5 Description of the Proposed Development

5.1 Introduction

5.1.1 This chapter provides a description of the Proposed Development which forms the basis of the EIA. This chapter has been written by Quod, based on information provided by the project architects, Hawkins Brown, and other members of the project team. This chapter is supported by the following appendices:

- Appendix 5.1: Parameter Plans;
- Appendix 5.2: Development Specification;
- Appendix 5.3: Strategic Design Guide;
- Appendix 5.4: Supporting Plans (including Site Location Plan, Existing and Proposed Site Levels Plans and Indicative Demolition Plan);
- Appendix 5.5: Outline Landscape and Ecological Management Plan;
- Appendix 5.6: Framework Lighting Strategy;
- Appendix 5.7: Operational Waste Management Plan;
- Appendix 5.8: Site Waste Management Plan; and
- Appendix 5.9: Framework Energy and Sustainability Strategy.

5.1.2 The Design and Access Statement (DAS) which accompanies the planning application provides a more detailed description of the Proposed Development with illustrations.

5.1.3 A description of the anticipated construction programme and a description of proposed key construction activities is provided within Chapter 6: Construction.

5.2 Overview of the Development

5.2.1 The Applicant is seeking outline planning permission for the following:

"Outline application, with all matters reserved, for a multi-phased (severable), comprehensive residential-led mixed use development comprising:

- *Up to 215,000 square metres gross external area of residential floorspace (or circa 1,800 homes which, depending on the housing mix, could result in a higher or lower number of housing) within Use Class C3/C4 and large houses of multiple occupation (Sui Generis);*
- *Supporting social infrastructure including secondary school/primary school(s) (Use Class F1); health, indoor sport and recreation, emergency and nursery facilities (Class E(d)-(f);*
- *A hotel (use class C1);*

- *Supporting retail, leisure and community uses, including retail (Class E(a)), cafes and restaurants (Class E(b)), commercial and professional services (Class E(c)), local community uses (Class F2), and other local centre uses within a Sui Generis use including public houses, bars and drinking establishments (including with expanded food provision), hot food takeaways, venues for live music performance, theatre, and cinema.*

- *Up to 155,000 square metres gross external area of flexible employment uses including research and development, office and workspace and associated uses (Use E(g)), industrial (Use Class B2) and storage (Use Class B8) in connection with the expansion of Begbroke Science Park;*

- *Highway works, including new vehicular, cyclist and pedestrian roads and paths, improvements to the existing Sandy Lane and Begbroke Hill road, a bridge over the Oxford Canal, safeguarded land for a rail halt, and car and cycle parking with associated electric vehicle charging infrastructure;*

- *Landscape and public realm, including areas for sustainable urban drainage systems, allotments, biodiversity areas, outdoor play and sports facilities (Use Class F2(c));*

- *Utility, energy, water, and waste water facilities and infrastructure; and*

- *together with enabling and associated works, including temporary meanwhile uses.*

Development affects the setting of a listed building and includes potential alterations to public rights of way."

5.2.2 It is necessary to retain flexibility within the outline application so that the detailed design of the scheme can effectively meet market demands at a later date. Therefore, the outline planning application is submitted with details of access to the Site and all other matters reserved for future planning approval. The outline planning application comprises a series of Parameter Plans (Appendix 5.1), the Development Specification (Appendix 5.2) and Strategic Design Guide (Appendix 5.3) which will set the design controls and context for future development of the Site. These are summarised as follows:

- **Parameter Plans**: four parameter plans are submitted with the planning application (as defined in Table 5.1). These illustrate the defined design parameters for the Proposed Development. Collectively, the Parameter Plans establish: the Site location; the different development areas and land use; maximum building heights; the location of green infrastructure; and the access and movement infrastructure network.
- **Development Specification**: this document describes the Proposed Development and the proposed type and quantum of uses. The Development Specification also includes Development Principles which set the performance criteria for future stages of detailed design and specifies inherent mitigation measures incorporated as part of the formal EIA process (see Appendix 5.2).
- **Strategic Design Guide**: this document outlines key site-wide design principles to guide future masterplanning and the detailed design for subsequent planning applications to come forward through Tiers 2 and 3. It sets out overarching principles

to define the quality of the Proposed Development that respond to local policy and will apply to all phases of development. These are based around aspects of open space and landscape character, biodiversity, drainage, movement, land use and built form.

5.2.3 The Parameter Plans which form part of the planning application are listed in **Error! R eference source not found.** and are provided in Appendix 5.1.

Table 5.1: Parameter Plan Schedule

Drawing Reference	Drawing Title
BEG-HBA-SW-ZZ-SK-A-SK81	Parameter Plan 1: Development Areas and Land Use
BEG-HBA-SW-ZZ-SK-A-SK82	Parameter Plan 2: Maximum Building Heights
BEG-HBA-SW-ZZ-SK-A-SK83	Parameter Plan 3: Green Infrastructure
BEG-HBA-SW-ZZ-SK-A-SK84	Parameter Plan 4: Access and Movement

5.2.4 The Parameter Plans are accompanied by three supporting plans that provide details on existing Site levels, proposed Site levels, and buildings to be potentially demolished. These are provided in Appendix 5.4.

5.2.5 The Proposed Development will bring forward the following key components and land use types, as set out in Table 5.2.

Table 5.2: Key Components of the Proposed Development

Land Use Type	Maximum Units / Floor Area (Gross External Area (GEA))
Expansion of Begbroke Science Park (Use Classes B2, B8, E(g) and F1(a))	155,000 sqm
Residential (Use Class C3)	215,000 sqm
Education facilities (Use Class F1(a))	19,800 sqm
Ancillary / Supporting Uses:	21,000 sqm
- Retail (Including the sale of food and drink) (Use Class E(a), (b) and (c))	3,500 sqm
- Hotel (Use Class C1)	10,000 sqm
- Non-residential and leisure institutions, including nursery, medical or health services, indoor sport or fitness facilities, and creches and/or nurseries (Use Class E(d), (e), and (f))	5,600 sqm
- Halls and Meeting Places	1,200 sqm
- Sui generis uses including (but not limited to) public houses, wine bars or drinking establishments (Use Class Sui Generis)	700 sqm

5.3 Demolition of Existing Buildings

5.3.1 The Indicative Demolition Plan (see Appendix 5.4) illustrates which existing buildings within the Site may be demolished to facilitate the Proposed Development. Full details are provided in Chapter 6: Construction.

5.4 Enabling Works

5.4.1 Enabling works would include all works necessary to prepare the site for construction of development, with details to be confirmed by planning condition. Such works could include (but would not be limited to): Site or ground clearance; construction of temporary accesses and/or highway works to facilitate the carrying out of the Development; archaeology; ecological surveys, investigations or assessments; site preparation; construction of boundary fencing or hoardings including for site security; erection of temporary facilities for security personnel; the erection of security cameras; excavation; interim landscaping works; construction of temporary internal roads; or other works or operations to enable any of these works to take place. Further details are provided in Chapter 6: Construction.

5.5 Existing and Proposed Ground Levels

5.5.1 The Proposed Development will seek to achieve a cut and fill balance within the Site in terms of the use of topsoil and sub-soil, to minimise the need to import or export significant volumes of this material. However some ground levels are required to facilitate construction of the Proposed Development. Appendix 5.4: Supporting Plans provides two plans illustrating existing and proposed ground levels associated with the engineering works required on the Site to enable the Proposed Development. A limit of deviation of +/- 500mm is proposed to be applied to all proposed ground levels.

5.6 Development Areas and Land Use

5.6.1 Parameter Plan 1: Development Areas and Land Use defines the future developable areas of the Site. Parameter Plan 1 defines a series of Development Zones and associated land uses within the Proposed Development, as follows:

- **Development Zone 01: Begbroke Hill** – area designated for residential units and green infrastructure;
- **Development Zone 02: Begbroke Science Park** – area designated for the retention and expansion of the existing Begbroke Science Park uses, commercial units and a primary school. The Development Zone will contain the Local Centre of the Proposed Development. The Strategic Design Guide identifies this Local Centre as the 'Farmstead'.
- **Development Zone 03: Parkers Farm** – area designated for residential units, commercial units and green infrastructure. A 0.5ha area of land safeguarded for a rail halt is within this Development Zone; and
- **Development Zone 04: Foxes Cover** – area designated for commercial units, residential units, a primary school, a secondary school and green infrastructure.

5.6.2 Areas of land in the north, centre and east of the Site are safeguarded from inappropriate built development by virtue of being in the green belt. These areas will have no major forms of built development and will comprise retained or enhanced green infrastructure and open/amenity space. These areas will include a community farm in the north of the Site, north of Rowel Brook, and formal sports provision and play areas in areas to the east in areas that are easily accessible. Where buildings and structures are developed in these areas, they will only be permitted where they do not cause significant adverse landscape

and visual impacts to nearby sensitive receptors, and otherwise accord with local and national planning policy regarding development in the green belt.

5.6.3 10m building set-back zones where no development will be allowed to take place are proposed in the following locations:

- Adjacent to the western Site boundary adjacent to the A44;
- West of the railway line; and
- Adjacent to existing and emerging residential development to the south and in Yarnton (to the west).

5.6.4 Within these zones, no built development will be allowed save for acoustic and/or visual attenuation barriers, and residential garden outbuildings and/or structures that do not exceed 3m in height. Additionally, development works will not be permitted within 8m of the top of the bank of any Main Rivers and the Oxford Canal without prior written consent from the Environment Agency and CDC. The Strategic Design Guide also states that development should set back and breaks in massing should be introduced, to create buffers with permeable edges where the Proposed Development interfaces with neighbours.

5.6.5 Matters of layout and scale will be determined through detailed design and submission of Development Briefs and Reserved Matters Applications (RMAs). These will be informed by the design principles set out in the Development Specification and Strategic Design Guide.

Housing

5.6.6 The planning application proposes up to 215,000 square metres ('sqm') gross external area ('GEA') of residential floorspace within use classes C3, C4 and Sui Generis. The inclusion of use classes C4 and Sui Generis allows for the provision of houses in multiple occupation ('HMOs') that would be delivered as university-linked accommodation.

5.6.7 The residential units will be provided in accordance with the unit mix ranges indicated in Table 5.2. The Proposed Development will deliver 50% of housing on the Site as affordable housing, in accordance with Policy PR8. The make-up of this provision will include social rent, discount market rent and key worker housing.

Table 5.3: Unit mix ranges

Unit type	Studio/1 bedroom	2 bedroom	3 bedroom	4+ bedroom
Range	20-40%	30-40%	15-30%	5-20%

5.6.8 The precise unit mix, including the proportion of apartments, shared accommodation and traditional housing, will be defined through the tiered submission of a Development Area Brief, and confirmed through the submission of relevant Reserved Matters Applications ('RMAs'), as set out in Chapter 1: Introduction. It is anticipated that the residential floorspace cap and unit mix range would deliver circa 1,800 residential units. This number could increase or decrease depending on the exact unit size split, for instance, if a greater number of flats and smaller properties were delivered.

Expansion of Begbroke Science Park

5.6.9 The existing Begbroke Science Park provides faculty space for Oxford University that supports inter-disciplinary research including materials, energy, nanotechnology, biomedical engineering and aerospace. It combines this faculty space with offices, R&D centres and laboratories used by commercial enterprises and start-ups.

5.6.10 This OPA seeks permission to deliver up to 155,000sqm GEA of floorspace in association with the expansion of the Begbroke Science Park. This floorspace would be delivered across 14.7ha of land. The faculty and commercial components of the Science Park would be expanded to ensure that the successful combination of academic research and commercial application continues.

5.6.11 Given the diversity of commercial activities within the Science Park, permission is sought for floorspace within Use Classes B2, B8, E(g), and F1(a). This will ensure that a diverse needs of occupiers can be met by providing a combination of offices, laboratories, storage spaces and industrial and manufacturing-type premises for research and development.

Supporting Uses

Hotel

5.6.12 The Proposed Development will incorporated up to 10,000sqm GEA of hotel floorspace. This would be delivered in proximity to the Local Centre and the expanded Science Park.

Non-Residential and Leisure

5.6.13 Up to 5,600sqm GEA of non-residential floorspace will be created alongside the R&D and residential floorspace to support the new community. These uses would cover commercial, leisure, health, community and amenity uses, including nurseries, gyms and health centres as required. The majority of these uses will be clustered at a Local Centre, i.e. the Farmstead. The Local Centre will be located around the Grade II listed Begbroke Hill Farmhouse. As set out in the Strategic Design Guide, the design objective of the Local Centre will be to enhance the setting and character of this heritage asset through developing a cluster of buildings that will be appropriately scaled in height and form and have attributes that relate to these structures. No works are proposed to the listed building. This location benefits from close proximity to main internal access roads, walking and cycling connections, and public transport links, with vehicular access running to the south, east and west to connect to Parker's Farm and Begbroke Hill.

5.6.14 A further 1,200sqm GEA of halls and meeting places is proposed. Shared public amenities, civic spaces and retail uses will be clustered in the Local Centre, providing flexible uses to be delivered to meet the needs of the living and working population of those who will live and work within the Proposed Development.

Retail Uses

5.6.15 The Application proposes up to 3,500sqm GEA of floorspace for retail uses (Use Classes E(a), (b) and (c)). These retail uses are intended to serve the day to day needs of those living and working on the Site and residents of nearby communities. An additional 700sqm GEA of sui generis floorspace is proposed to provide for bars and pubs. Retail and amenity

uses will be clustered within the Local Centre. Small-scale retail premises may be provided in other locations within the Site where this helps provide walkable neighbourhoods.

Education Provision

5.6.16 The Proposed Development will meet the requirements of the LPPR by safeguarding land for the provision of two primary schools and one secondary school. The primary schools are intended to meet the needs arising from PR8 only. The secondary school would provide 1,100 school places and is intended to meet the needs arising from all PR sites.

5.6.17 The indicative locations and extent of education uses are shown on Parameter Plan 1. The 3FE primary school, which would be delivered first, is located between Sandy Lane and the south western boundary of the existing Science Park on 3.2ha of land. Land directly adjacent to the Local Centre has been safeguarded for the delivery of this school.

5.6.18 The 2FE primary school would be located in the southern portion of the Site on 2.2ha of land on the location of the existing poultry and deer farm, south of Gravel Pits Lane.

5.6.19 The secondary school is proposed on a circa 8ha area of land in the south of the Site, to the south of Sandy Lane, west of the railway line and adjacent to the proposed Central Park. The land for the secondary school has been safeguarded as a 6.77ha 'core' parcel, and a 1.26ha 'option' parcel. This ensures there is flexibility to expand to the school in response to needs as they arise in the local area. The school will be jointly funded by all PR sites, with financial contributions secured through their respective Section 106 agreements with CDC and OCC. School buildings and playing fields will be sited and designed to provide a suitable noise environment and will seek to allow for natural ventilation of buildings where possible. The siting of the buildings and playing fields will be confirmed at subsequent design stages.

5.7 Maximum Building Heights

5.7.1 Parameter Plan 2: Maximum Building Heights defines the maximum buildings heights for the Development Zones outlined in Parameter Plan 1. This Parameter Plan defines the maximum height of built development within the Site pertaining to the maximum building ridge or parapet height.

5.7.2 The tallest buildings of the Proposed Development are to be located immediately north of the existing Begbroke Science Park. The maximum building heights reduce from the Science Park to the Site boundaries. The Parameter Plan establishes five maximum building height parameter envelopes for the Development Zones:

- **Buildings up to 13.5m from ground level:** This applies to all development within Development Zone 04, the northern and south west boundaries of Development Zone 01, and the south west corner of Development Zone 02, and the northern boundary of Development Zone 3;
- **Buildings up to 15m from ground level:** This applies to the majority of development within Development Zones 01 and in northern and eastern extents of Development Zone 03;
- **Buildings up to 18m from ground level:** This applies to a small area in the north of Development Zone 02 only; and

- **Buildings up to 22m from ground level:** This applies to the majority of development within Development Zones 02 and 03.

5.7.3 All maximum building heights are from existing ground levels.

5.7.4 An area around the Grade II listed Begbroke Hill Farmhouse is also defined where special consideration of heights and massing should be provided for development. Development Area Briefs and RMAs will be prepared with particular regard for the enhancement or preservation of the significance of the setting of the listed building, where possible.

5.7.5 These parameters exclude provision for rooftop plant, antennae and equipment. Development Principle (DP) 12.2 of the Development Specification states that where plant, flues or antennae may exceed the stated maximum building heights in the Parameter Plan, they are located to reduce visual clutter and that appropriate design, screening or visual mitigation (if necessary) is provided.

5.7.6 For areas of the Site not in a Development Zone, these are reserved for landscaping, open space and play space. No notable built development is expected, with the exception of recreational/amenity facilities associated with areas of open space and public realm. A maximum height parameter is therefore not defined for these areas.

5.8 Green Infrastructure and Open Space

5.8.1 The landscape strategy of the Proposed Development has been developed in-line with policy PR8 requirements. Parameter Plan 3, Development Principle 9.2 of the Development Specification and the Strategic Design Guide provides further details of these proposals.

5.8.2 Almost 80ha of open space will be provided as Rowel Brook Park, the Canalside Parkland and the new Central Park. Further open space will be delivered within the developable area in the form of green 'arteries', which will constitute linear parks that connect the centre of the development to the larger open areas on its peripheries. 12ha of land will be retained within an agricultural-related use, 7ha of which would be used as a community farm enterprise that provides opportunities for collective farming.

Strategic Landscape Components

5.8.3 Parameter Plan 3: Green Infrastructure identifies the locations of strategic landscape elements of the Proposed Development, including existing green infrastructure to be retained. The types of green infrastructure to be included as part of the Proposed Development are:

- Retained and enhanced habitat, including existing woodland, trees and hedgerows with selective thinning to allow for access and planting of additional hedgerow trees where appropriate;
- Retained agricultural land;
- A new Local Nature Reserve;
- Community Parks and public open spaces;
- Indicative formal sport and recreation areas; and

- Indicative location of green arteries, aimed at providing public access routes and connecting wider green areas with every neighbourhood.

5.8.4 The main landscape character areas proposed are as follows:

- **Canalside Parkland** - a semi-natural open grassland and meadows in the eastern extent of the Site, to the east of the railway line and adjacent to the Oxford Canal. The Canal Parkside includes indicative provision for a formal sports and recreation area of approximately 3.5 ha, and walking and cycling routes. The Parkland will include a new Local Nature Reserve and retained agricultural land fronting to the Oxford Canal.
- **Railway Marshes** – this will be a nature conservation area used of circa 12.2ha primarily for habitat and biodiversity enhancement with limited public access in the eastern extent of the Site, to the east of the railway line. A bird-viewing hide or similar type of structure may be constructed where this does not cause unacceptable visual impacts or adverse impacts to existing or new habitats and species. These measures aim to strengthening the Oxford Canal corridor contributing to Oxfordshire's Nature Recovery Network.
- **Central Park** – a multi-use park will be located on the historical landfill site in the centre of the Site, which will be remediated to an appropriate standard. The park will include formal sports and recreational area. High quality, non-vehicular routes will be provided across the park to aid permeability to other areas of the Development.
- **Rowel Brook Park -** This comprises areas to the north and south of Rowel Brook in the north of the Site and west of the railway line. The southern area of Rowel Brook Park is to be improved to deliver public open space with high quality walking and cycle routes, and creation new habitats and enhancing biodiversity. The northern area is intended to primarily to be used for cultivation and uses related to existing agricultural use, including (but not limited to) allotments, community gardens, farms and orchards. This is the indicative location for a proposed community farm and re-provided allotments. Structural planting to the east of Begbroke village will be delivered to aid visual screening.

5.8.5 Existing vegetation within the Site will be retained and enhanced on the eastern, southern and western Site boundaries, around the northern, eastern and western borders of the Begbroke Science Park, around Parkers Farm, along Rowel Brook and existing linear vegetation outside the Development Zones in the east of the Site. Retained green space adjacent to the Grade II listed Begbroke Hill Farmhouse is also stipulated around the building and its curtilage, as defined in the Strategic Design Guide. New structural planting is also proposed on the north western Site boundary.

5.8.6 Four principal 'green arteries' will cross the Site. These will be wide green, car-free corridors that bisect areas of built development and connect them to different elements of green infrastructure. They will also be used to deliver non-vehicular routes, play areas, surface water drainage including SuDS, biodiversity, 'pocket parks' and food growing areas. The approximate alignments are illustrated on Parameter Plan 3. These all extend out from the existing Begbroke Science Park and proposed Local Centre, with one extending north into Rowel Brook Park (north) ('Farm Link and Innovation Avenue'), one south through Central Park and to the southern Site boundary ('Boulevard' and 'Countryside Artery'), and two into Rowel Brook Park (south) ('Forest Artery' and 'Food Artery') towards the north western and north eastern Site boundaries.

5.8.7 Additional areas of landscaping, not defined by Parameter Plan 3, will be brought forward as part of the Proposed Development. This includes principles of strategic planting stated in the Strategic Design Guide on sensitive Site boundaries to minimise impacts on the setting of Yarnton, Begbroke and Kidlington. The details of this landscaping will be defined in subsequent RMAs and is likely to include the provision of private amenity space in the form of gardens for the residential units.

Agricultural Land, Community Farm and Allotments

5.8.8 Retained agricultural land (c.7ha) will be located in the north of the Site in Rowel Brook Park, with c.5ha of retained agricultural land in the south of the Site. This will comprise a farm for use by the community ('community farm') located in Rowel Brook Park, to the north of Rowel Brook, and land kept open and largely undisturbed to provide for farmland bird habitats. Allotments will also be provided, with the location needing to take account of the need for good daylight and sunlight and appropriate site access.

Public Amenity

5.8.9 The Proposed Development will provide access to nature across areas of new greenspace, particularly in canalside areas in the south-east of the Site, and at the new Local Nature Reserve along the Rowel Brook. Note that some areas of greenspace which are focused on nature conservation, such as the Railway Marshes, will have limited public access.

5.8.10 All existing Public Rights of Way ('PRoWs') within the Site will be retained or reprovided to an equivalent or better quality alongside the creation of new informal pathways across the newly implemented areas of public open spaces. Open space and play space will be provided by the Proposed Development in accordance with the standards set out in the standalone Open Space and Play Space Strategy, submitted with the planning application.

Biodiversity

5.8.11 The design of the Proposed Development has been iterative and has followed the mitigation hierarchy. As such, the Proposed Development has been designed to avoid and retain important ecological features including boundary hedgerows and trees to ensure they can be managed long-term to maximise their biodiversity potential. Where this is not possible, new habitats are proposed to deliver overall biodiversity gain (see Parameter Plans 1: Development Areas and Land Use and 2: Green Infrastructure).

5.8.12 The Parameter Plans, Development Specification, Strategic Design Guide and Outline Landscape and Ecological Management Plan (LEMP) set out details of broad habitat retention, creation and management measures that will take place across the Proposed Development. These include:

- Existing ecological assets should be retained wherever possible with particular attention to the Oxford Canal corridor and Sandy Lane;
- Retention of existing hedgerows, trees, ponds, and dark conditions suitable for bats, within areas of greenspace;
- Retention of hedgerows (and dark conditions suitable for bats) along Sandy Lane, Kidlington Lane in the south of the Site, along Begbroke Lane in the north of the Site, and where they have high ecological value;

- Retention and enhancement of the Rowel Brook and its tributary;
- Retention of the ditch along the southern boundary of the Site, including a 5m dark buffer of native vegetation;
- Retention of the Begbroke Hill Farmhouse complex, and lighting conditions there suitable for bats;
- Grassland, woodland and scrub habitats in the proposed LNR in the north of the Site;
- Floodplain meadow grassland in the Nature Conservation Area in the north east of the Site (and retention and enhancement of the northernmost grassland field in this location);
- Extensive grassland habitat (some accessible, and other areas without public access to maximise their value for farmland species such as skylark and brown hare) in the east of the site south of Sandy Lane;
- Tree and plant selection that supports native species, promotes diversity and is responsive to local climate and geological conditions;
- Creation of dark and green habitat corridors, suitable for bats between Sandy Lane and Begbroke Science Park, and between Begbroke Science Park and the Rowel Brook;
- Provision of bat and bird boxes incorporated into the walls of new buildings (equivalent in number to 20% of new dwellings);
- Provision of wetland Sustainable Drainage Systems (SuDS) to provide marshy grassland reedbed or similar wetland habitats in the north and east of the Site;
- Creation of six new ponds, not connected with any drainage function, in the north and east of the Site, to provide habitat;
- Creation of six new wetland scrapes in inaccessible areas in the east of the Site to provide habitat for wetland birds; and
- Areas of the Proposed Development with limited or no public access to enable biodiversity to increase.

5.8.13 The Development will deliver Biodiversity Net Gain (BNG) to meet policy requirements, with the commitment to create above 10% biodiversity net gain compared to the baseline condition through provision of the LNR, Canalside Park and other green infrastructure. Further details of the BNG assessment are provided in Chapter 13: Ecology and Appendix 13.4: Biodiversity Net Gain Assessment.

Landscape and Ecological Management

5.8.14 The Outline LEMP, submitted as a standalone document, provides greater detail on the proposed creation of landscape and ecological areas. It also sets out the management objectives, programme, and responsibilities. Linked to the biodiversity commitments listed above, this management plan includes the following biodiversity and landscape enhancements:

- Provision of a wide range of habitats (e.g. woodlands, wet meadows, meadows, marshlands) that are properly monitored and maintained to retain their ecological value;

- Supporting local fauna by providing strategically located features within the landscape, including (but not limited to) bird & bat houses, logs, rock piles and insect hotels;
- Enhancement of retained ponds and provision of new wildlife ponds to increase habitat connectivity for great crested newts, amphibians and invertebrates; and
- Management regimes of trees, hedgerows and ponds to allow existing habitats to mature.

Play Space

5.8.15 Age-specific play space will be provided across the Proposed Development within reasonable walking distances from family dwellings, taking into account age and ability. Formal and active sport and play will be concentrated in the Canalside Park. Land that has been provided for a four court sports hall within the secondary school site may also be utilised. Specific details regarding the play spaces will be determined at the Reserved Matters stage of the application.

5.9 Access, Movement and Parking

5.9.1 Parameter Plan 4 – Access and Movement shows where the key vehicular and non-vehicular access points and routes will be. This network would be supported by a finer grain of streets, paths, roads and routes that will ensure the Site is highly permeable. The parameter plan defines the indicative location of main transport and access routes and points of site access within the Proposed Development and details the locations and alignments of the following:

- Vehicular Route:
  - Retained / enhanced vehicular route.
  - Indicative proposed vehicular route and restricted vehicle access route.
  - Existing vehicular route adapted to pedestrian/cycle route including controlled vehicular access where required.
  - Safeguarded public transport route.
- Pedestrian and Cycle Route:
  - Retained / enhanced cycling and pedestrian routes, including PRoWs.
  - Indicative proposed cycling and pedestrian route.
- Site Access:
  - Indicative location of vehicular access, including through third party land.
  - Indicative location of pedestrian and cycle access, including through third party land.
  - Indicative location of proposed Sandy Lane bridge.
  - Land safeguarded in the southeast of the Site to provide for a future canal bridge for pedestrians and cycles that would connect to land at Stratfield Farm (allocated by Policy PR7b). Detailed proposals would be prepared in consultation with the third-party landowner(s), the Canal and River Trust, CDC and OCC at a future date (‘Stratfield Bridge’).

5.9.2 Parameter Plan 4 does not detail all the potential transport routes that will be constructed as part of the Proposed Development as these will be lower-scale (e.g. estate roads) that will be defined during detailed design.

Site Access

5.9.3 Parameter Plan 4 shows the points of access to the Proposed Development. Access will be provided for vehicles, public transport, cyclists and pedestrians.

5.9.4 The Proposed Development will be served by two points of access that connect with the A44. In the north, the existing Begbroke Hill access will be upgraded to include access to the allocated PR9 site, across the A44, via a fourth arm that connects with the signalised junction to the west. Improvements to pedestrian and cycle crossing facilities are proposed at the junction.

5.9.5 A second access is proposed as a new three arm signalised junction connecting with the A44, which will be provided within third party land owned land to the south, which forms part of the PR8 allocation.

5.9.6 These two access points will separately serve the northern and southern portions of the Proposed Development with no through connection provided for general traffic. Instead, a north-south restricted access will be provided for accommodating pedestrians, cyclists, public transport, and servicing vehicles.

5.9.7 Pedestrian and cycle access will be provided from six locations on the Site boundary. Two accesses on the northern Site boundary provide linkages to Begbroke Lane and Rowel Drive from the proposed Rowel Brook Park (north) area of the Proposed Development. Two accesses on the north western and north eastern corners of the Site will provide access to the pavement on the A44 and the canal bridge to Partridge Place respectively.

5.9.8 Additionally, where the Proposed Development is next to emerging planned development, it will look to connect routes and/or green infrastructure, where practical. It is proposed that there will be one access to the adjacent Hallam Land site (south), and land safeguarded for the proposed Stratfield Bridge in the south eastern corner of the Site, providing access to Oxford city centre. Land for the Stratfield Bridge will be safeguarded to achieve a minimum of 3 metres clearance over the Oxford Canal, subject to feasibility and design studies, and a bridge that is compliant with Local Transport Note 1/20[1].

5.9.9 Network Rail are intending to close the level crossing at Sandy Lane. As such, Sandy Lane will be access-only for vehicles, and will become primarily a green pedestrian and cyclist movement corridor. Through the public engagement it has undertaken, the Applicant understands the importance of the east-west connection that Sandy Lane currently provides to local communities. The Applicant has been working closely with Network Rail to explore the potential for delivering a bridge over the railway that would replace the level crossing, and provide connectivity for cyclists, pedestrians and public transport vehicles. This work with Network Rail is ongoing and as such does not form part of this OPA. Land has been safeguarded, however, to ensure that such a bridge could be delivered in the future.

Internal Routes

5.9.10 An internal spine road will be delivered that links to the existing Begbroke Hill road and continues down through the Site, east of the historical landfill to connect to the third-party land to the South, and onwards to a new junction on the A44. The spine road will be a through route for public transport vehicles, pedestrians and cyclists only. This will avoid it being used by private vehicles for rat running and encourage shorter trips to be made by sustainable modes.

5.9.11 The internal vehicle network aims to prioritise active travel over vehicular trips with permeable cycling and walking networks providing the most direct connection between all areas of the Site. Pedestrian and cycle routes will provide links to other proposed access points and to the Local Centre in the centre of the Site along the proposed green arteries.

5.9.12 The primary vehicular route will link to the proposed vehicle access points and provide a central route around the northern boundary of the existing Begbroke Science Park. The existing vehicular route on Sandy Lane extending from the western Site boundary to the canal bridge will be adapted to a pedestrian and cycle route, with controlled access to vehicles when required. A safeguarded route for public transport is defined from the proposed Sandy Lane bridge (to be delivered by Network Rail) to the proposed Stratfield Bridge.

5.9.13 The roads within the Proposed Development will allow for a low car mode share, where the principle of 'living streets' is applied. Further details are set out in the Strategic Design Guide.

5.9.14 Use will be made of the existing Yarnton Bridge over the Oxford Canal that connects Yarnton Road to Kidlington Road to provide restricted access to the land within the Site that is east of the railway.

5.9.15 Two internal bridges will be provided within the Proposed Development: one across Rowel Brook providing access to the Rowel Brook Park (north) and associated amenities, and one at the Sandy Lane rail crossing, to be delivered by Network Rail. Should the latter be confirmed as a vehicular bridge, this will be incorporated into the site-wide road network.

5.9.16 Future Reserved Matters applications will need to demonstrate compliance with Parameter Plan 4, associated Development Principles in the Development Specification and Strategic Design Guide and relevant standards/guidance at the time of submission.

Rights of Way

5.9.17 All existing PRoWs within the Site will be retained or reprovided to an equivalent or better quality. New informal pathways will also be created across the areas of green infrastructure and public open spaces, including provision of green arteries. Access will be prohibited or limited to certain areas designated for nature conservation, as set out above.

Car and Cycle Parking

5.9.18 The Development Specification states that car parking spaces used in association with the expanded Begbroke Science Park and Local Centre should be predominately in multi-storey car parks. These will be located to minimise adverse environmental impacts where possible and to encourage movement through the Proposed Development by foot and cycle. Open-roof multi-storey car parks will not be permitted where they would give rise to unacceptable

light spill, and would aim to minimise adverse air quality, noise and visual impacts. An electric vehicle (EV) car club scheme is proposed as part of the mobility hub.

5.9.19 On-plot car parking for individual Begbroke Science Park buildings shall be used primarily for blue-badge parking or for other specific reasons that could include car club/car sharing spaces or short-stay car parking related to the non-residential uses where justified.

5.9.20 In accordance with the Oxfordshire New Street Design Guide, it is expected that the residential parking will be provided in a mixture of on-plot and off-plot in shared parking areas, with provision of accessible parking spaces and EV charging spaces. Where possible, residential on-street parking will be clustered to allow for 'living streets', with parking and vehicular access laid out in ways that allow vehicular access but encourage other forms of active travel and accessible neighbourhoods.

5.9.21 Cycle parking will be distributed across the Site to encourage the uptake of cycling. Each Reserved Matters application will set out how cycle parking has been considered in relation to this principle.

Public Transport

5.9.22 A composite vehicular network including roads and shared-surface routes will ensure access throughout the Site for cars, servicing, deliveries and waste collection whilst giving priority to cyclists and pedestrians.

5.9.23 Public transport will be accessible throughout the Proposed Development with bus stops to be strategically located within the Site to increase accessibility to public transport, where possible. The Strategic Design Guide states that bus stops should be located to serve the greatest possible catchment area, with the aim of each residence or place of work being within a 5 minute walk from one. A mobility hub will be located with close to the Local Centre optimising opportunities for modal interchange. The public, transport provision will be phased, taking into account opportunities to connect to different modes in the future should they be progressed (e.g. Oxford Parkway, future rail halt).

5.9.24 A site-wide Framework Travel Plan (Appendix 9.2) is submitted with the planning application and makes the following commitments in relation to buses and public transport:

- Improvements to the local highway network to provide bus priority and reduce the journey time of buses;
- Provision of high-quality public transport infrastructure within the Proposed Development (e.g., bus shelters, live timetable information);
- Provide a new community bus service that will serve the Proposed Development as well as Yarnton and Kidlington;
- Explore how existing residents of Begbroke would be best served by the proposed community bus;
- Financial contribution towards improvements to the frequency of existing bus service (e.g., service S3);
- Financial contribution towards a new bus service to serve the Proposed Development and provide a connection to Oxford Parkway station; and

- Safeguarding of land for the provision of a potential rail halt at Begbroke Innovation District (this would be subject to a separate planning application).

Off-site Highway Works

5.9.25 OCC have identified a package of transport network improvements to support the planned development across the 'PR' sites. These include improvements along the A44 corridor to deliver bus priority measures and enhance cycle and pedestrian connectivity. OCC are expected to deliver the works following appropriate financial contributions from the Applicant and other PR site applicants secured via respective Section 106 Agreements. These are explained in more detail in the Transport Assessment (see Appendix 9.1).

5.10 Building Form and Appearance

5.10.1 The external appearance of each building is reserved for subsequent determination through the submission of Reserved Matters applications. These will be defined by the principles set out in the Development Specification and Strategic Design Guide, including building appearance and setbacks.

5.10.2 Built form will transition from larger to smaller scale footprints through transitionary steps in urban grain and scale. A variety of built forms and roofspaces will create variation aimed at enhancing character and placemaking of the Proposed Development. Breaks and setbacks in the building lines will shape informal public spaces and clusters.

5.10.3 Larger scale landmark features or buildings will be strategically located at key nodes and vistas to aid orientation and wayfinding.

5.10.4 Design Principle 12.1 of the Development Specification states that building plant should be designed into the overall composition and design of buildings wherever practical. It should be integral to the design such that it is perceived as part of the intended form and shape of a proposal building.

5.10.5 Development Area Briefs and RMAs will be prepared with particular regard to the appearance of development in views from nearby heritage assets, including views towards St Mary's Church in Kidlington, and the viewpoints assessed in the LVIA.

5.11 Historical Landfill Remediation Strategy

5.11.1 A historical landfill site is located in the centre of the Site, south of Sandy Lane. As defined by Development Principle 16.1, land within the historical landfill and within c. 3m of its extent will be remediated. A Remediation Strategy has been prepared and is provided at Appendix 15.2 of this ES which includes measures to allow for the safe use of this as an urban open space and to avoid adverse environmental effects associated with the existing landfill. The remediation strategy involves compaction of the historical landfill using specialist compaction equipment and installation of an engineered cover system on the landfill area. The cover system will include clean subsoil/topsoil to a depth of 450mm in the public open space area of which at least the upper 150mm shall be topsoil. No buildings are proposed in the landfill area and therefore no gas protection measures are required.

5.11.2 A detailed Remediation Strategy will be submitted for approval by CDC and the Environment Agency once a Contractor has been appointed at either Tier 2 or Tier 3 stages.

Further details are set out in Appendix 15.2: Remediation Strategy and Verification Plan. If processing of Made Ground is required, an appropriate Environmental Permit will also be required under the Environmental Permitting (England and Wales) Regulations 2016.

5.12 Flood Attenuation

5.12.1 No development is proposed within the fluvial Flood Zone 2 or 3 extents. However, a series of embedded mitigation measures have been included to mitigate fluvial and surface water flood risk to the Proposed Development as set out below. These are described further in section 4 of the Flood Risk Assessment (FRA) which forms Appendix 16.1 of this ES:

- **North West Area** – to mitigate flood risk in this location, a swale is proposed to re-route flood water into Rowel Brook. A 300mm bund/ barrier is proposed on the eastern bank of the swale.
- **Secondary School Site** – No part of the proposed secondary school should be located in an area of Flood Zone 2 or 3. To remove any flood constraints from this location, it is proposed to re-grade the land within the proposed extent of the secondary school and infill an existing tributary of the Southern Drainage Ditch across the south west corner of the Site. A replacement channel is proposed to be created outwith but along the boundary of the secondary school to maintain the connectivity of the Southern Drainage Ditch. Linked to this, a flood storage area with an indicative extent of circa 2,960m^2, with graded side slopes down to a depth of 1m, is proposed to the south west of this area. It is likely that approval will be required from the OCC as the Local Lead Flood Authority (LLFA) for the infilling of the ditch, which is classified as an Ordinary Watercourse.
- **Finished Floor Levels (FFLs)** – FFLs will be set with appropriate resilience and to ensure that the Proposed Development is at a low risk from flooding. Building FFLs and access roads will be set above the design flood level with an allowance of 300mm freeboard.

5.12.2 Flood mitigation measures will be further developed and agreed in detail with CDC and the EA at subsequent stages of consent (i.e. Tier 2 / 3). The proposed flood mitigation strategy will need to be tested through hydraulic modelling to maintain the goal of achieving no increase in flood risk off-site or risk to property or people within the Proposed Development.

5.12.3 The Proposed Development makes provision to safeguard land for development of the Stratfield Bridge. The bridge will be brought forward in a separate planning application and a FRA will need to be undertaken to assess the impact of the proposed bridge and outline any mitigation required.

Drainage Strategy

Surface Water

5.12.4 A surface water drainage strategy has been developed that aims to improve upon the current Site conditions where possible. This is included in Appendix 16.1: Flood Risk Assessment (Appendix D: Drainage Strategy). Within the Proposed Development, the key principles of this strategy are as follows:

- Surface water will be confined to the drainage system in a 1 in 30-year (+25% climate change) rainfall event;

- The proposed buildings on-site will be protected from flooding in the 1 in 100-year (+40% climate change) events; and
- Exceedance in the 1 in 100-year rainfall events will be managed in exceedance routes that minimise the risks to people and property.

5.12.5 Key components of the surface water drainage strategy comprise:

- The surface water drainage network collects rainwater at the source. These flows will be attenuated before discharge into the above and below ground surface water network at an agreed rate, utilising the existing topography as much as possible.
- Priority should be given to retention and direct infiltration. In areas of the Proposed Development where infiltration is possible, this will allow for a reduction in flows being conveyed.
- Green Arteries should constitute the primary drainage feature of the Proposed Development; Retention basins should be located outside flood zones and have sufficient capacity to accommodate expected runoff volumes. The shape of the basin should follow the contour lines to minimise impact on existing topography;
- Proposed buildings would incorporate the use of green/blue roofs and various other methods of water capture;
- Where falling on the roadway, it is proposed that rainwater flows will be captured by permeable paving to promote infiltration prior to being conveyed by roadside swales. These roadside swales allow for a preliminary treatment and attenuation of the flows.
- Surface water flows will then be conveyed to proposed basins where they will be attenuated and, where possible, infiltrated. Any flows up to the 1 in 100-year storm (including a 40% climate change allowance) will be discharged into adjoining watercourses, e.g. Rowel Brook, Oxford Canal. This will ensure that the Proposed Development does not adversely impact the existing flooding conditions surrounding the Site or adjacent ecological receptors, i.e. Rushy Meadows SSSI.
- Peak flow discharge will be limited to greenfield rates and the agreed mean annual maximum flow rate (or 2l/s/ha whichever is greater) for the 1 in 100-year flood risk event.
- Greenfield runoff rates will be achieved by using a Hydrobrake or other orifice control, as is required by LLFA.

5.12.6 Further details will be provided in the Development Area Briefs and RMAs. These will follow the principles established through the Drainage Strategy.

Groundwater

5.12.7 Design principles to mitigate groundwater flood risk within the Proposed Development have been incorporated into the drainage strategy as follows:

- For surface water drainage attenuation areas in the low-lying areas of the Proposed Development, the preference is for the basins to be lined, or the surface lifted to a sufficient level above the ground water level. The most appropriate method will be developed during detailed design;

- Infiltration drainage is only proposed in the River Terrace Deposits in the central/ northern plateau area of the Proposed Development at topographically high areas of the Site;
- If basements are proposed in higher groundwater flooding areas, they will need to be designed to be suitably watertight facilities that can withstand the hydraulic loadings, uplift from groundwater; and
- The risk of groundwater springing is taken into account in the surface water drainage strategy, with localised grading ensuring that this surface water is directed into the surface water drainage network. Exceedance events are to be managed in exceedance routes that minimise the risks to people and property.

Environmental Permits

5.12.8 All temporary and permanent works within 8m of the Main Rivers require an Environmental Permit from the Environment Agency. Both the Rowel Brook and the Southern Drainage Ditch are considered Main Rivers. As part of the drainage strategy and flood mitigation measures for the secondary school site, works within 8m of these watercourses will be required, therefore Environmental Permits will be required. The Environmental Permitting Regulations process is separate to planning and a Flood Risk Activity Permit will be applied for independently.

5.13 Water Use and Management

5.13.1 The potable water strategy for the Proposed Development has been developed in consultation with Thames Water to keep water use to a minimum. Key principles of this are limiting usage for residential dwellings to 110 litres/day through design measures such as low flow fittings and on-plot rainwater harvesting. Demand in commercial buildings will be kept to an absolute minimum, with non-potable water demand to be met by rainwater harvesting measures.

5.13.2 Opportunities have been considered for green / blue roofs on appropriate typologies, as well as grey water capture, cleaning and reuse. These will be refined during detailed design.

5.13.3 The landscape strategy has been designed to reduce the need for irrigation, though rainwater harvesting is proposed to be used as a water source for this purpose.

5.14 Lighting

5.14.1 Lighting design will be sensitive to the surrounding area and its users and will be developed to minimise light spill and glare, to minimise impact on local sensitive receptors (including residents, local road users and ecological receptors).

5.14.2 Detailed lighting design will come forward in line with the principles defined in the Development Specification. These include a well-designed lighting strategy that emphasises the primary circulation routes and highlights special features within the Site to ensure users feel safe in-line with the relevant industry guidance.

5.14.3 A Framework Lighting Strategy (Appendix 5.5 of this ES) has been submitted as part of the planning application and makes the following site-wide commitments to minimise the impact of the artificial lighting for the Proposed Development:

- Limit the impact of obtrusive light and undue light spill on to surrounding areas, protected natural environments and sensitive receptors which includes residential properties, Rushy Meadows SSSI, the Oxford Canal and its users (e.g. canal boat users), bats, badgers, green spaces and key dark links around the Site;
- Enhance lighting on external landscape during hours of darkness to provide safe use and mitigate upward light distribution to preserve dak sky views; and
- Provide appropriate illumination of new roads, cycle paths and pedestrian pavements to improve cycle and pedestrian connectivity.

5.15 Acoustic Mitigation

5.15.1 The A44 and railway line are sources of noise in the ambient baseline environment. Noise attenuation is proposed adjacent to the A44 and railway line to in the form of acoustic fencing and/or bunding. The design option chosen will achieve approximately a 10dB reduction in ambient noise levels where required to create an acceptable noise environment for the proposed use.

5.15.2 Noise generating uses of the Proposed Development (where such noise cannot be sufficiently reduced) or uses which generate a higher degree of servicing or vehicular traffic, will be located away from uses that are considered sensitive, such as residential dwellings or social infrastructure uses.

5.16 Climate Change Resilience

5.16.1 Policy 39 of the LPPR states that all new dwellings and new non-residential development of 1,000 sqm or more should achieve net zero operational regulated carbon emissions. The Proposed Development seeks to embed principles of climate change mitigation into the masterplan to target operational net zero carbon through:

- Reduce reliance of cars by focusing design on pedestrian and cycle movement, walkable neighbourhoods and a co-located mix of uses, including equitable and inclusive access to green infrastructure, reducing the need to travel;
- Implementation of Framework Travel Plans;
- Explore options for using rooftop solar photovoltaic panels on buildings;
- Explore the use of passive design measures to reduce the need for heating;
- Seek to minimise the use of building materials that require more frequent replacement or refurbishment;
- Creation of new SuDS features and surface water drainage pathways, including the enhancement of Rowel Brook, to increase efficiency as outlet for surface water drainage;
- An increase in total area and biodiverse value of green space, incorporating SuDS where appropriate; and

- Retention of trees/hedgerows and new tree planting to mitigate flood risk and provide increased sources of shade during hot periods.

5.16.2 While the specification of materials and construction methods will come forward at a more detailed stage and are not part of this outline planning application, it is envisaged that embodied carbon in buildings and infrastructure will be reduced as detailed design comes forward.

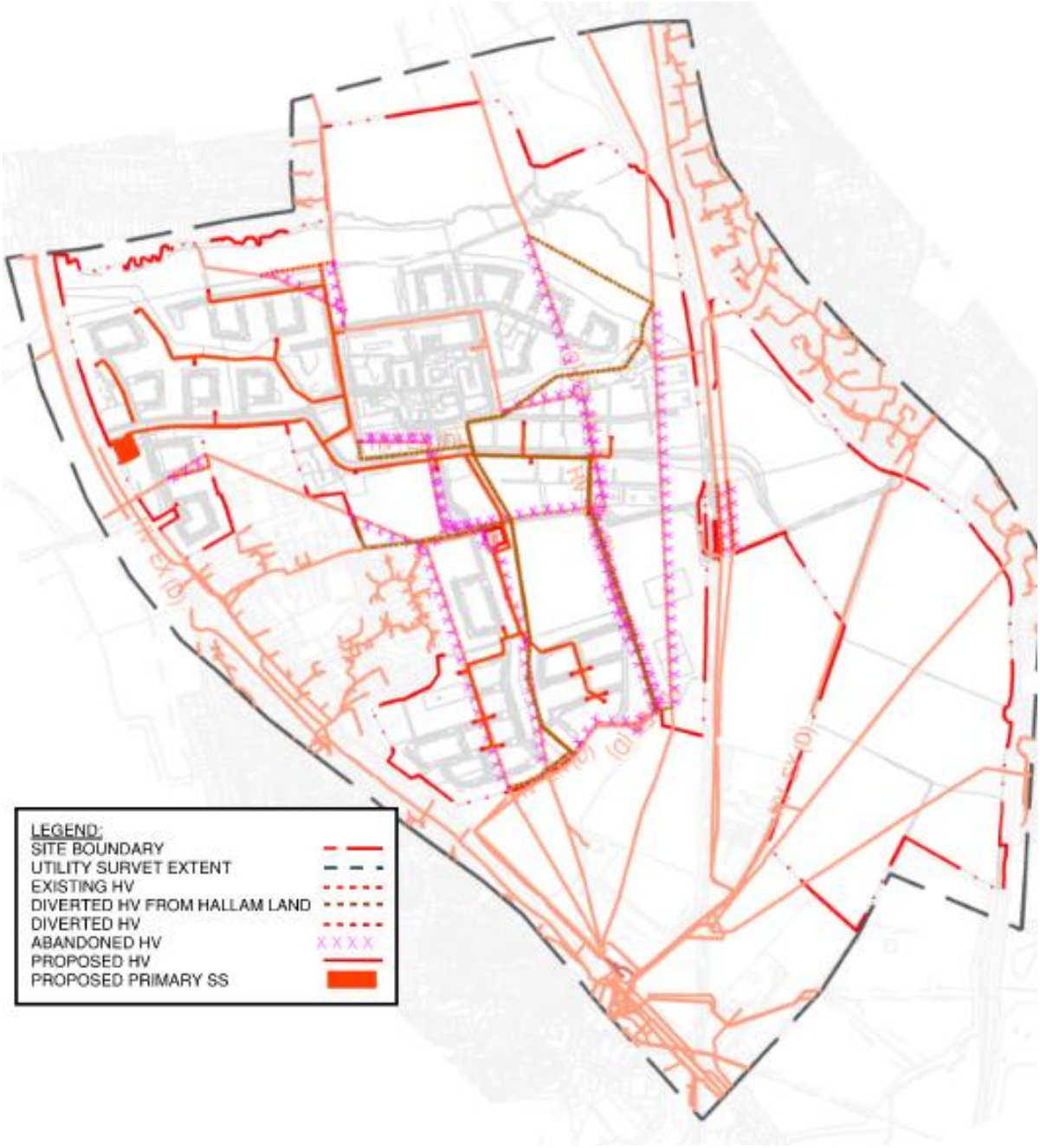
5.17 Utilities

5.17.1 Connection points for utility infrastructure for the Proposed Development have been identified. Consultation has been conducted with the respective service providers to ensure that the local networks have adequate provision to service the Proposed Development for electricity, heating potable water, drainage, and telecommunications. Details are provided in the Utilities Strategy Report, submitted with the planning application.

5.17.2 An existing medium pressure Southern Gas Network (SGN) gas main crosses the Site from Sandy Lane to BSP, across one of the primary school sites in Development Zone 02. It is assumed that this SGN gas main will be diverted to allow for the construction of any proposed building foundations. The service provider, SGN, has been consulted with regarding this diversion and discussions are ongoing.

5.17.3 A new electricity connection will be required to supply the Proposed Development to the Yarnton Sub Station adjacent to the Site across the A44. It is also proposed that the multiple overhead power lines are undergrounded through the Proposed Development works, with details to be confirmed at the RMA stage and following further consultation. Two new sub-stations will be constructed within the Proposed Development. The location of these are not confirmed, although indicative locations are shown adjacent to Begbroke Hill and the Sandy Lane level crossing, as shown on Figure 5.1.

Figure 5.1: Indicative High-Voltage Utilities Layout



5.17.4 For foul water, all the sewers crossing the Site will require diversion. An application for the public sewer rising main and sludge main diversions has been made to Thames Water with a Section 185 application alongside the planning application. Further details are provided in the Drainage Strategy (Appendix D of Appendix 16.1: Flood Risk Assessment).

5.17.5 Other existing utilities will be diverted as required following consultation with the relevant statutory undertakers.

5.18 Waste

5.18.1 The Proposed Development will look to implement the waste hierarchy of prevent, reuse, recycle, recover and, finally, dispose. Consultation was carried out with CDC between November 2022 and February 2023 to inform preparation of an Outline Waste Management

Strategy which accompanies the planning application. This following design principles have been agreed in relation to the Proposed Development:

- Waste generation rates and composition for residential and commercial properties;
- Food waste collection in flats will use 140 L food bins;
- Waste segregation and the collection frequencies for different waste streams;
- Commercial waste collection service to be provided by CDC; and
- Waste collection processes and design considerations e.g., maximum bin drag distances.

5.18.2 Waste generated by apartments will be collected in communal bins on the ground floor. For the commercial areas to be managed by OUD, several waste stores or a centralised waste storage area will be provided. Further details of the waste management strategy be determined at reserved matters stage (Tier 3).

5.18.3 It has been estimated that approximately 938,689 litres of waste will be generated per week by the Proposed Development.

5.18.4 Further details of operational waste storage and management procedures are provided in the standalone Operational Waste Management Plan.

5.19 Energy and Sustainability

5.19.1 CDC ESD Policy 3 requires that non-residential buildings target BREEAM Very Good. The Proposed Development commits to this and targets above this standard. A site-wide Framework Energy and Sustainability Strategy has been submitted alongside the planning application.

5.19.2 The energy strategy for the Proposed Development adopts the Energy Hierarchy: Lean, Clean, Green in-line with local policy. This aims to minimise the energy consumption low energy, passive measures, and highly efficient systems before the deployment of low and zero-carbon technologies. A decentralised, all electric heating and cooling strategy will be adopted to serve both residential and non-residential buildings. This will include potential use of solar PV, solar thermal and heat pumps, subject to detailed design. An ‘all-electric’ approach will achieve net zero-carbon emissions from operational energy use when used in conjunction with on and off-site renewable electricity sources.

5.19.3 The Proposed Development will deliver net zero operational carbon buildings and a development that will be resilient to climate change.

5.19.4 Circular economy principles will be central to decision making to reduce the reliance on finite resources. The masterplan will create new, large open spaces that will increase biodiversity and foster wellbeing and inclusion.

5.19.5 The Cherwell Residential Design Guide SPD also requires masterplans to consider the potential of Passivhaus for buildings. Passivhaus principles will be adopted for housing during design and construction to focus on performance based outcomes. WELL Community standards and Building with Nature have also been integral considerations during the masterplan design process.

5.20 Management and Stewardship

5.20.1 The Begbroke delivery partners, with long term interests in the land, will maintain long-term ownership and management of the majority of the Proposed Development, with the exception of certain key infrastructure, e.g. adopted roads. Sustainability, public realm strategies and the embedding of community uses will be central to this approach. This will be manged through such documents as the Outline LEMP, which defines management objectives, a management programme, and roles and responsibilities for these works.

References

[1] Department of Transport, 2020. Cycle infrastructure design (LTN 1/20). July 2020