

NW Bicester Exemplar

Local Centre

Landscape and Green Infrastructure Strategy

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Project Team

Client

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1. Introduction

Introduction

This Landscape and Green Infrastructure Strategy document has been prepared on behalf of the applicants A2Dominion Developments Ltd, to support the full planning application for the development of the North West Bicester Exemplar Local centre.

This statement has been produced to assist the Cherwell District Council in their determination of the application and to provide others who are interested in the application with background information regarding the site and the proposal.

This Landscape and Green Infrastructure Strategy should be read in conjunction with the Local Centre Landscape Masterplan and Planting Plan and the Design and Access Statement and associated drawings.

In July 2012, Cherwell District Council (CDC) granted planning permission (Ref 10/01780/HYBRID) for the development of 21 ha of land within the North West Bicester Masterplan Area, the 'Exemplar Phase'. The permission for this hybrid application included detailed consent for 393 residential homes, roads and infrastructure including an Energy Centre. It also granted outline permission for a neighbourhood centre comprising non-residential use including community facilities, local retail, a pub and office space and a new primary school.

This application for the Exemplar Local Centre forms a subsequent application to the original Exemplar Phase application as referenced above; relative to the local centre located adjacent to the first part of the development which is currently under construction.

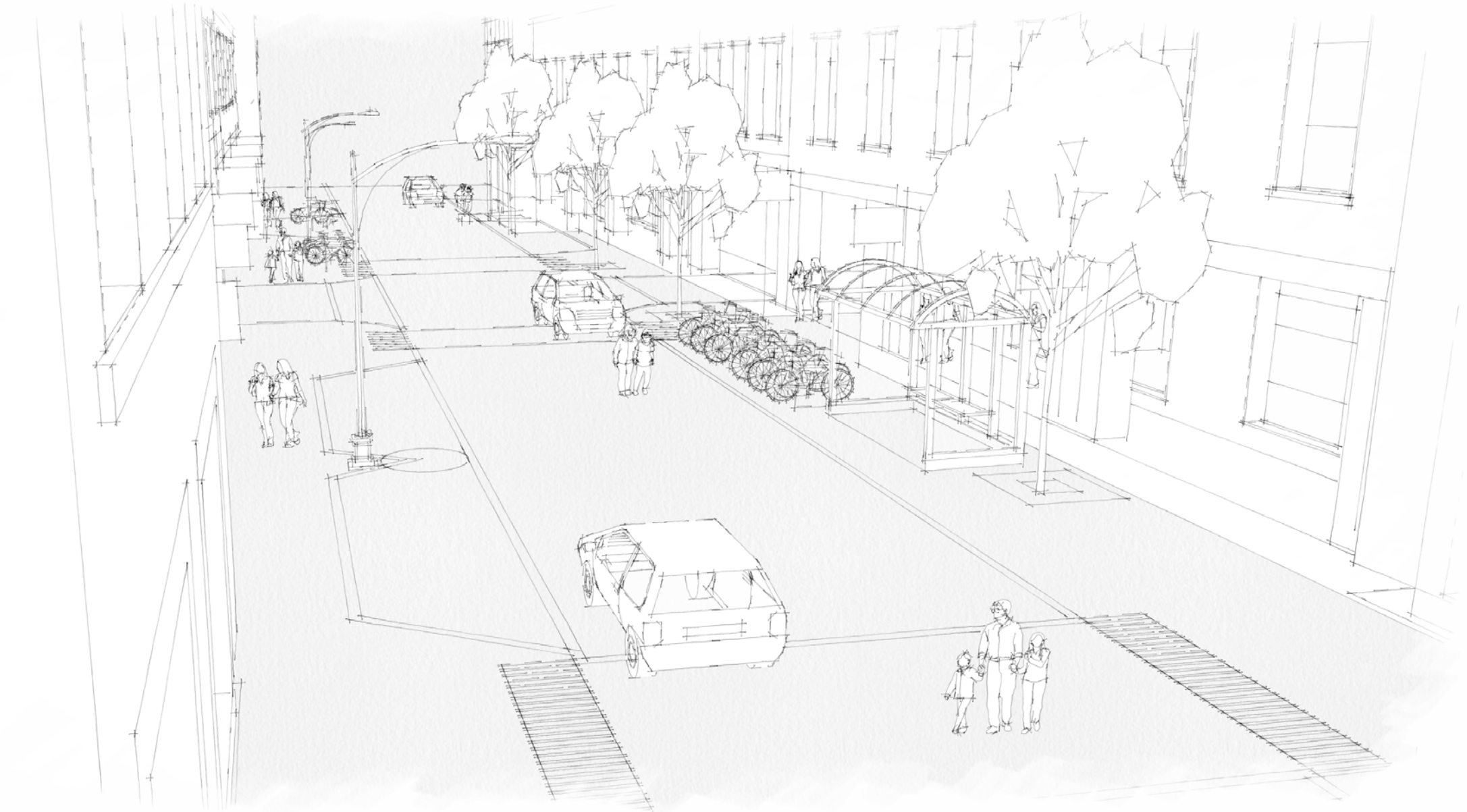
The Development description is as follows:

Development of a new local centre comprising a 503 sqm convenience store (Use Class A1), 444 sqm of retail units (flexible Use Class A1/ A3/A5), 664 sqm pub (Use Class A4), 523 sqm community hall (Use Class D1), 869 sqm nursery (Use Class D1), 614sqm of commercial units (flexible Use Class A2/ B1/ D1) with associated access, servicing, landscaping and parking.

The landscape proposals comprise a shared surface street, parking courts/service yard, perimeter planting/hedgerow buffer and green roofs.

Context

The site of the local centre is central within the North West Bicester Exemplar development. The application site is adjacent to a river corridor that will be enhanced for ecology, recreation and pedestrian/cycle routes, and is bounded by an existing hedgerow on its southern edge. The residential area surrounding the site is currently under construction.



Visualisation of street proposals, looking west

2. Landscape Strategy

Landscape Strategy

The landscape scheme comprises a shared surface street, parking courts/service yard, perimeter planting/hedgerow buffer and green roofs.

Shared surface street

A shared surface environment will be created that provides a high quality, distinctive street that is welcoming to pedestrians, cyclists and motorists.

Natural stone will provide a high quality aesthetic and will be extended across the full width of the street. The carriageway will be delineated through the use of a smaller size paviour and a 50mm upstand kerb in coordinating material. The upstand kerb is designed to assist with navigation for visually impaired users. Flush formal crossing points with tactile paving in coordinating material are provided at strategic locations.

Carefully chosen cycle parking, seating and lighting complete the street scene.

Parking Courts/Service Yard

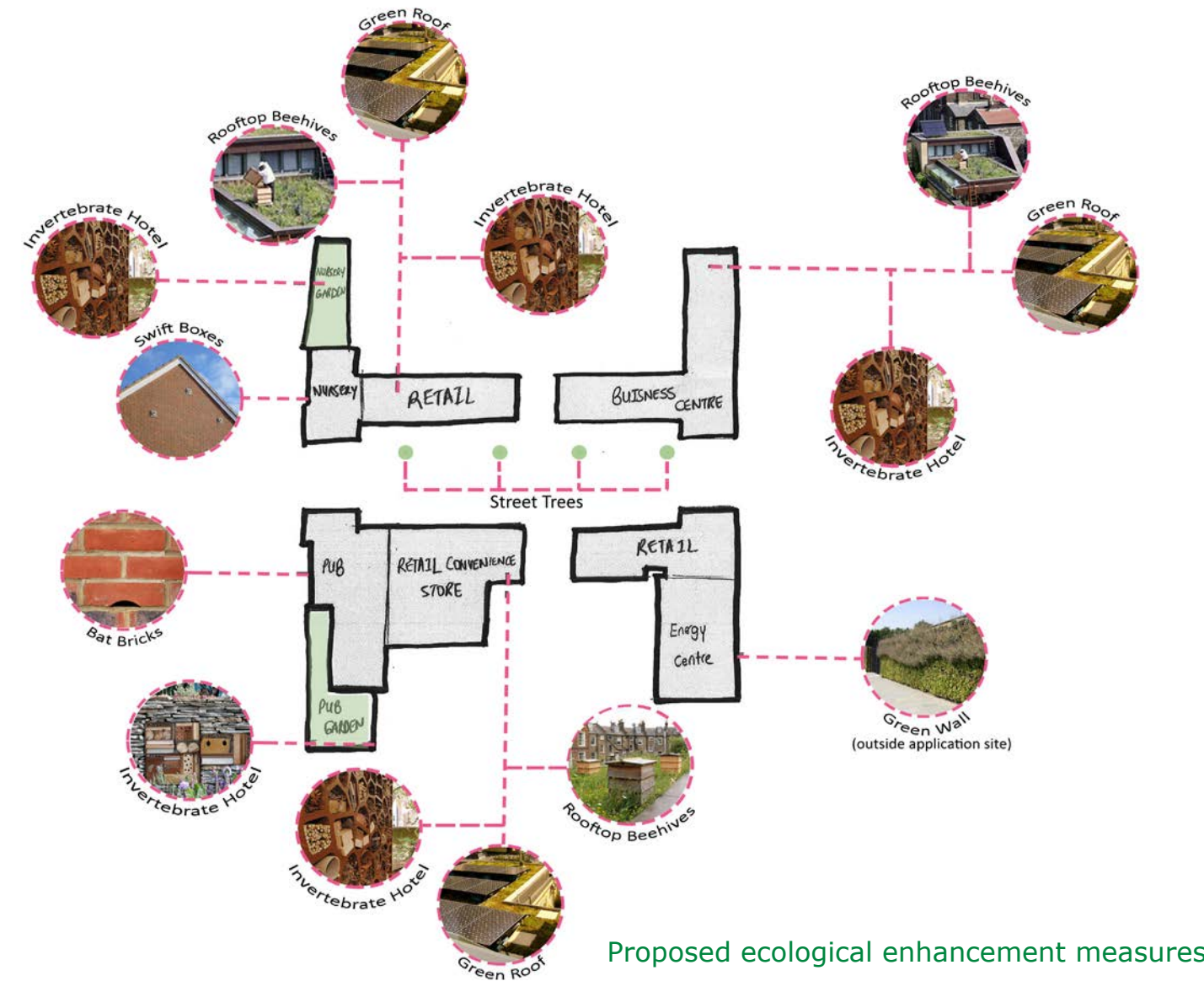
Parking courts are designed to be easily navigated, with paving colour defining car parking bays, pedestrian routes and cycle parking zones. Cycle parking for staff will be provided within secure enclosures, with Sheffield stands in the open, provided for visitors use.

Perimeter Planting/Hedgerow Buffer

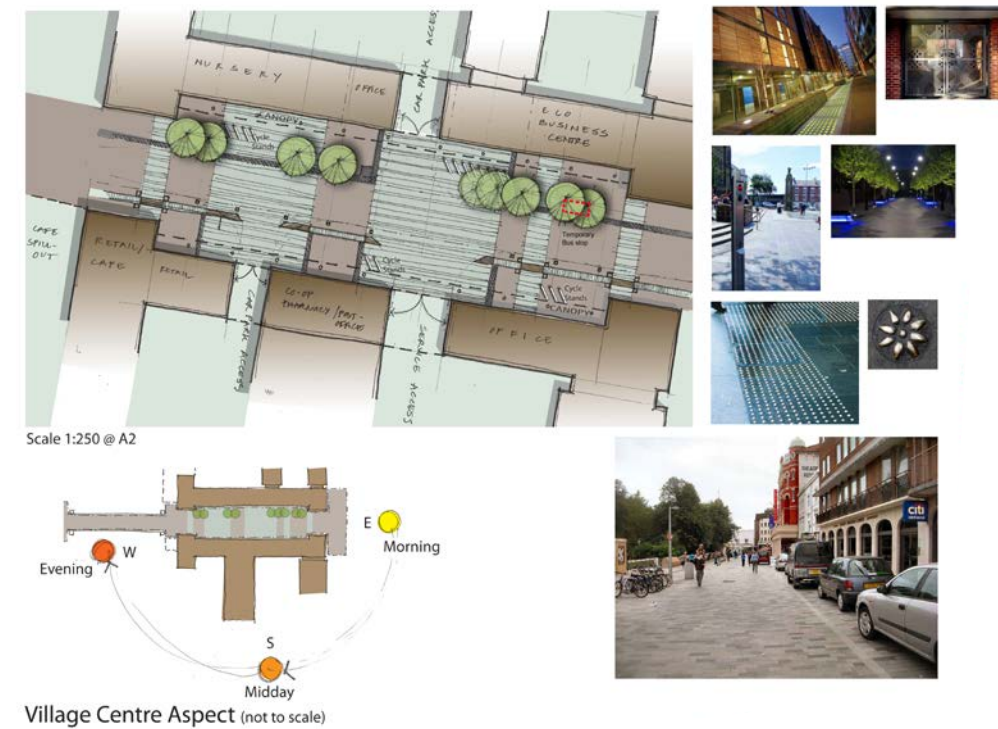
An existing hedgerow (to the south of the application site) is to be protected by buffer planting that comprises native trees, wildflowers and grasses. See section 6 of this report for further detail.

Green Roofs

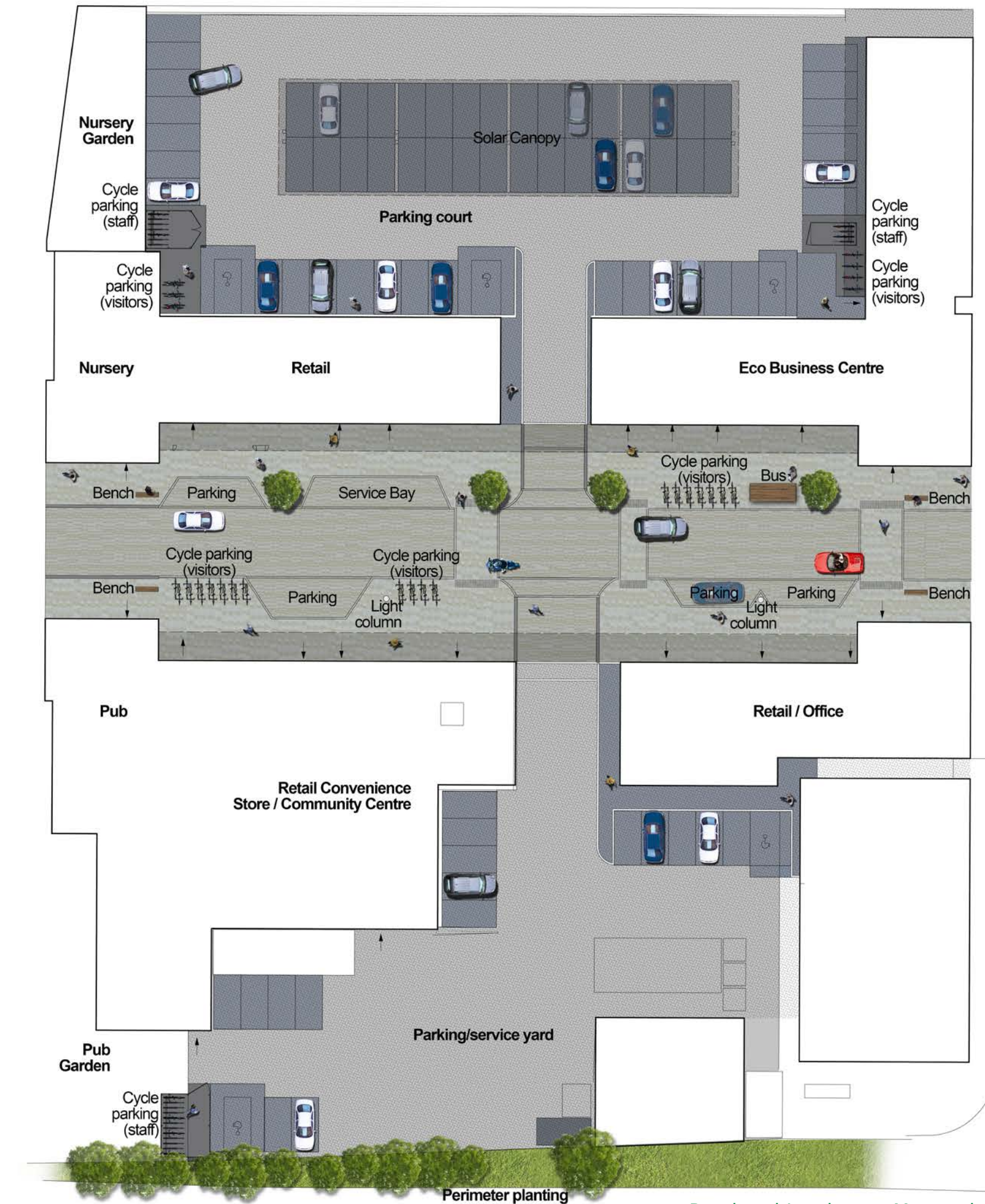
Sedum green roofs will be provided, interspersed with roof top photo voltaic panels. A number of other features are proposed on the rooftops in order to enhance biodiversity such as bee hives and invertebrate hotels. See section 4 of this report for further detail.



Proposed ecological enhancement measures



Local Centre - design development



Rendered Landscape Masterplan

3. Precedents

Examples of UK shared surface streets have been considered in the creation of the scheme. The streets pictured on this page demonstrate careful use of materials and level changes used in creating this type of environment.

Fishergate, Preston



New Road, Brighton



Poynton



4. Biodiversity

The land affected by the Local Centre comprised bare mud covered by cabins, storage areas and access routes associated with ongoing works on the Exemplar Phase. This land was of negligible value to nature conservation. Whilst works on the Exemplar Phase are on-going fencing will be in place to ensure that the species-rich hedgerow and its associated buffer adjacent to the southern boundary of the Local Centre site is protected from works on site. Similar fencing would be in place whilst the Local Centre is constructed to ensure that the hedgerow and its buffer remain protected. Measures have been implemented as part of the Construction Environmental Management Plan for the Exemplar Phase to protect the wider environment including the adjacent river corridor during the construction works. These measures would also be implemented when the Local Centre is under construction.

Features have been incorporated into the design of the Local Centre to deliver a net gain in biodiversity. This includes:

- green- Sedum (stonecrop) roofs;
- 'invertebrate hotels' on the roofs;
- 'invertebrate hotels' incorporated into walls;
- bat boxes/bat brick incorporated into walls; and
- swift boxes and other nesting bird features incorporated into the nursery wall.

The green roofs together with their 'invertebrate hotels' will be beneficial to invertebrates and the fauna that feed on them (principally other invertebrates, birds and bats). The invertebrates themselves provide wider ecosystem benefits for example pollination and the recycling of nutrients. The bat boxes/bricks will provide new roosting sites for bats using the adjacent river corridor. The swift boxes and other nesting bird features provide nesting opportunities on a site where no natural nest sites exist.

By incorporating features of value to biodiversity within the design of the Local Centre this aspect of the Exemplar Phase will deliver a net gain in biodiversity.



Bat brick, precedent image



Roof top bee hive, precedent image



Invertebrate hotel, precedent image



Roof top bee hives, precedent image



Sedum roof, precedent image



Swift boxes, precedent image

5. Materials & Street Furniture

Materials

Materials have been selected to complement the wider NW Bicester Exemplar palette and adjacent building materials. They will provide a high quality aesthetic that offers a distinctive look to the Local Centre street and subtle delineation that will assist with the creation of a shared surface space that is welcoming to all.

Within the north parking court a permeable paving system with variety in colour and materials will enhance legibility. Matching, impermeable paving will be provided in the south parking court/service yard.

Street Furniture

A palette of street furniture has been selected that complements the materials and will provide a practical solution to cycle parking.



Scoutmoor Linear Yorkstone - primary road shared surface



Permeable/impermeable paving system, Charcoal - Car parking

Permeable/impermeable paving system, Grey - Parking courts

Tumbled concrete setts Cycle parking bays



Proposed building elevation



Bus Shelter



Sheffield Cycle Stand - Stainless steel



Tiered secure cycle compound



Bench

6. Planting

Street Trees

The street trees specified are *Carpinus betulus* 'Franz Fontaine'. They match trees specified on the primary road that fall outside this application (but are within the NW Bicester Exemplar) - ensuring continuity. They have a small predicted canopy size of 3m diameter, appropriate to this space.

Hedgerow Buffer/Perimeter Planting

To the south of the site, native trees and grasses are proposed adjacent to an existing hedgerow (hedgerow is outside of this Application but within the NW Bicester Exemplar). They form part of the buffer zone to this hedgerow.

Tree species include:

Alnus glutinosa (Common Alder)
Prunus avium (Wild Cherry)
Fagus sylvatica (Common Beech)
Acer campestre (Field Maple)

A meadow mixture for chalk and limestone soils is specified as follows:

Wildflowers

Achillea millefolium Yarrow
Anthyllis vulneraria Kidney Vetch
Centaurea nigra Common Knapweed
Centaurea scabiosa Greater Knapweed
Clinopodium vulgare Wild Basil
Daucus carota Wild Carrot
Galium verum Lady's Bedstraw
Knautia arvensis Field Scabious
Leontodon hispidus Rough Hawkbit
Leucanthemum vulgare Oxeye Daisy
Lotus corniculatus Birdsfoot Trefoil
Onobrychis viciifolia Sainfoin
Origanum vulgare Wild Marjoram
Plantago media Hoary Plantain

Poterium sanguisorba - (Sanguisorba minor) Salad Burnet
Primula veris Cowslip
Ranunculus acris Meadow Buttercup
Reseda lutea Wild Mignonette
Scabiosa columbaria Small Scabious

Grasses

Briza media Quaking Grass (w)
Cynosurus cristatus Crested Dogstail
Festuca ovina Sheep's Fescue
Festuca rubra Slender-creeping Red-fescue
Koeleria macrantha Crested Hair-grass (w)

Green Roofs

The buildings are topped by sedum green roofs. The sedum is planted in between rows of solar panels. An indicative species list (the Bauder XF301 Sedum Blanket) is as follows:

Sedum acre
Sedum album - 'bella d' Inverno
Sedum album - coral carpet
Sedum ewersie
Sedum Kamtschaticum-ellacombianum
Sedum Kamtschaticum-weinstephaner gold
Sedum montanum orientale
Sedum pulchellum
Sedum rupestri (reflexum)
Sedum sexangulare
Sedum spurium - mesemlanthemum =
Delosferma
Sedum spurium - mesemlanthemum =
hallii
Sedum verticillatam



Carpinus betulus 'Franz Fontaine' (Street trees)



Sedum green roof



Native tree planting and grasses within hedgerow buffer/perimeter planting

