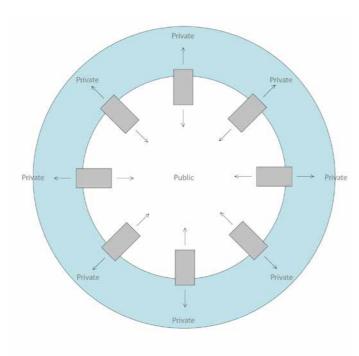
05. DESIGN RATIONALE

5.3 Design and layout concept

The ecology survey and other relevant information have demonstrated that the southern part of the site, where a significant range of habitats are currently present, should not be developed. This area is being retained for nature conservation and bio-diversity enhancement, with some access for recreational and bird watching /nature watching purposes. Similarly Knighton Heath Wood is not being developed but instead retained and managed, including management of the archaeological assets. A major new bio-diverse habitat area, the "Biodiverse Heart" is being created on an area of over 31 hectares (78 acres) in the north eastern quadrant of the site, including large areas of public access land. The areas with identified scope for holiday accommodation and facilities are the north west portion of the site which is currently being deep quarried, and the central section of the site occupied by the sand and gravel processing plant, offices and quarry workings. The eastern portion of the site occupied by the blister hangar and the Warmwell Road site entrance will be the location for the country club.

In terms of detailed design, use will be made of local materials throughout the development; Portland and Purbeck stone, other local stone, brick, render, flint and cob, timber (both structural and timber cladding). For roofs, use will be made of locally produced materials including stone and clay tiles, local reed thatch where appropriate (particularly for some of the smaller buildings such as bird hides, canoe storage) and potentially for some of the holiday accommodation. Contemporary materials will be integrated with the use of more traditional materials, as has successfully been the case at Lower Mill Estate in the Cotswolds, where glass, steel and metal cladding have been integrated with Cotswold stone, render and timber in an award-winning combination. The next section of this report shows how this design and layout approach has been applied to a range of identified character areas across the site.

The diagram below shows how one important concept has influenced some of the character areas proposed at Silverlake. The application of this concept will be apparent in relation to the islands character areas in particular, but also in a number of the other areas of water frontage development. Instead of the communal areas being at the front of the holiday units, with private space at the rear, the shared communal areas are located at the rear, the holiday units and their private spaces fronting the water.



Inverted public/ private space











Lodges and chalets at Silverlake will embody both traditional and contemporary design solutions and materials, energy efficient construction incorporating local materials, focussed on the waterside environment.

SILVERLAKE

OPPORTUNITIES FOR INNOVATIVE AWARD WINNING ARCHITECTURE AND DESIGN, WITHIN A SENSITIVELY MANAGED NATURE RESERVE









Examples from Lower Mill Estate

6.1 Silverlake design principles

Amount

The proposed Silverlake development includes up to 1,000 holiday lodges and chalets. The units comprise 2 and 3 storey buildings up to the heights indicated and with the built footprints indicated in the character areas section which follows. The amount of holiday lodge and chalet development in those character areas with built development comprises;

Islands – 550 Terraces – 300 Lakeside – 56 Beach – 46 Mayers Pond Wood – 48

Many of the units will be detached, with some linked, grouped and small terraces of lodges and chalets.

Massing

Footprints and heights are provided for each character area in the following sections. The massing will be relieved considerably by the landscape framework within which all of the lodges and chalets will be located. Within each plot, landscape measures will reflect the character area and the biodiversity objectives adopted for that particular part of the Silverlake site. It will also reflect the topography and relationship with the water bodies. A number of areas involve plots broken up by woodland and tree planting, further reducing the impact and built impression.

Building heights and building footprints are provided for each of the character areas.

The Country Club and Hotel

The country club will comprise a number of linked pavilions, totalling 6153sgm of floor space, maximum building heights being three storeys, 14 ms including the roof. The hotel is a small 30 room facility enabling potential purchasers to try the Silverlake experience.

It will have a floor space of up to 992sqm and a height of 2-3 storeys, 14 ms including the roof.

Density

Throughout the Silverlake development, the aspiration is for low density in a highly landscaped setting. Very low density is proposed in the more sensitive areas, such as Lakeside and Mayers Pond Wood. Providing a comfortable space between buildings will add to the feeling of open space and help develop a relaxed atmosphere. Average plot dimensions are 20m x 35m.

Some smaller terraced units will provide a mix of holiday accommodation for Silverlake. Whilst maintaining the high quality of design which runs throughout Silverlake, the smaller units will provide an efficient and slightly higher density concept which will appeal to a wider variety of holiday users. The provision of communal spaces for each group of about 30 units, will encourage social interaction, with each communal area to be shaped by the communities that form around it.

Sustainability

Throughout the Silverlake development, sustainability principles will include the following provisions for building design, construction, choice of materials and mode of future operation;

Low impact construction including:

- sustainable materials
- off-site construction / sectional timber buildings
- green roofs
- locally sourced materials
- local labour force
- construction waste minimisation and management
- resilient and flexible design
- natural ventilation
- healthy buildings

Sustainable energy sources including;

- high levels of insulation and energy efficiency
- solar and other renewable energy technologies on-site
- biomass for powering communal buildings and some groups of lodges
- wood burning stoves for individual holiday units
- mini CHP for communal buildings

Water efficiency and management

- adequate water supply available
- water metering and monitoring
- grey water recycling
- rainwater harvesting

Infrastructure

- no major investment is needed in new infrastructure
- electricity infrastructure is already in place on site (no need for a new supply)
- water supply is readily available, with some upgrading of local pipework
- access roads are satisfactory
- rail services are available locally
- shuttle vehicles will be provided on site and for station links/coastal trips/journeys to Dorchester/Weymouth

6.2 The Indicative Masterplan

The indicative Masterplan for Silverlake opposite shows how the arc of nature conservation and landscape interest in the south has been retained, with all lodges set over 400m from the Special Protection Area (the dashed line on the plan). Most are over 500m from the SPA.

Knighton Heath Wood is retained for its landscape and archaeology interest, buffered from new development, with footpaths and bridleways through the woodland.

A large area in the north of the site, the Biodiverse Heart extending to 31 hectares (78 acres), is proposed for nature conservation and recreation, including over 11 hectares (27 acres) of publicly accessible SANG with public parking using the existing northern quarry access for Crossways residents and other visitors.

The holiday lodges are proposed in two main areas; in the north west of the site and in the central area, south of Knighton Heath Wood and the Biodiverse Heart, set around a system of interconnected lakes and water bodies.

The 'Eastern Gateway' area with its access from Warmwell Road will accommodate a country club, sales office and hotel.

The three existing accesses to the quarry are shown as site entrances for the Silverlake development on the Masterplan.

The site has been divided into several Character Areas, as explained on the next pages.





6.3 Character areas

The comprehensive site analysis has brought together a wealth of ecology and habitat survey information, landscape assessment and other environmental and technical input, to identify a number of distinctive areas within this large site with particular environmental characteristics. The design approach has sought to carefully synthesise Habitat First Group's philosophy for creating a sustainable vacation community with these identified site characteristics. As a result, this has generated several distinctive character areas, with a different design response to each of them.

The character areas are:

- 1. Islands
- **2.** Terraces
- **3.** Eastern Gateway
- **4.** Biodiverse Heart
- **5.** Beaches
- **6.** Lakeside
- **7.** Mayers Pond Woodland
- **8.** Southern Lakes
- **9.** Knighton Heath Woodland

In areas with existing nature conservation and habitat value, there will be no built development, but increased habitat creation and management with an appropriately managed level of access for people, controlled seasonally where appropriate to respect nesting birds and other nature conservation principles. These include the Southern Lakes, Knighton Heath Wood and the new Biodiverse Heart.

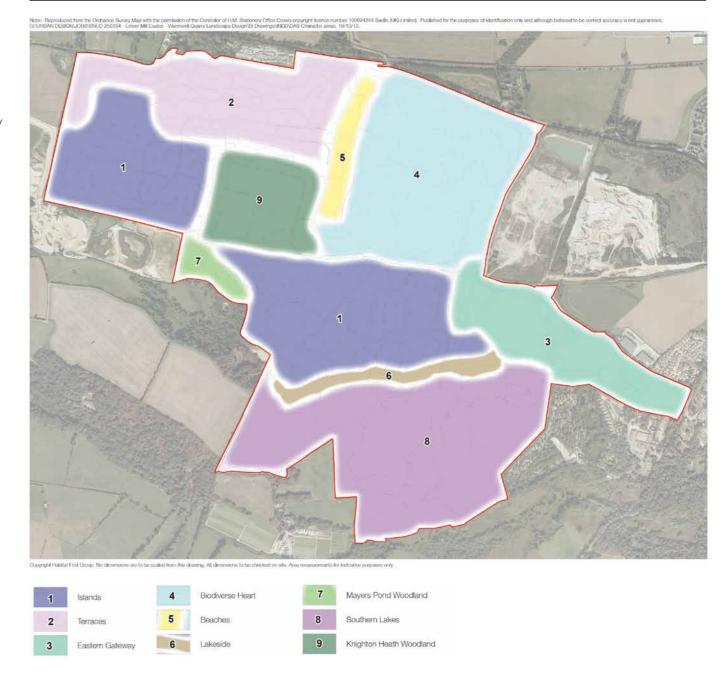
Other parts of the site will be for wider public or managed access. Built holiday accommodation is confined to those parts of the site where appropriate environmental capacity has been identified.

Within each of the character areas, accommodating lodges and chalets the concept has been to develop small groups of around 30 units, each focussed around a communal green area, with scope for open space or a range of facilities to be created for joint use by surrounding and nearby chalet and lodge users. Facilities will range from a village green, to tennis courts, bowling green, an outdoor pool or community allotments.

In some areas, specially designed holiday units are proposed in response to sensitive locations; elsewhere a wider range of designs are considered appropriate, but all designs will respond to the locational characteristics and opportunities. Design parameters have been defined in terms of height and foot print to enable the planning authority to assess and define the scale of the built development.

The design approaches for each of the character areas, derived from site appraisal and assessment, are explained in the following pages.

Character area locations



Character Area 1: Islands

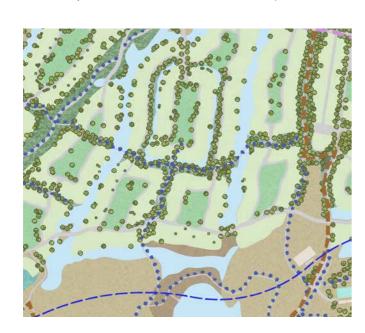
Location and Access

The island communities are the most common of the built character areas at Silverlake. The character is created by a series of new 'islands' separated by water bodies and linked by bridges. A proposed footpath and bridleway network will provide public access across some of the islands.

Architecture and Landscape

The island communities are set amongst meandering waterways and corridors of nature which run throughout the Silverlake development. The buildings will be placed comfortably within a semi-wooded setting. A high proportion will have a waterfront location.

Within the centre of each island, a narrow shared vehicular/ pedestrian route will provide access to each chalet, as well as access to a central communal space, similar to a 'village green', or community areas, where groups of around 30 chalet users will choose their community approach (a green, community allotments, tennis court, bowls etc.).



The spaces will have the capacity to accommodate a storage barn for the use of surrounding chalets as well as their choice of community facility. Communities will share each island's bespoke facilities.

Holiday units will be of high quality design. Materials used will reflect the Dorset vernacular, whereas form will respond to the layout of the islands, with their central communal green spaces and the private space on the outer edge.

Biodiversity

At the water's edge, this character area provides opportunities for a wide range of aquatic and marginal planting, to include:

- deep and shallow aquatic planting in open water
- emergent, lower bank and mid-upper bank marginal vegetation

The open spaces and boundaries of holiday properties can also be rich wildlife habitats, including:

- flower-rich amenity grassland
- species-rich native shrub and hedgerows
- native trees

Greenways through the larger islands will have tree and shrub planting each side of the paths providing a series of wildlife corridors.

Height	2 - 3 storeys - Max 12m height
Form	Detached / small groups
Uses	Holiday Accommodation / storage barns
Amount	Individual Footprint 100 sq m max















Character Area 2: Terraces

Architecture and Landscape

The terraces in the deep quarried areas in the north-west of the site will marry in with the existing ground levels at the upper-most levels, stepping down towards the lower water levels. The hillside character is linked with that of the proposed landform, making it distinct from other character areas.

The chalets and lodges will be of highly efficient design, whilst retaining key elements of the 'Dorset Vernacular'.

Biodiversity

At the water's edge, this character area provides opportunities for a wide range of aquatic and marginal planting, creating a naturalistic riparian buffer between the holiday units and the waterbodies.

These will include:

- deep and shallow aquatic planting in open water
- emergent, lower bank and mid-upper bank marginal vegetation
- flower-rich amenity grassland
- species-rich native shrub and hedgerows
- native trees

The open spaces also provide areas for offline ponds. These will be significantly smaller than the main water bodies and will attract a different range of species to those in the larger ponds. The ponds will be varied in shape and depth, providing a maximum range of habitats.









Height	2-3 Storeys - Max 11m height
Form	Detached / small groups
Uses	Holiday accommodation / storage barns
Amount	Individual Footprint 100 sq m max







Character Area 3: Eastern Gateway

The Eastern Gateway and the access from Warmwell Road will be the first part of the site that most visitors will see. Crossways and the local community will have membership access to the Country Club. Pedestrian/cycle routes will be provided, including a trim trail and access to existing ponds. During the bird-breeding season access to the western area of heath will be restricted.

Country Club, Hotel and Sales Centre

The Country Club will include tennis courts, indoor and outdoor pools, indoor tennis and squash, a spa, a children's club, a restaurant and brasseries. Architecturally, it will be an expansion of the woods with a forest of "trunks" of Purbeck stone and timber supporting its canopy.

The layout is conceived as small villages, with courtyards and communal open spaces. The design of this area will link man-made and nature, inside and outside, public and private. A series of distinct nature areas, inspired by the English garden and landscapes, including orchards, wildflower meadows, woodland flowers, coppice, heathland, woodland, lawns, herb gardens and green roofs.

The Silverlake Sales Centre has 30 parking spaces. It will provide a high quality, functional sales office that reflects and complements the natural landscape, demonstrating the Silverlake ethos, design approach and principles.

Parameter

Height	3 storey max up to 15m
Form	Group of linked individual buildings
Uses	Country club, Hotel, Sales centre
Amount	Individual footprints max 300 sq m (indoor pool)

Landscape

This area will accommodate a hotel, country club and sales office and will have no holiday chalets. The country club facilities will be set within heath, scrub and woodland. The hotel will be a small 30 bed facility, offering the opportunity to try out the Silverlake holiday lifestyle and facilities.

Biodiversity

The existing heath in this area will be managed to strengthen its heathland characteristics. An existing dormouse corridor runs along the vegetation adjacent to the main access road. A continuous hedgerow and tree canopy is conserved to preserve dormouse access, including a bespoke 'dormouse bridge'. Buildings will have green/living roofs, a habitat-rich ecology-led construction method, to mitigate the impact of the buildings on the site.

The site access, sales area and car park are proposed for full approval (see section 7), to enable work to commence in early 2014.















Conceived as "villages", groups of individual linked buildings with courtyards and communal spaces



Character Area 4: Biodiverse Heart

The Biodiverse Heart restores a large part of the quarried area (31 hectares / 78 acres) and includes three lakes. The focus is on nature conservation and recreation, with:

- a new bridleway along its eastern edge and a new footpath along its northern edge
- a visitors' pedestrian/cycle/horse route along the northern edge of the lakes
- access to the beach for holiday visitors
- seasonal access for visitors to two of the southern islands, via boat only
- a footpath and public walking / dog exercising area of 11 hectares (27 acres) in the north-eastern part, and continuing around the north, east and south of the lakes with public car parking
- canoe and kayak area in the southern lakes

Landscape

There are no chalets within this area, which will consist of entirely restored gravel pit, enabling a series of lakes and islands to maximise opportunities for colonisation by a wide range of plants and animals. Vegetation will be selected to provide a maximum range of habitats appropriate to the locality.

Parameter

Height	Single storey 6m max
Form	Small low buildings, natural materials (timber and stone)
Uses	Bird hides, cycle sheds, canoe storage
Amount	Individual Footprint 30m sq m max

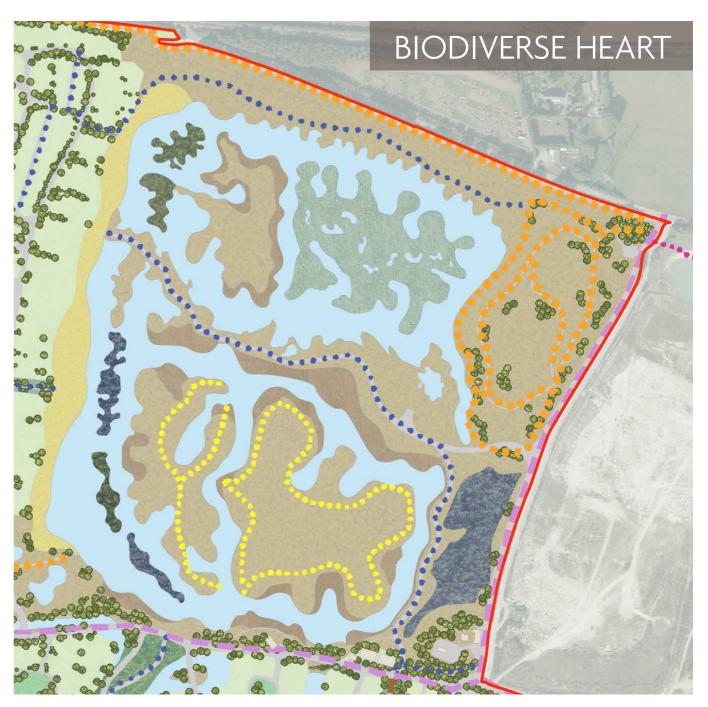
The design of the islands will enable some areas to remain inaccessible to visitors, whilst others may provide interesting destinations for occasional canoe users. A canoe and kayak hire facility will be provided.

Habitats will include:

- Alder Carr
- Acid grassland
- Ephemeral short perennial vegetation
- Heathland with pine copses
- Reedbeds and riparian habitats
- Flower-rich neutral grassland
- Sand Martin cliffs

Wooded islands will provide habitat for common woodland birds, potential for breeding Herons, and a myriad of insects and other invertebrates. Target species will include Willow Tit, Cetti's Warbler and Woodcock. Periodic flooding will help vegetation management in this area.





Character Area 5: Beaches

The Beaches Character Area will consist of a stretch of sandy beach, overlooking the Biodiverse Heart series of new lakes and islands that will provide high quality wildlife habitats for a wide range of flora and fauna.

Architecture and Landscape

Chalets and Lodges will be located within a semi-wooded setting behind the beaches. The Beaches area will contain a variety of individually designed, exceptionally high quality buildings. Local building materials including Purbeck and Portland stone, timber and colour-washed render, will be used in energy efficient contemporary designs.

Recreation

The beach area provides an excellent opportunity for informal, restful recreation, including sun-bathing and wildlife watching.

Whilst the lakes by the beach form a series of important ecological habitats, they also provide restricted access for the 'Canoe Safari'. Canoes will be available for hiring on the eastern side of the Biodiverse Heart, with users able to paddle through the variety of creeks and islands within the lakes off the southern and central parts of the beach.



Height	2 - 3 storeys max - 12m max
Form	Detached
Uses	Holiday accommodation / storage barns
Amount	Individual Footprint max 100 sq m











Character Area 6: Lakeside

Location and Access

The Lakeside Character Area covers a series of small frontages to the lakes along the southern edge of the proposed development area. The lakefront areas are set on the edge of the Island character areas and so will also enjoy all the social aspects of the communal green spaces provided on the islands.

Architecture, Landscape and Recreation

This area will provide the opportunity for creating some of the more bespoke holiday lodges in Silverlake. Plots will be relatively large, and properties will be set within spacious areas of landscape that will allow views out across the lakes to the south of the site. In comparison to the Beach character area, these properties will have closer access to the water, with their curtilages directly fronting the lakes rather than being set back behind a beach.

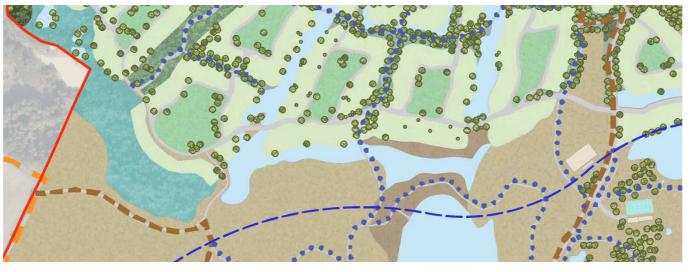
The lakes are prioritised for wildlife conservation, with managed or seasonal recreational access.

Biodiversity

This character area benefits from extensive areas of waters edge, providing opportunities for a wide range of aquatic and marginal planting and creating a naturalistic riparian buffer between the housing and margins of the waterbodies. These will include:

- deep and shallow aquatic planting in open water
- emergent, lower bank and mid-upper bank marginal vegetation

Height	2.5 storeys 12m max
Form	Detached, low density
Uses	Holiday lodges, storage barns
Amount	Individual Footprint 100m sq m max













Character Area 7: Mayers Pond Woodland

The Mayers Pond Wood Character Area consists of an area of scrub and woodland on the south-western edge of the site, close to Knighton Heath Wood.

Architecture and Landscape

A small number of very low density lodges are proposed within a secluded retreat. These will offer a connection to nature on a higher level than any other of the character areas, sensitively designed, conserving the wooded character of the area. No vehicular access to this area; holiday users will park near by and access on foot or using electric "buggies".

The natural habitat itself will remain virtually unchanged, with chalets set within the tree canopies and incorporating roof terraces, made of timber to harmonise with the surrounding woodland, blending in with nature.

Recreation

Access to Mayers Pond Wood will be limited, to conserve its wildlife conservation value.

Biodiversity

This area of secondary woodland supports great crested newts and dormice and the proposals provide an excellent opportunity to manage the area more pro-actively for these and other species.

This would include:

- the creation of woodland glades, especially around the currently heavily shaded ponds
- rotational coppicing to enhance conditions for dormice, woodland flowers and various other woodland species
- additional woodland planting to connect the tree canopy between the wood and Knighton Heath

Height	2-3 storeys 14m max
Form	Detached clusters, timber / stone
Uses	Holiday accommodation / storage barns
Amount	Individual Footprint 100 sq m max











Character Area 8: Southern Lakes

The Southern Lakes include a number of areas that are locally, nationally or internationally designated for their ecological importance.

- Dorset Heathlands Special Protection Area (SPA)
- Dorset Heaths Special Area for Conservation (SAC)
- Warmwell Heath Site of Special Scientific Interest
- Outer Heath and Empool Bottom Sites of Nature Conservation Importance (SNCI)

The area has an existing public bridleway. The scheme will create carefully managed access for the new holiday community, including: pedestrian/cycle routes; new horse routes to link the bridleway with proposed riding stables; canoe/kayak access to a new lake in the south-western area; continued access to a fishing lake; a 'coracle safari' through narrow water bodies; viewing platforms and hides can be hidden in scrub and reeds adjacent to lakes.

Landscape

There are no chalets or lodges proposed within this area. Other development will include only a leisure facility, a small block of stables within the centre of the area, a refreshments "shack" and occasional wildlife watching hides. A picnic area is also proposed, close to the riding stables. The Dorchester and District Angling Club lake will be retained, other lakes will be created or restored for their amenity and/or wildlife value.

The area will include a diverse mosaic of open and enclosed habitats. It will also provide opportunities for secluded and peaceful, sedentary recreational activities, such as wildlife watching or sketching/painting.

Biodiversity

Habitats will include:

- Marsh
- Willow Carr
- Acid grassland
- Heathland
- Willow short-rotation coppice
- Reedbeds and riparian habitats

This area can accommodate a series of bird hides, some on stilts overlooking the adjacent lakes. Extensive reedbeds around the margins of the lakes will attract various waterfowl and wetland passerines. These areas would include shallows less than 1m deep, encouraging plant colonisation and fish, invertebrate and bird life.

Height	Up to 1.5 storeys / 6 m max
Form	Detached timber buildings / green roofs / reed thatch
Uses	Leisure facility bird hides, stables, drinks "shack" / rest point
Amount	Individual Footprint 20 sq m max



