the design process, but effort should be made to avoid impact on the identity of the village centre.

Landscape and public realm

- **5** Proposals should incorporate a sequence of urban spaces which generate a strong sense of vibrancy and activity, linking the Business Park to the village centre.
- **6** Efforts should be made to achieve an attractive green character, through tree planting and a clear strategy of landscape connections between the existing green areas and proposed spaces in the masterplan framework.



Existing business units at the Business Park



The Business Park will have an attractive landscape setting -Ansty Park, Coventry

Character and scale

- **7** The indicative layout identifies opportunities for rational, viable plots which are suitable for a flexible range of employment uses and sizes.
- 8 Buildings in the Business Park are generally anticipated to be up to 3 storeys in height. Heights might increase to 4 storeys at the interface with the village centre.
- **9** Proposals will be encourage to adopt a contemporary and innovative approach to design in the business park area. Opportunities to draw on aviation heritage could be considered in relation to materials.



New buildings offer an opportunity for high quality, contemporary design - Farnborough Business Park

Land use and activities

- in the total quantum of employment floorspace.

 This will be achieved through a consolidation and rationalisation of the existing premises, and the creation of new floorspace. Future detailed masterplanning and design proposals for the Business Park area must provide a clear phasing strategy to enable the evaluation of the projected net gain of floorspace at each stage.

 Opportunities to re-purpose existing buildings will be encouraged where possible.
- 11 The Council will encourage a flexible approach to employment activity on the site, maximising opportunities for high value production activities.
- 12 The Village Centre will straddle the central part of the Business Park, facilitating a rich mix of employment and town centre facing commercial uses. Opportunities for signature projects such as a community based business hub with flexible spaces, meeting facilities, business support and excellent IT facilities will be encouraged.
- 13 "Swing blocks" will be considered in locations where greater flexibility is justified. Innovative typologies including live-work will be considered at the interface between the centre and the Business Park.

10.3 Village centre

Vision

The village centre will be a welcoming, vibrant heart for the settlement. The centre is situated at a natural juncture between the business park, runway park and the residential neighbourhoods which radiate from the centre and village green. The centre will benefit from a genuine mix of uses including town centre activities, new homes, business uses and education.

Figure 35 shows an indicative layout plan of the village centre which will be a key location in DPGV. The annotations on the plan provide an overview of some of the key opportunities and design considerations that any proposals coming forward will be expected to respond to.

Streets and movement

1 The centre should be characterised by a peoplefirst approach with strong walking and cycling
routes between the eastern and western sides
of runway park, to and from the business park
area and within the centre via safe streets and
spaces. These routes will also enable ease of
walking and cycling between the centre and
adjacent residential neighbourhoods and the
primary school, via street-based connections and



Fig 35 Indicative layout for the village centre

routes across the village green and green wedges beyond.

- 2 The street to the east of the centre will form a key north-south link between Stovold's Hill and Compasses Bridge. As illustrated in the movement framework, it is envisaged that the main access street will connect to this street, forming a key primary route for vehicles accessing the residential neighbourhoods and other uses off the main crescent which forms a natural edge to the centre.
- 3 It is envisaged that a car park would be situated on the eastern boundary of the village centre, supporting the vitality of community facilities, shops and services, and minimising the penetration of private vehicles into the centre.

 High quality cycle parking will also be required alongside provision for electric vehicle charging.
- **4** The village centre must be served by a bus route, with stops located to maximise convenience for key destinations including the potential primary school, shops and facilities and the business park.
- **5** Local access for deliveries and servicing should be managed through a careful management regime which encourages out-of-hours servicing from the rear of units where possible.
- **6** Shared surfaces should be provided within the village centre as illustrated in Part C.

Landscape and public realm

- 7 The village centre should benefit from a sequence of public spaces (North Square, Market Square and South Square) as stepping stones between the business park and village green. The northern space will have a focus for employment uses and ancillary services marking the transition from the centre to the business park in this location. Market Square will be focused on retail, community and leisure functions. The southern space is likely to have a community focus, coinciding with the transition to the village green.
- 8 The village green offers a memorable and formal green space formed in the illustrative framework as a crescent which allows a transition from the linear geometry of the runway to the fan-like neighbourhood petals and green wedges. Further guidance is provided in chapter 11.



Local centres will be vibrant places and the focus of community life Photo: Landscape Design, Townshend Landscape Architects. Credit: Eddington Cambridge. Photographer: Paul Michael Hughes

Character and scale

- 9 The framework allows for a flexible approach to the design of the centre. Although a more formal geometry such as the crescent-'D' will be encouraged, the structure of buildings, parcels, streets and spaces within the centre might adopt a more assymetrical approach which is inherently more flexible to shifting market dynamics, and shifting land use and plot requirements.
- **10**Building heights will be up to 4 storeys in the village centre.

Homes will be within close walking distance of community infrastructure. Photo: Storey's Field Centre and Eddington Nursery, MUMA. Credit: Eddington Cambridge. Photographer: Alan Williams

Land use and activities

- 11 The village centre will bring together a range of retail, leisure and community uses, focused around the new network of streets and spaces.

 Key spaces should be fronted by active uses, overlooked by accommmodation on upper floors.
- 12 Higher density residential uses will occupy the upper floors of the centre, with opportunities for residential uses at ground floors
- school is a central parcel immediately west of the centre. The position of the parcel within the runway space, offers an exciting opportunity to establish a unique, contemporary design which inspires young residents at DPGV. An urban format is favoured, although the exact parcel size is flexible to accommodate the precise space requirements and need. Early discussions with Surrey County Council will be required