

5.0 ACCESS

5.1 ACCESS AND MOVEMENT PRINCIPLES

5.1.1 Policy Bicester 1 of the Cherwell Local Plan (Part 1) (2015; re-adopted in 2016) sets out the following development requirements for North West Bicester:

- Prioritisation of non-car modes to encourage a modal shift from car use to other forms of travel.
- Pedestrian and cycle routes that enable integration and connectivity between new and existing communities, including the town centre.

5.1.2 Development Principle 6 of the North West Bicester SPD (2016) requires development to have a network of well-designed, connected spaces and routes that prioritise the movement of pedestrians, cyclists and public transport. Development proposals must integrate fully with existing communities in Bicester by improving/removing barriers to movement both on and off-site.

5.1.3 Development Principle 9 requires proposals to create a network of interconnected green cycle and walking routes with direct links between green areas and key destinations.

5.1.4 The draft Cherwell Design Guide SPD (2017) requires new development to promote a movement network and street design which encourages walking and cycling over vehicle movements and connect into the existing network of streets and footpaths.

5.1.5 The Oxfordshire Residential Road Design Guide (2003; amended in 2015) priorities pedestrians over vehicular movement to encourage more sustainable travel.

5.1.6 The Design Guide promotes developments that are accessible, legible and convenient to all users, including the mobility impaired. Developments should be designed to emphasise a sense of place and community, with movement networks to enhance these qualities, with links with adjacent areas to ensure permeability.

5.1.7 Oxfordshire's Cycling Design Standards: A guide for developers, planners and engineers (2017) encourages new development to:

- Establish a well connected street network which provides cycle users with the opportunity to make direct journeys with distance minimised; and
- Create cycle links through open, overlooked green corridors where a longer form of traffic free path is appropriate.

5.1.8 Oxfordshire's Walking Design Standards: A guide for developers, planners and engineers (2017) encourages new development to design streets with the needs of pedestrians as a priority.



- 5.1.9 The proposals will provide for an integrated network of routes and spaces allowing for use by pedestrians, cyclists and vehicles, with that order of priority. This movement network will incorporate pedestrian and cycle routes which connect into the surrounding North West Bicester area.
- 5.1.10 The Transport Assessment submitted in support of this planning application sets out in further detail the transport issues and demonstrates how these are being addressed in respect of sustainable development and transport objectives.
- 5.1.11 The traffic assessment, through its extensive evidence and survey base data, demonstrates that the application proposals will not have a significant impact on the local road network.
- 5.1.12 All properties within the development are served by the internal access arrangements of the site. It is proposed to provide one principal vehicular access to the site from Charlotte Avenue. A secondary vehicular access will be provided from the existing Home Farm access off Banbury Road to access the allotments and informal parking area.
- 5.1.13 The road layout will facilitate access to all parts of the site and turning movements as required. The illustrative Master Plan demonstrates how this could be achieved.
- 5.1.14 New walking and cycling routes within the proposal provide greater accessibility to open spaces and connectivity with the surrounding North West Bicester site.
- 5.1.15 In addition to these improvements to the pedestrian/cycle network, the site is accessible to local facilities and well served by means of bus service.
- 5.1.16 The scheme will be designed to be inclusive of disabled users and consideration has been given to the access to the proposed properties and the ease of use taking account of advice set out in "Planning Practice Guidance", "The Principles of Inclusive Design (Cabe 2006), and "Inclusive Mobility: A Guide to Best Practice" (2002).
- 5.1.17 The highway elements of the development will mainly be adopted and maintained by the Local Highway Authority.



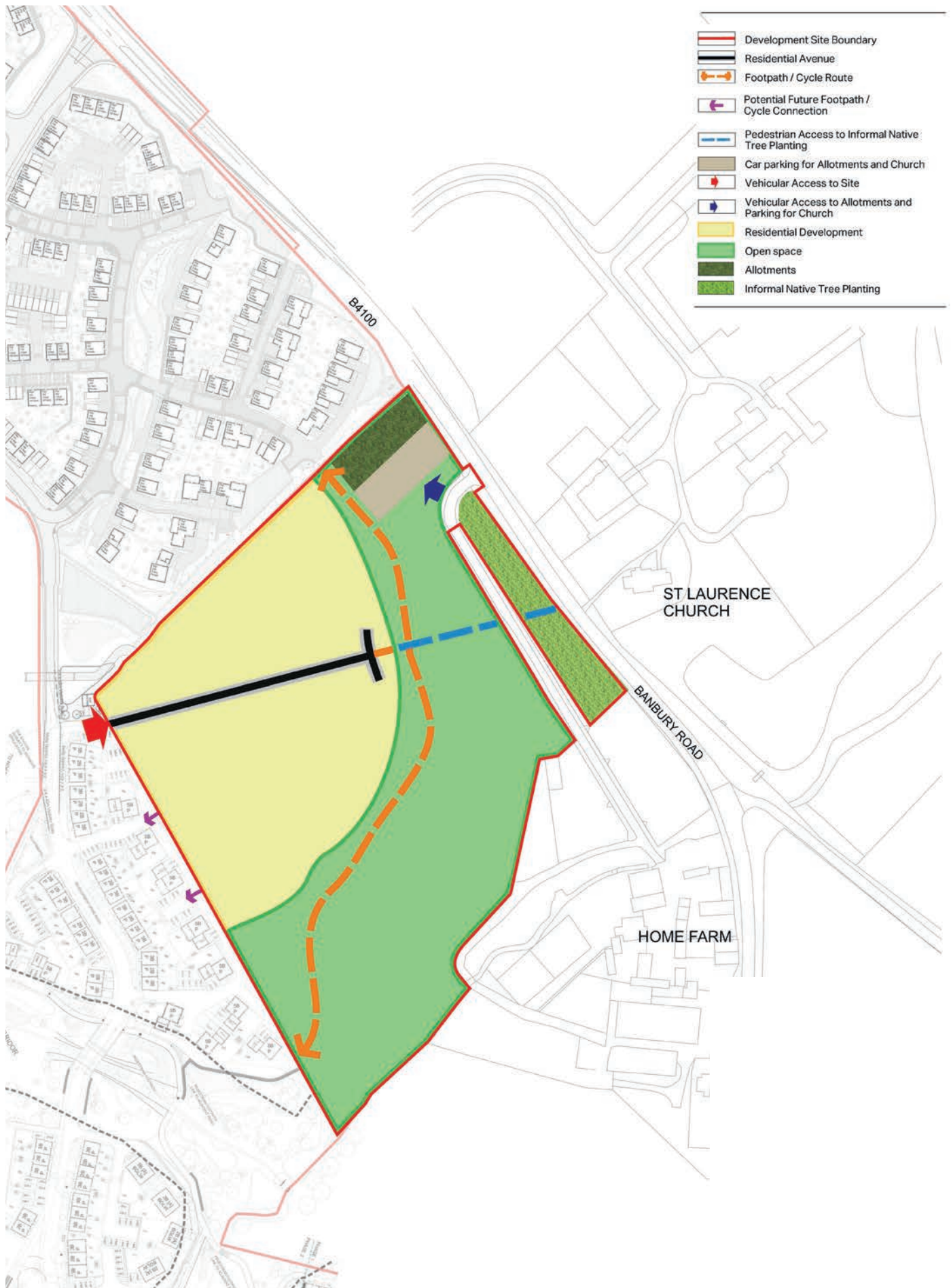


Fig 5.1 - Access and Movement Parameter Plan

5.2 CONNECTIONS WITH THE WIDER NORTH WEST BICESTER ECO-TOWN

5.2.1 The proposed development provides opportunities for this site and the wider North West Bicester area to be brought forward as a comprehensively planned sustainable eco-town.

5.2.2 In preparing this application careful consideration has been given to how the site facilitates physical and visual connections with the adjacent areas within the North West Bicester area (particularly the neighbouring exemplar site) for existing and future residents to access wider services and facilities.

5.2.3 The Access and Movement Parameter Plan set out within this DAS has been prepared within the context of enabling ease of access to the scheme and to the wider area. Connectivity and integration with the wider North West Bicester eco-town will be secured as follows:

- The proposed development will provide for access by all modes to be served to and from Charlotte Avenue.
- New public transport provision along Charlotte Avenue will be within a walkable distance (400 metres) of the site and all residential dwellings.
- The internal street network has been designed to enable pedestrian and cycle connections with the adjoining development.
- A combined footway/cycleway will be provided within the area of open space on-site to provide a leisure route which will connect with the pedestrian and cycle network within the adjacent development parcels of the exemplar site, to the north-west and to the south-west of the site.
- Potential future pedestrian and cycle connections with the wider North West Bicester area.

5.3 PARKING

Car parking

5.3.1 Oxfordshire's Residential Road Design Guide (2003; amended in 2015; Appendix 6) states that one allocated car parking space per dwelling will be acceptable at North West Bicester Ecotown. This may be on plot or off plot. Off plot provision may be grouped in a parking court provided the courts are small, close by, secure and conveniently accessed. Additional unallocated off plot car parking may also be provided up to a maximum of one space per dwelling.

5.3.2 Provision for car parking on site will be made in accordance with the standards and policy set out by Cherwell District Council and Oxfordshire County Council. Resident car parking will be provided on-plot in garages or on driveways. The following principles will govern parking provision:

- Parking to be provided as close to each property as possible, and is safe and easy to use;
- Parking is generally expected to be provided in a combination of on plot, off plot and on street spaces;
- Adopting a flexible approach to parking design and provision, focusing on optimum design and layout to meet the needs of residents, pedestrians and cyclists; and
- Reducing the visibility of the car in the streetscene through careful design, robust boundary treatments, and unobtrusive garaging and use of car ports.

5.3.3 Informal parking will also be provided in walking distance of the Church, for use by parishioners and users of the allotments. This proposal has been discussed with local stakeholders and improves the existing parking arrangements for this important local community facility.

Cycle parking

5.3.4 The Cherwell Design Guide SPD (2017) sets out the following cycle parking standards:
Cycle parking requirement

	Cycle Parking Requirement
Resident	1 bed – 1 space 2+ beds – 2 spaces
Visitor	1 stand per 2 units, where more than 4 units

5.3.5 Provision for cycle parking as part of the development will also be made in accordance with Council policy to encourage use of sustainable modes of transport. This can be secured by planning condition.



6.0 SUSTAINABILITY

SUSTAINABILITY APPROACH

6.1.1 Sustainability is a key design aspiration in terms of the physical, economic and social dimensions of the illustrative master plan. The layout of the development, the mix of uses that are proposed, the incorporation of sustainable drainage systems and the enhancement of important natural Site features all form a key part of the master plan design. A connected network of streets, footpaths and cycleways will support sustainable patterns of movement. Provision of local education and community facilities as part of the adjacent wider North West Bicester masterplan will also reduce the need for residents to travel, particularly by car.

6.1.2 The North West Bicester SPD (2016) requires new development at North West Bicester to meet the following development requirements in relation to sustainability:

- Development Requirement 2 – To achieve zero carbon emissions; and
- Development Requirement 3 – To provide additional sustainability, economic or wellbeing benefits (e.g. rainwater harvesting using drainage techniques that increase biodiversity).

6.1.3 The development has been designed to accord with the sustainability and energy efficiency aspirations of the Council where deliverable. It is intended that specific building design features should be incorporated to reduce energy demand. These will include both passive measures such as providing passive shading and large south-facing windows, as well as active design measures such as highly efficient boilers, zonal heating controls or high efficiency lighting.

6.1.4 Further information is provided in the Sustainability Statement enclosed as part of this application.



7.0 DESIGN GUIDELINES

APPLICATION OF DESIGN GUIDELINES

- 7.1.1 The design guidelines build upon the broad principles set out in earlier parts of this Statement. These guidelines have been influenced by both an analysis of the site and also the wider application of the development principles for the North West Bicester eco-town on adjacent sites.
- 7.1.2 The purpose of design guidelines is to set out clear guidance to designers and developers and to provide a framework within which the District Council will assess Reserved Matters Applications, which will be required to be broadly in accordance with the design guidelines in this Statement.
- 7.1.3 The application of design guidelines on this site will help ensure the town grows and develops cohesively in terms of design quality, sustainability and community.
- 7.1.4 The guidelines focus on securing the basic relationships between buildings and public realm that is necessary to deliver context specific design, provided by the landscape, its history, its relationship with the areas beyond the site and the features that lie within.
- 7.1.5 The guidelines provide precedents for appropriate materials and a colour palette, although does not require a particular architectural style on the basis that this will be addressed by the detailed design and planning processes.
- 7.1.6 Sustainability is a key design and development aspiration in terms of the physical, economic and social dimensions of the development at this site. The layout of this residential development, the incorporation of sustainable drainage systems and the protection of the setting of local heritage assets adjacent to the site all form a key part of the design of the development. A connected network of streets, footpaths and cycleways running through the site will support sustainable patterns of movement. Building in sustainability is an integral part of the development proposals.
- 7.1.7 Guidelines are provided on the following key facets of the development at this site:
- Streets
 - Land Uses
 - Open Space
 - Urban Design
 - Blocks
 - Building Heights
 - Car Parking
 - Boundary Treatment
 - Colour and Material Strategy

STREETS

7.1.8 The disposition of movement routes is based on providing an efficient and integrated movement solution for people travelling by foot, cycle and car, with convenient access to public transport. The street hierarchy sets out the structure of routes of the proposed development and consists of the following types of streets:

- Residential Avenue: a tree-lined street provides the principal movement route through the development.
- Low key access street: these will be designed to accommodate vehicles, pedestrians and cyclists within a shared surface, and will vary in width dependent on location.
- Private drives: in certain locations residential dwellings will have private drives for parking on plot. Private drives will typically be provided in periphery locations with dwellings arranged informally.

7.1.9 The main vehicular access route will be provided via Charlotte Avenue. A new 'leisure' route for pedestrians and cyclists within an attractive landscape setting will be provided in the form of a joint cycleway/footway of at least 4 metres in width, connecting with the adjoining areas of the eco-town.

7.1.10 The street hierarchy is illustrated on Figure 7.1.



Tree-lined Avenue

Building Typologies

Varying building heights of 2½ to 3 storey dwellings both sides of the road to give a sense of enclosure and framing the vista to the church. Dwellings are to be in terraced form to provide a continuous street frontage with a consistent building line.

Set-backs

Dwellings are to be set back 1.5-2m from the back edge of the footpath.

Carriageway

The tree-lined avenue is to have a carriageway width of 5.5m and design speed of 20mph with trees along the carriageway. The carriageway is to be in a finish consistent with the neighbouring sites.

Driveways

No driveway access is allowed over the verge and parking for dwellings facing the verge is to be from the side roads or from the rear.

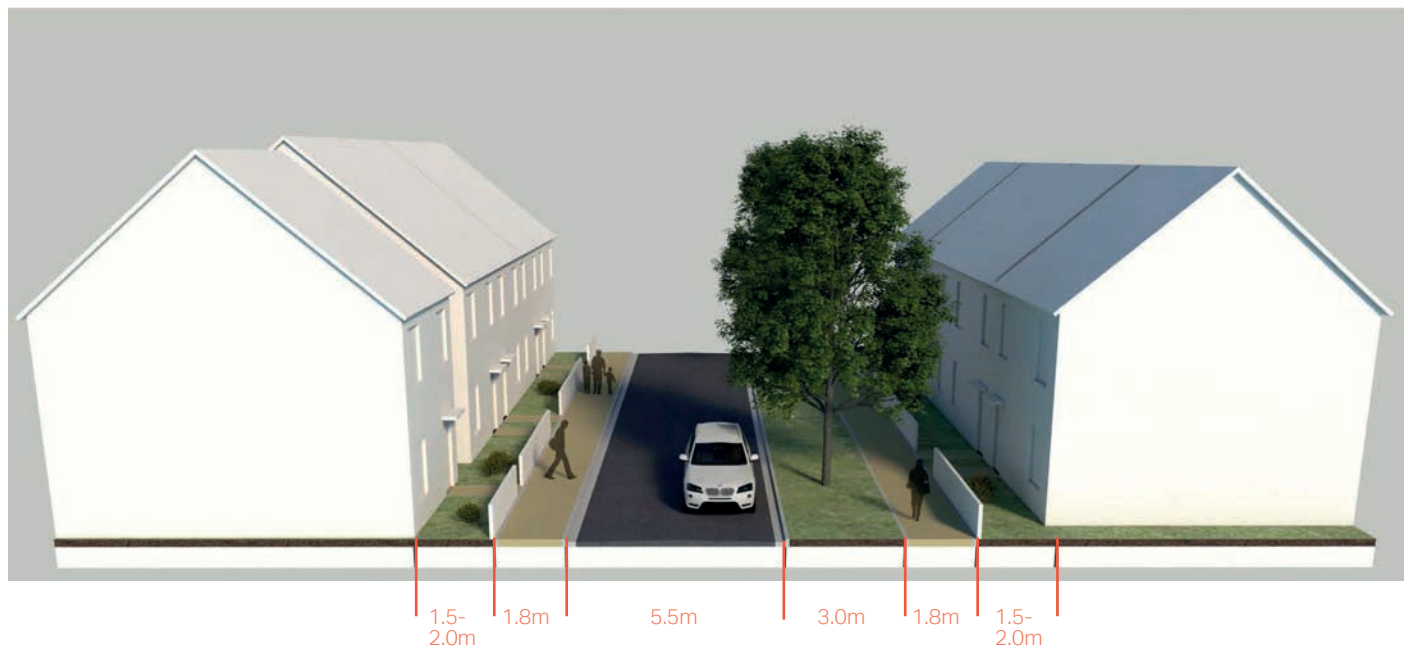
Footpaths

A footpath width of a minimum of 1.8m is required both sides of the carriageway to be in a finish consistent with neighbouring sites.

Front garden boundary treatments

Generally, brick walls to front boundaries.

Fig 7.2 - Tree-Lined Avenue



Low Key Access Road

Building Typologies

Up to 2 storeys in height for dwellings. Mainly detached or semi-detached with the occasional short terrace of no more than three dwellings to form a broken street frontage linked with garden walls.

Set-backs

Dwelling set-backs generally 2-5m from back edge of the carriageway.

Carriageway

A minimum carriageway width of 4.2m, having a design speed of 15mph. The roads are to be an informal layout with gentle curves forming passing places and areas for informal visitor parking. The carriageway is to be in a finish consistent with the neighbouring sites.

Driveways

Driveway access is to be directly off the carriageway. The maximum width of driveway is to be 6m.

Verges

A 1m wide service strip is to be provided at the edge of the carriageway generally finished in grass. Occasional street trees to be informally arranged.

Front garden boundary treatments

Generally clipped hedges set close to the back edge of the carriageway. Garden walls facing the public realm are to be at least 1.5m high brickwork in the same material as the front external wall of the relevant dwelling.

Fig 7.3 - Low Key Access Road



Private Drives

Building Typologies

Up to 2 storey dwellings orientated to face the open space and take advantage of the views towards the Church.

Set-backs

Dwelling set-backs a minimum of 2.5m from the back edge of the carriageway.

Carriageway

A minimum carriageway width of 4.2m, with the private drives served off the turning head of an adopted road. Private drives are to be a maximum length of 40m and serve no more than 5 houses. The layout of the drives is to be informal, with gentle curves that incorporate visitor parking and passing places. The carriageway is to be in a finish consistent with the neighbouring sites.

Driveways

Driveway access is to be directly off the private drive between the detached dwellings. The maximum width of the driveway is to be 6m.

Verges

A minimum 1m wide service strip is to be provided at the edge of the carriageway generally finished in grass. Timber bollards are required to discourage parking on the verges and other open spaces.

Front garden boundary treatments.

Generally, clipped hedges set close to the back edge of the private drive. Garden walls facing the public realm are to be in brick.

Fig 7.4 - Private Drives

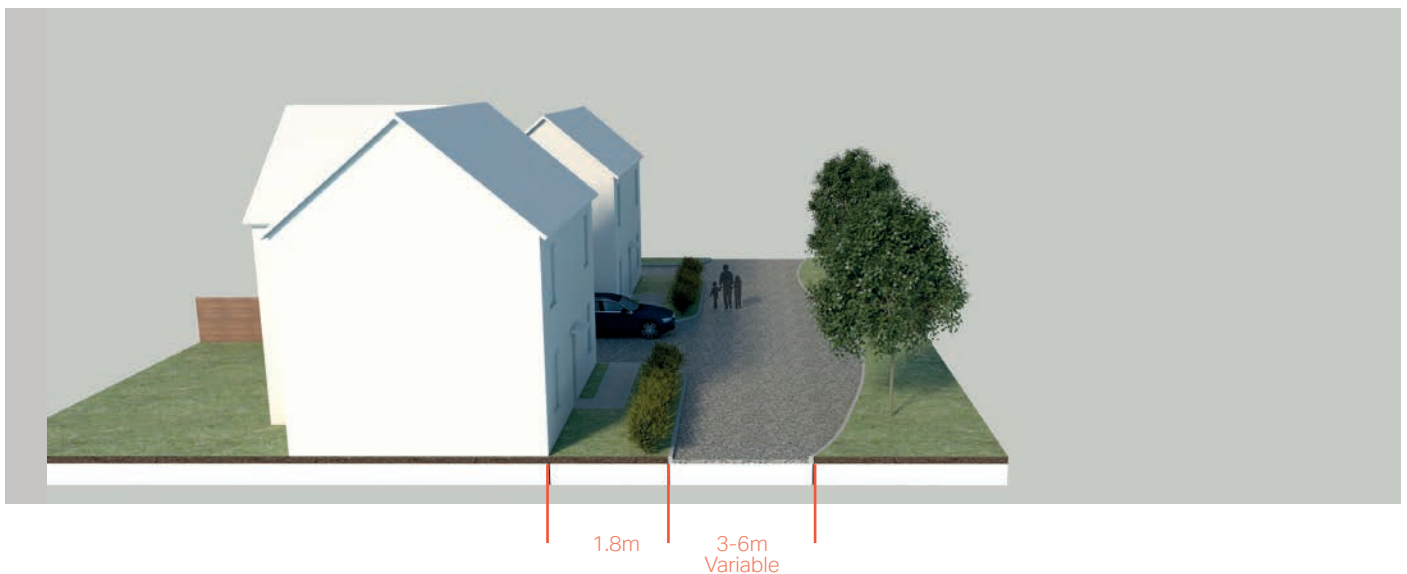
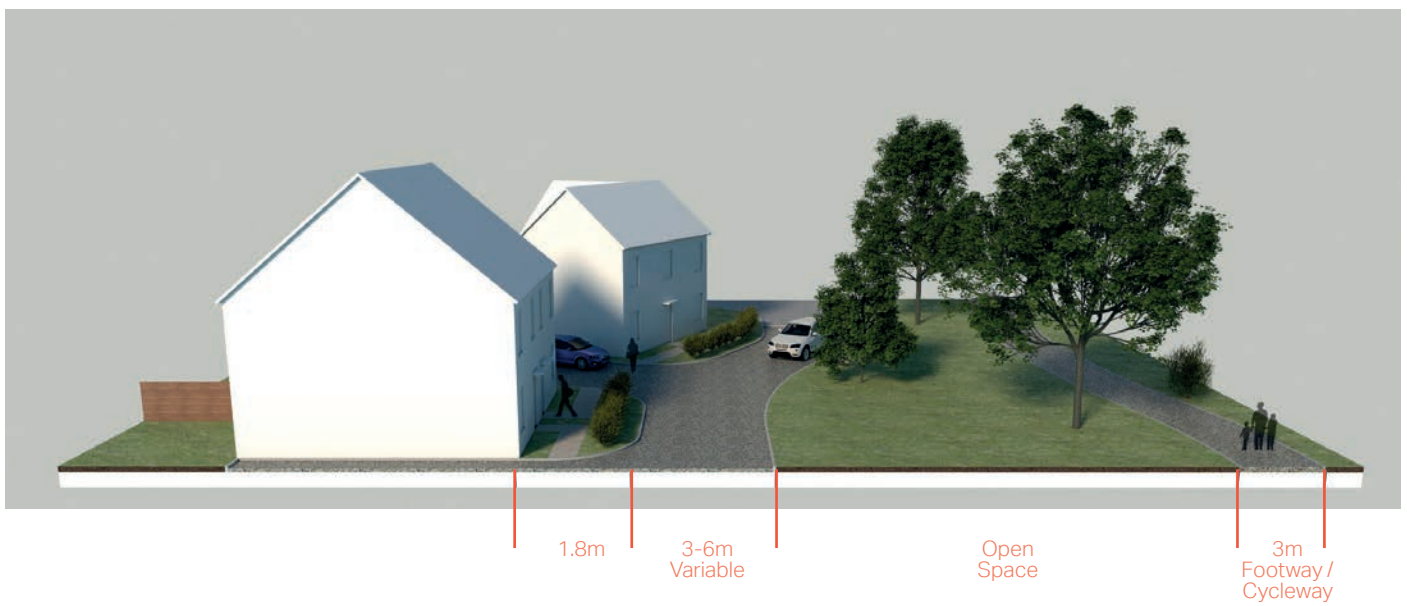


Fig 7.5 - Edge of site overlooking open space



LAND USES

7.1.11 Plot SGR 1 will promote a residential development to support the viability of the wider mixed-use development of the North West Bicester eco-town. The residential layout should provide vistas along streets to create visual and functional links with the surrounding green infrastructure and the Church.

7.1.12 The land uses for the proposed development are illustrated on the Land Uses Parameter Plan (see Figure 4.1).

OPEN SPACE

7.1.13 An area of amenity open space located to the eastern and southern part of the site must incorporate a play area and sustainable drainage and be accessible to all residents.

7.1.14 The play area should comprise a LEAP / LAP to provide an equipped area of play for children. The location of the play area adjacent to the residential area should provide for natural surveillance from adjacent dwellings.

7.1.15 A joint cycleway/footway provides a new leisure route for pedestrians and cyclists through the informal green space. This leisure route should connect with the adjoining exemplar site. The indicative location of this route is identified on the Access and Movement Parameter Plan.

7.1.16 The landscape should be designed to be productive. Allotments to the northern corner of the site are co-located with a small area of car parking, for use by both users of the allotments and by church parishioners. An area of informal native tree planting is located to the north-eastern edge of the site in the form of a green corridor adjacent Banbury Road.

7.1.17 The south-eastern boundary adjacent to Home Farm and the eastern boundary adjacent to Banbury Road will be strengthened by supplementary planting to provide visual screening.

7.1.18 An indicative location for an attenuation pond is illustrated in the southern part of the informal green space, to take advantage of the natural drainage points of the site.

7.1.19 Due to visual sensitivities associated with the adjacent listed buildings, views of the residential development edge should be softened by hedgerow planting and to help tie the development together with its landscape rather than urban setting. Where landscaping is provided within the highway, appropriate visibility splays must be maintained.

7.1.20 The Open Space and Landscaping layout is illustrated at Figure 7.6.



Fig 7.6 - Open Space and Landscaping



URBAN DESIGN

- 7.1.21 The layout of Plot SGR 1 must adhere to recognised best practice in urban design, responding to the specific context of the site and the wider North West Bicester eco-town.
- 7.1.22 An informal arrangement of dwellings should front onto the green space to establish an active frontage, with residential dwellings providing overlooking.
- 7.1.23 Building typologies will vary across the site to respond to setting. The Tree-lined Avenue could be achieved through short residential terraces, with narrow gaps provided between blocks to establish a formal character.
- 7.1.24 Streets overlooking open spaces and landscape will comprise mainly detached and semi-detached houses with car parking located between residential units. At the entrance to the site, dwellings will front an area of open space to provide a soft gateway to the site. Lower order streets such as courtyards and mews will exhibit irregular set-backs that accommodate car parking, and hard landscaping with street trees planted within tree pits set within the paving.
- 7.1.25 The Urban Design principles are illustrated at Figure 7.7.

Fig 7.7 - Urban Design Principles



BLOCKS

7.1.26 To establish a legible layout which is easy to navigate, it is essential that development blocks form attractive, well defined streets and spaces. To achieve this quality, urban form principles need to be adhered to, along with principles for access and parking.

7.1.27 The key principles which apply to blocks throughout Plot SGR1 are as follows:

- Streets should be fronted by development, with buildings and tree planting providing a sense of enclosure and continuity of frontage to generate an 'active frontage' with frequent doors and windows animating the public realm.
- Natural surveillance of the street, public spaces and play areas should be promoted by ensuring they are overlooked by adjoining buildings.
- Car parking should be carefully designed so that it is inconspicuous and does not detract from the visual amenity of the development. A combination of parking options should be used including on-street and on-plot, with limited areas of parking courts where possible.
- Vehicular access to blocks should be off minor streets rather than main streets where possible.
- Development should generally be arranged in perimeter blocks, scaled to enhance permeability, and designed to ensure private garden space for each dwelling.
- Clear distinction between public fronts and private backs should be established to make obvious which areas are for public use and those which are for residents use only.
- Buildings should be designed to be flexible and adaptable to meet the requirements of different users in the future.

- Utility and meter boxes must be designed as discrete elements of the building façade, and where possible kept away from street frontages.
- Buildings should be orientated to maximise passive design to create the correct balance of shade and solar gain.

7.1.28 A mix of housing types and sizes should be provided for, ranging from 1-bed to 4-bed dwellings as set out below. The exact housing mix will be determined at reserved matters stage.

Unit Size	Market Units
1-bed	0-5%
2-bed	15-25%
3-bed	40-50%
4-bed	20-30%
Total	75 units

BUILDING HEIGHTS

- 7.1.29 The scale of the built form at Plot SGR 1 responds to the following key features:
- Along the Tree-lined Avenue, the building form will vary between 2½ to 3 storey housing, with 3 storey housing at key locations such as at the gateway to the site to contribute towards distinctiveness. Any flats to be accommodated within the residential area should be located at this gateway to tie in with the wider North West Bicester area.
 - In peripheral locations to the eastern edge, the predominant building form will be up to 2 storey to reflect the transition between the built form and the area of open space.
- 7.1.30 The indicative building heights plan is presented at Figure 7.8.

CAR PARKING

- 7.1.31 It is necessary for car parking to be designed as an integral part of the residential layout of the proposed development to avoid car parking dominating the streetscene and creating poor mobility for pedestrians through pavement parking.
- 7.1.32 A combination of car parking solutions is identified to avoid disrupting the continuity and enclosure of the street frontage. Parking can be provided either on-plot between houses and within integral garages or off-plot in small parking courts with no more than 12 spaces. Additional unallocated off plot car parking may also be provided up to a maximum of one space per dwelling.
- 7.1.33 Oxfordshire's Residential Road Design Guide sets out the current local parking standards for North West Bicester Ecotown. Provision for car parking at Plot SGR1 must be made in accordance with the standards and policy set out by Cherwell District Council and Oxfordshire County Council.

Fig 7.8 - Indicative Building Heights



BOUNDARY TREATMENT

7.1.34 Boundary treatments will contribute to the character and quality of the public realm, and they will be considered as part of the detailed landscape strategy.

7.1.35 Boundary treatments will respond to the location of dwellings within the street hierarchy, consisting of the following boundary treatment typologies:

- Hard Edge – along the Tree-lined Avenue, the boundary treatment will generally comprise 900mm high brick walls with gates between brick piers.
- Soft Edge – a softer boundary treatment will be used along the low key access roads and private drives, generally comprising hedges and/or grass verges.
- Rear Garden Walls – rear gardens will be screened with a 1.8m high brick wall where small sections of rear and side boundaries are located along the edge of the perimeter

7.1.36 The southeast boundary of the site adjacent Home Farm will also be strengthened by additional planting.

Fig 7.9 - Boundary Treatment



Fig 7.10 - Boundary Treatment Perspective



LIGHTING

7.1.37 The approach to lighting within the development will need to be mindful of Secured by Design and public safety while remaining sensitive to wildlife and heritage assets.

7.1.38 The design and siting of lighting will be an important consideration at the detailed design stage to the appearance of the road for both road users, pedestrians and cyclists.

7.1.39 The lighting strategy will also need to reflect the lighting within the wider North West Bicester area to facilitate a consistent approach to lighting.

7.1.40 The lighting will be of a standard appropriate for residential areas.

7.1.41 The green corridors and open spaces (and habitats within) will be retained as unlit corridors to benefit biodiversity and nocturnal foraging.

7.1.42 In conformity with the wider North West Bicester development parcels, the lighting classes identified for the proposed development will be required to comply with BS 5489 and BS EN 13201, comprising:

- Lighting class S7 (5m columns) along the tree-lined avenue; and
- Lighting class S7 (3 or 4m columns supplemented by building mounted luminaires and bollards or ground level lighting) along the low key access roads and private drives, including those fronting the play area.

COLOUR AND MATERIAL PALETTE

7.1.43 To achieve high authenticity across the site, colours and materials used in the local context – particularly within the North West Bicester eco-town - will be used to inform the colour and material palette for Plot SGR 1.

7.1.44 The objective has been to identify a constrained palette, capable of creating a sense of cohesion across the site and wider context but including opportunities for careful architectural detailing to both aid legibility and create a unique image for the eco-town.

7.1.45 The palette of colours and materials for the site will need to respond to the following, reflecting the aspirations of the North West Bicester SPD:

- Materials consistent with achieving high sustainability performance.
- The use of materials that are sustainability produced and locally sourced, to enhance the local Oxfordshire vernacular and to reduce the carbon footprint.
- The use of stone in locations closest to the heritage assets.
- New paving materials should be simple, functional, and reflect the character of the wider North West Bicester eco-town.
- Materials which are durable and require minimal maintenance.

7.1.46 The style and approach of the external appearance are to be determined at the detailed design stage and will contribute to the performance and vision of the eco-town.

7.1.47 The potential material palette could include reconstituted limestone, brick and render with controlled elements of timber boarding. The roofing material could typically be slate, stone or clay tiles.



SUSTAINABLE DESIGN

Energy

- 7.1.48 High levels of energy efficiency are a fundamental design principle of the development, requiring:
- Optimisation of energy demand where possible, through nationally recognised energy hierarchy principles and through design principles such as orientation of buildings to optimise the site's potential for solar gain and incorporation of open spaces;
 - Provision of a proportion of the development's energy supply by potentially using low carbon and renewable energy sources that are feasible at the site, such as solar PV panels on southward facing roofs of houses, solar water heating or air source heat pumps;
 - Reduction in the consumption of natural resources and greenhouse gas emissions through sustainable, energy, water and materials procurement strategies, as well as considerate construction practices; and
 - Use of energy efficient materials.

Waste

- 7.1.49 The use of locally sourced materials (with a high recycled content) in addition to the careful management, ordering and storage of material will be required to prevent wastage. The reuse and recycling of materials on-site during the construction process will also minimise waste.
- 7.1.50 All properties will be supplied recycling bins for organics and recyclables to minimise waste.

Water

- 7.1.51 Water efficiency measures will be introduced, including rainwater harvesting and reuse, and water efficient fixtures and fittings. These measures will enable all homes to reduce average water consumption levels.
- 7.1.52 Surface water management will protect the receiving waters from pollution and reduce the risk of flooding, including through the use of permeable paving.
- 7.1.53 The use of Sustainable urban Drainage Systems (SuDS) will provide storm water management and help to recharge the underlying groundwater resource, whilst minimising run-off at source. SuDS will also provide a biodiversity function by enhancing the creation of new habitats.



8.0 CONCLUSIONS

- 8.1.1 The outline planning application is for up to 75 dwellings, of which 30% are proposed to be affordable (to be secured within the Section 106). The proposed development would provide a full range of tenures and dwelling sizes, in accordance with government objectives of sustainable development.
- 8.1.2 The proposed development offers a number of benefits, including:
- Creation of a high quality sustainable development incorporating a mix of house sizes, including 30% affordable housing.
 - A well-designed development of up to 75 homes.
 - New housing well connected to eco-town facilities and services.
 - Provision of car parking spaces for the church and allotments.
 - Provision of allotments to provide an edible landscape to encourage local food production.
 - New combined pedestrian/cycle link through the site between the adjacent development parcels providing enhanced connectivity across the North West Bicester eco-town.
 - Residential layout configured to respect the setting of local heritage assets.
 - New green open space, incorporating Sustainable Urban Drainage and enhanced ecological value.
 - A high quality landscaped setting for the development.
 - The proposals will facilitate a pedestrian link through the Site towards the Church of St Laurence, ensuring that a pedestrian crossing to the Church can be delivered separately.
- 8.1.3 This Design and Access Statement has explained how the design of the proposed development takes full account of its physical and policy context, including the design vision and key principles for the development. Those principles are given spatial expression in the Parameter Plans.
- 8.1.4 Effective application of those principles at the detailed design stage, secured by a condition on any Outline permission requiring compliance with the Parameter Plans, would ensure the proposed development is of a high design quality and appropriately response to its context.

