

North West Cambridge Masterplan

Environmental Statement

Replacement Non-Technical Summary

INTRODUCTION

The University of Cambridge (the Applicant) is seeking outline planning permission for the redevelopment of a 114 hectare site (referred to as 'the site') north-west of Cambridge, Cambridgeshire. The site is located across the administrative boundaries of South Cambridgeshire District Council (SCDC) and Cambridge City Council (CCC) and are therefore the planning authorities for the site. The Greater Cambridge Shared Planning Service (GCSPS) manages planning services on behalf of SCDC and CCC. The site boundary is as defined by the site location plan shown on **Page 3**, with the site location within a wider context shown on the opposite side of this page.

The planning application is for the demolition of the existing buildings and the construction of a mixed-use development, primarily comprising of residential uses, including student accommodation, co-living and senior living. The Proposed Development will also provide flexible employment floorspace, academic floorspace, floorspace supporting retail, nursery, health and indoor sports and recreation uses, as well as public open space, sports facilities, amenity and play space, allotments and landscaping works. It will also include highway and infrastructure works. The Proposed Development is further described and illustrated on **Pages 5 to 11**.

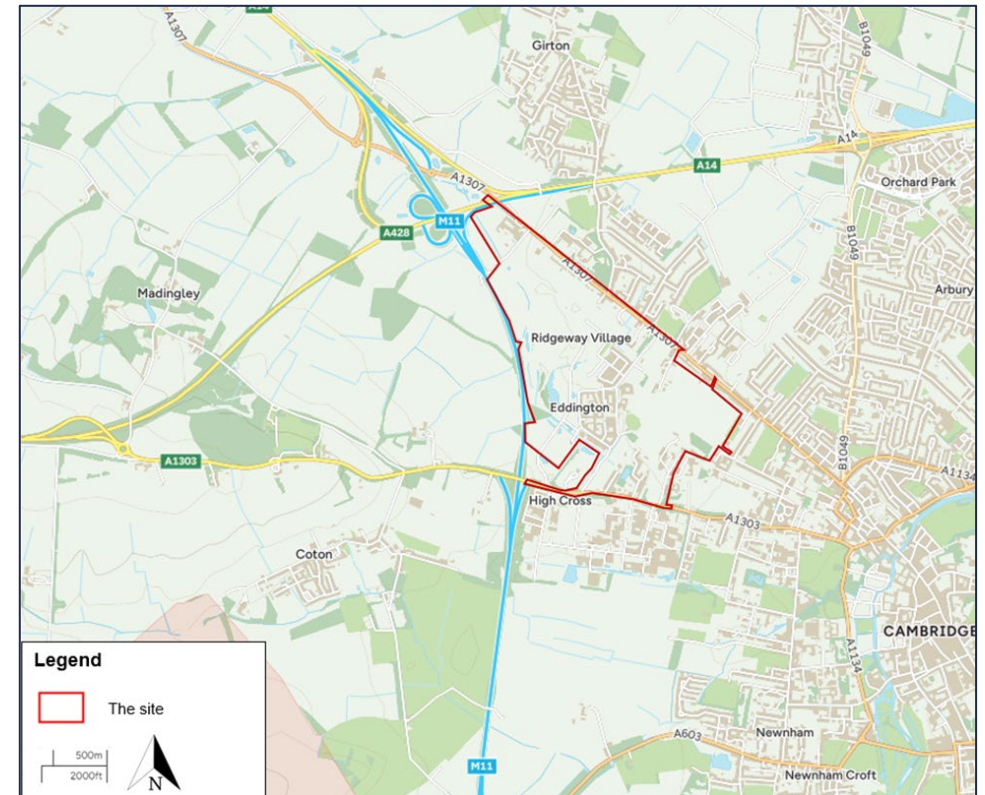
An Environmental Impact Assessment (also referred to as an EIA) has been carried out to identify the likely significant environmental effects that are likely to occur during the enabling, demolition and construction works and once the Proposed Development is completed and in use. This document is a Non-Technical Summary of the findings of the EIA which are reported on in the Environmental Statement. This Non-Technical Summary has been prepared to explain the Proposed Development, its potential environmental effects and the measures proposed to protect the environment.

Purpose of the Environmental Impact Assessment and Non-Technical Summary

Environmental Impact Assessment is a process that allows the significant beneficial and adverse (positive and negative) effects of certain projects on the environment to be identified and reported upon. This is required by law and helps the local authority (in this case, GCSPS) to understand the significant environmental effects of a new development when they make their decision on whether to grant planning permission. Measures to protect the environment,

otherwise known as 'mitigation measures', are also identified as part of the Environmental Impact Assessment process.

The below figure shows the location of the site in the context of the surrounding area



Base source map: OS Maps (2025). It should be noted, the indicative site boundary shown for the purposes of illustrating site location. Excluded areas from the planning application redline boundary (as shown in the figure on Page 3) are not included within this figure.

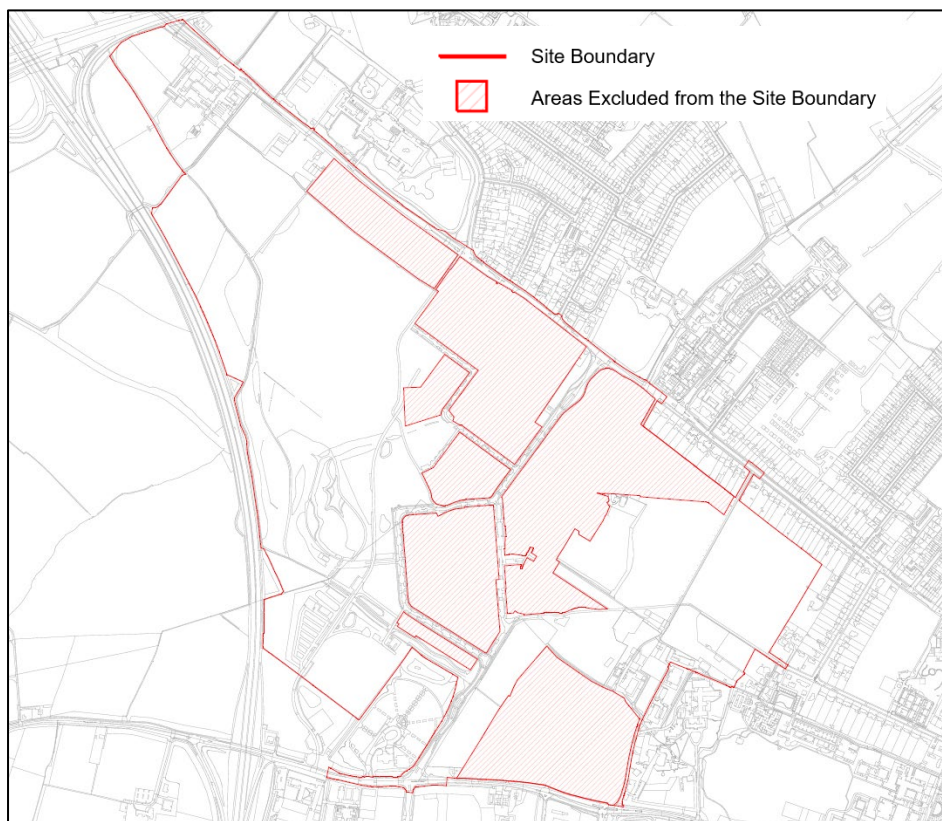
The Environmental Impact Assessment supports a planning application that has been submitted for the Proposed Development. The Environmental Statement and this Non-Technical Summary document is available for viewing on the [Greater Cambridge Shared Planning Portal](#). Comments on the planning application can be provided online via the [Greater Cambridge Shared Planning Portal](#).

Electronic Copies of this Non-Technical Summary and the Environmental Statement are available free of charge and can be provided via a downloadable file provided by email. Printed copies of the Environmental Statement and NTS would incur a printing and postage charge. For further details, please contact hello@triumenv.co.uk with reference in the email header of "Environmental Statement Request – North West Cambridge Masterplan" or Tel: +44 (0) 203 887 7118.

Trium Environmental Consulting LLP, with the input of technical specialists in their relevant environmental fields, has undertaken the Environmental Impact Assessment for the Proposed Development, and has prepared the Environmental Statement and this Non-Technical Summary document.

The Environmental Statement is made up of a number of technical documents, and so the purpose of this Non-Technical Summary is to provide an overview of the Environmental Statement in non-technical language.

The Site Location Plan (below) illustrates the area in which planning permission for the Proposed Development is sought by the Applicant



To read more detail about the site, the legislative requirements for an Environmental Impact Assessment and relevant guidance and planning policy, see **ES Volume 1, Chapter 1: Introduction, ES Volume 1, Chapter 2: EIA Methodology** and the [Town and Country Planning \(Environmental Impact Assessment\) Regulations](#).

Site Description

The site is bordered by:

- The A14, Girton College, residential properties and agricultural fields to the north;
- Residential properties (including student accommodation) and sports grounds to the east;
- Madingley Park and Ride, Madingley Road (A1303), residential properties and the University of Cambridge buildings to the south; and
- The M11 to the west.

The majority of the site consists of grassland fields and construction sites, and also includes sections of Huntingdon Road (A1307) and Madingley Road (A1303). The site also contains areas of hardstanding and an area used for car parking to the south of the site.

The site comprises a variety of amenity and green space, including swales, ponds, grassland, areas of woodland, hedgerows and individual trees. The Washpit Brook is the closest watercourse to the site which runs through the site from south-east to the north-west

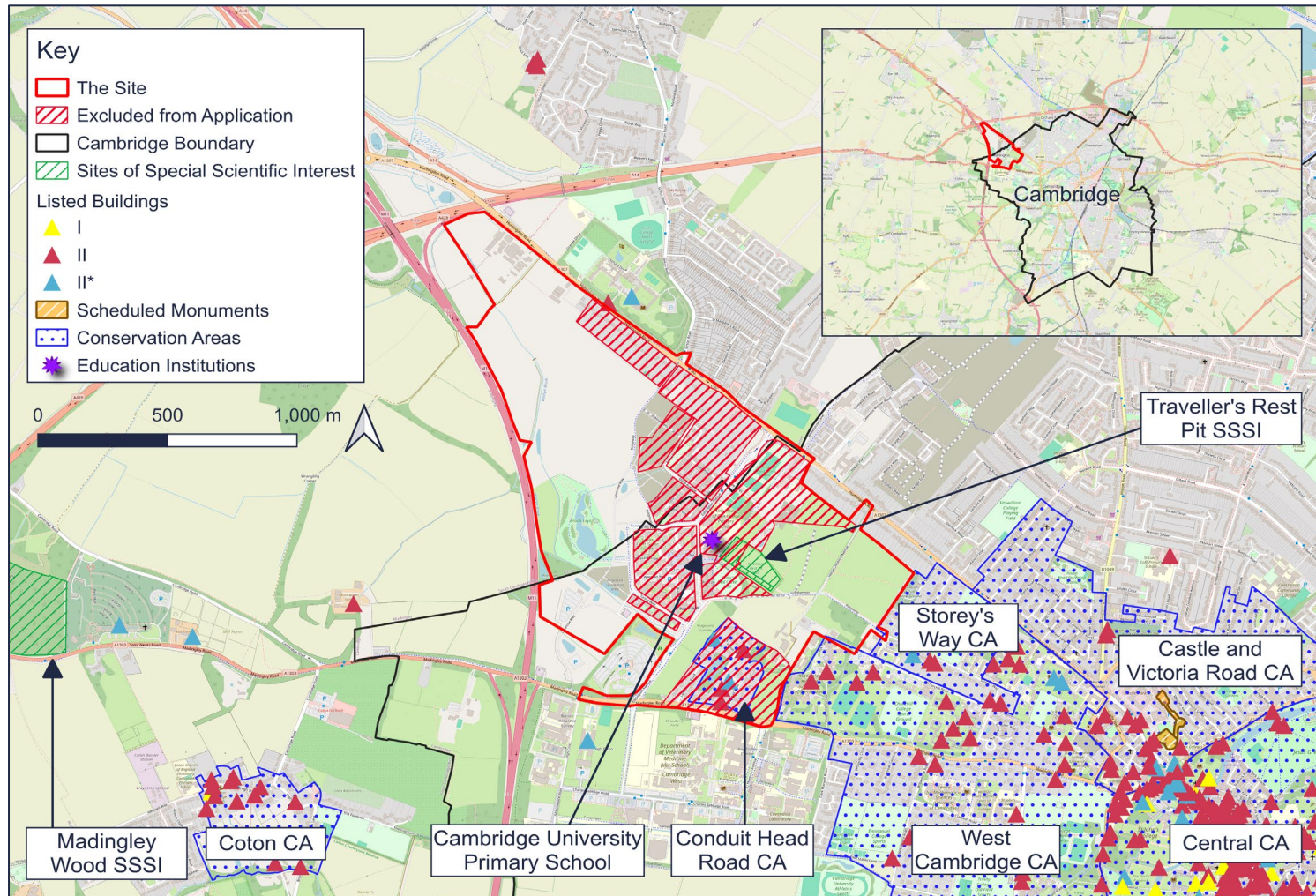
Vehicular access to the existing site can be gained via either Huntingdon Road (A1307) to the north or Madingley Road (A1303) to the south of the site. Pedestrian access can also be gained from Storey's Way, Madingley Rise, Horsechesnut Avenue and Bunkers Hill, with Public Right of Way (Footpath 99/5) crossing the site in the north-west corner.

The entire site is designated as a Major Development site within the Cambridge Local Plan and the South Cambridgeshire Local Plan, and is allocated as a Major Development site within the North West Cambridge Area Action Plan. The site also forms part of the North West Cambridge Development Masterplan redevelopment site, which was granted outline planning permission in 2013 (referred to as the '2013 OPP'). A portion of the 2013 OPP, known as 'Phase 1' has been built out, with a number of other Phase 1 plots currently under construction. The areas of the site shown 'excluded from application' in the Site Location Plan are areas of the 2013 OPP which are excluded from this planning application, though located within the site boundary.

To read more detail about the planning history of the site, including the 2013 OPP and its relation to this planning application, see **ES Volume 1, Chapter 1: Introduction, ES Volume 1, Chapter 2: EIA Methodology**.

Environmental and Local Context

The surrounding area is comprised mainly of agricultural fields, motorways and major road networks, as well as built-up areas with residential properties, including student accommodation, and educational buildings associated with the University of Cambridge. The environmental context of the site and surrounding area is presented below¹.



To read more detail about the environmental context of the site, see *ES Volume 1, Chapter 3: Alternatives and Design Evolution*

¹ CA (Conservation Area) – An area of special architectural or historic interest that a local planning authority has designated for preservation or enhancement of its character and appearance;
 SSSI (Site of Special Scientific Interest) – An ecological site designated for its particular interest to science, for example due to containing rare species or important geological features.
 Listed Building – buildings of special architectural or historic interest with legal protection.

PROPOSED DEVELOPMENT

The Proposed Development is for a phased (constructed in distinct stages) mixed-use development providing up to 3,800 residential dwellings, up to 1,800 student accommodation units, up to 1,800 co-living² units and senior living. It will also provide flexible employment floorspace, academic floorspace, floorspace supporting retail, nursery, health and indoor sports and recreation uses, as well as public open space, sports facilities, amenity and play space, allotments and landscaping works.

The Proposed Development will also include highway and infrastructure works. Buildings will generally range from up to 28.5m Above Ordnance Datum³ to up to 49.5m Above Ordnance Datum (between up to 3 and up to 7 storeys). Some locations within the centre of the site may have buildings with a maximum height of up to 52m Above Ordnance Datum (up to 8 storeys). Building heights are illustrated below on **Page 7**.

The Applicant is seeking an initial form of planning permission for the Proposed Development which agrees to architectural plans which set out the maximum amount of development for each proposed land use, including the maximum height and land use floorspace limits, as well as the means of access to the site, including detail of the North-West Huntingdon Road access, which is proposed to be one of the primary means of access to the site. The planning application will also seek permission for the minimum amount of green infrastructure, play and open space across the Proposed Development.

The more detailed architectural design is then subject to a further (later) 'reserved matters⁴' application.

² Co-living is a housing model whereby residents have private units and share amenities such as kitchens and lounges.

³ The term 'Ordnance Datum' refers to the height of mean sea-level, taken from a reference point at Newlyn in Cornwall.

Land Uses and Amount of Development

The maximum amount of development for residential and non-residential uses sought for approval (measured in Gross External Area⁵ (GEA) are:

Residential Element

- Residential – Up to 365,000m² GEA, equating to up to 3,800 units;
- Student Accommodation – Up to 52,000m² GEA, equating to up to 1,800 units; and
- Co-living – Up to 52,000m² GEA, equating to up to 1,800 units.

It should be noted that all of these units could not come forward at the same time due to the maximum floorspace amount of 417,000m² GEA allocated to these uses.

50% of the residential dwellings will be Key Worker Housing for University of Cambridge and College staff.

The Proposed Development will also provide up to 6,500m² GEA of senior living.

Non-Residential Element

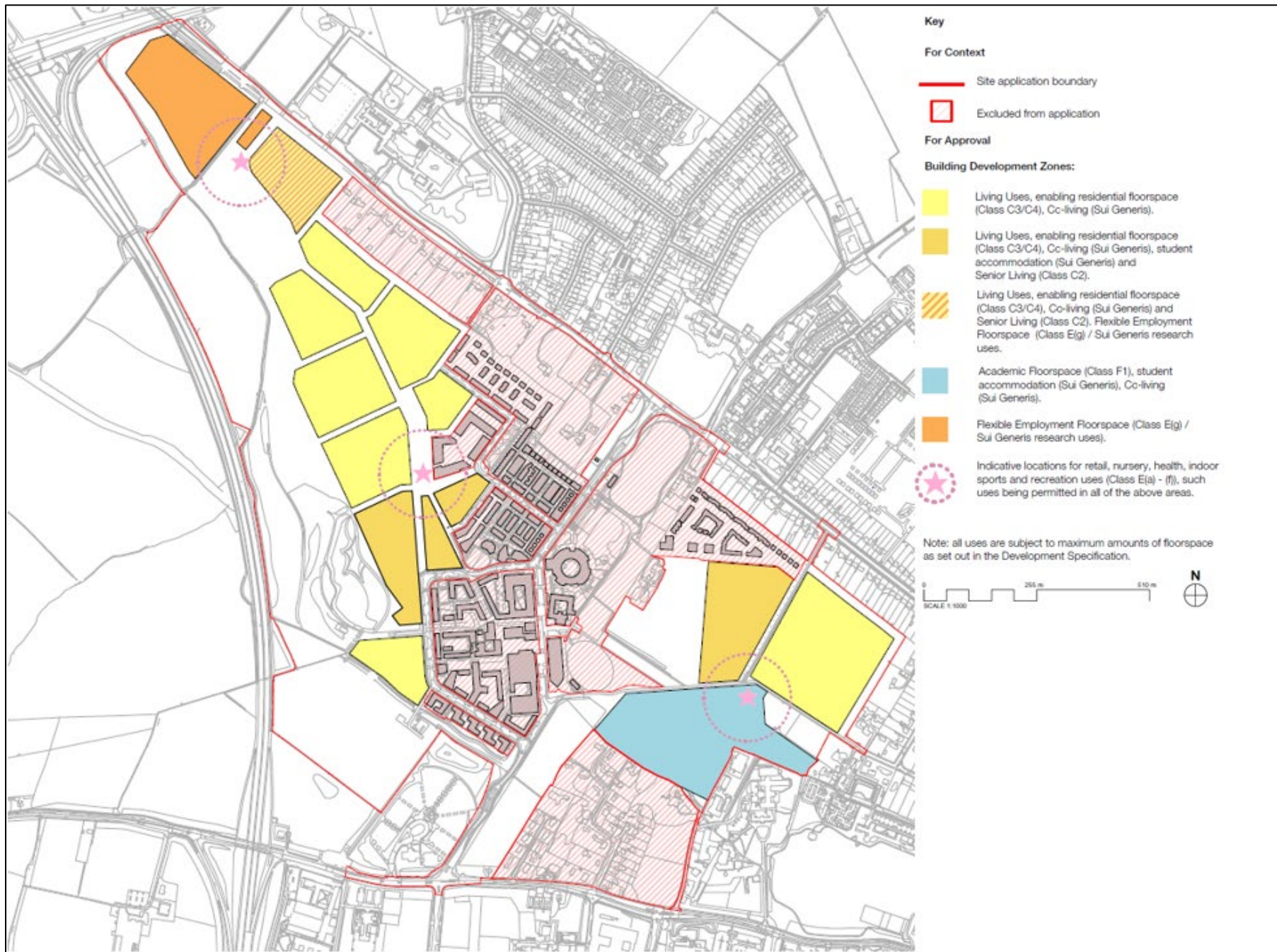
- Flexible Employment Floorspace – Up to 40,000m² GEA;
- Academic Floorspace – Up to 60,000m² GEA; and
- Supporting retail, nursery, health and indoor sports and recreation uses – Up to 3,500m² GEA.

Due to the outline nature of the proposals, this land use plan shown below are simple block images on the plans. Details of these areas will be subject to later 'reserved matters' applications, as mentioned above.

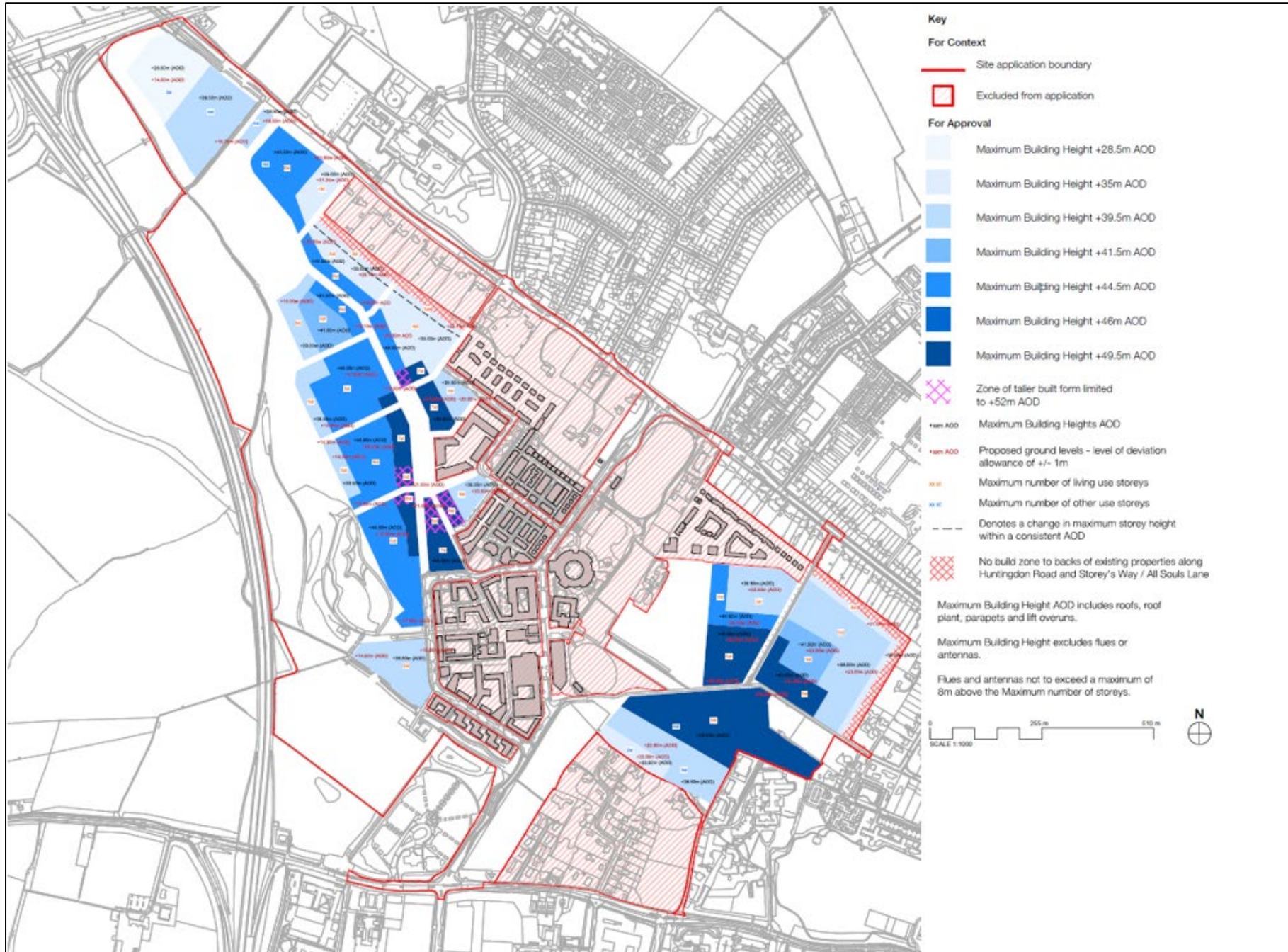
⁴ Reserved Matters Applications relate to elements of a scheme in which detail is sought for approval after initial outline planning permission is granted.

⁵ Gross External Area (GEA) – The area of a building measured externally at each floor level.

The Land Uses for the Proposed Development



Maximum Heights of the Proposed Development



Means of Access and Movement

The means of access and movement, including vehicle access, segregated cycle access and shared pedestrian access routes will be provided as shown on **Page 9**. The main access route through the site will be a new primary road known as Cartwright Avenue, which will connect Huntingdon Road (A1307) at the north-west of the site to Turing Way (located within Phase 1 of the 2013 OPP). Vehicle access to the site will be provided by six primary access points, three of which are existing. Three new vehicular access points to the site are proposed at the following locations:

- North-West Huntingdon Road Access – a new signalised junction on Huntingdon Road (A1307) joining the proposed Cartwright Avenue;
- New vehicular access located to the north-west of the site from Huntingdon Road (A1307) into Plot A; and
- New vehicular access located to the north-west of the site from Huntingdon Road (A1307) into Plot B2.

Detailed Access (North-West Huntingdon Road Access)

The North-West Huntingdon Road access is proposed as one of the primary means of access to the site and will provide vehicular access to the proposed Cartwright Avenue, and will be sought for approval in detail within the planning application. This will comprise new signalised junction, cycle infrastructure, and pedestrian crossings.

Pedestrian and Cycle Access

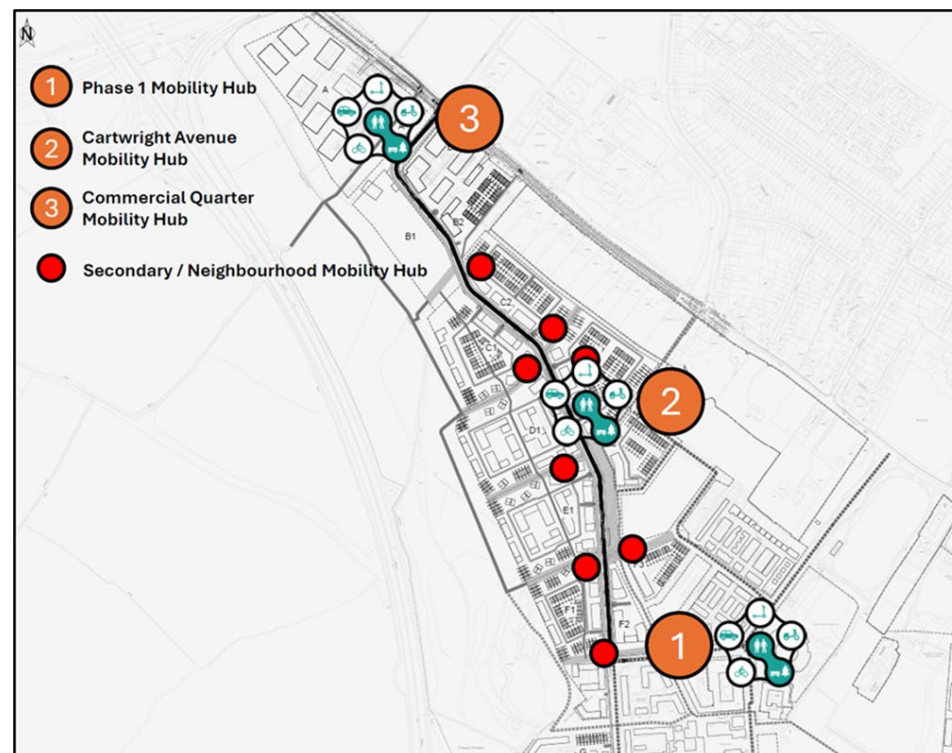
Pedestrian corridors along the existing Public Right of Way (Footpath 99/5) and footpaths which cross the site are to be retained and the network is extended with new footpaths and cycleways. New pedestrian and cycle routes both on and off street are proposed, which will provide connection to essential facilities, services, amenities and open space. The detail of these pedestrian and cycle links will be designed at a later ('reserved matters') stage.

Public Transport

The Proposed Development has been designed to continue to accommodate buses via Eddington Avenue and Cartwright Avenue has been designed to the

appropriate width to accommodate new and diverted buses via the North-West Huntingdon Road access. A network of three primary mobility hubs are included within the Proposed Development, and shown in the figure below. The Mobility Hubs are located along Cartwright Avenue.

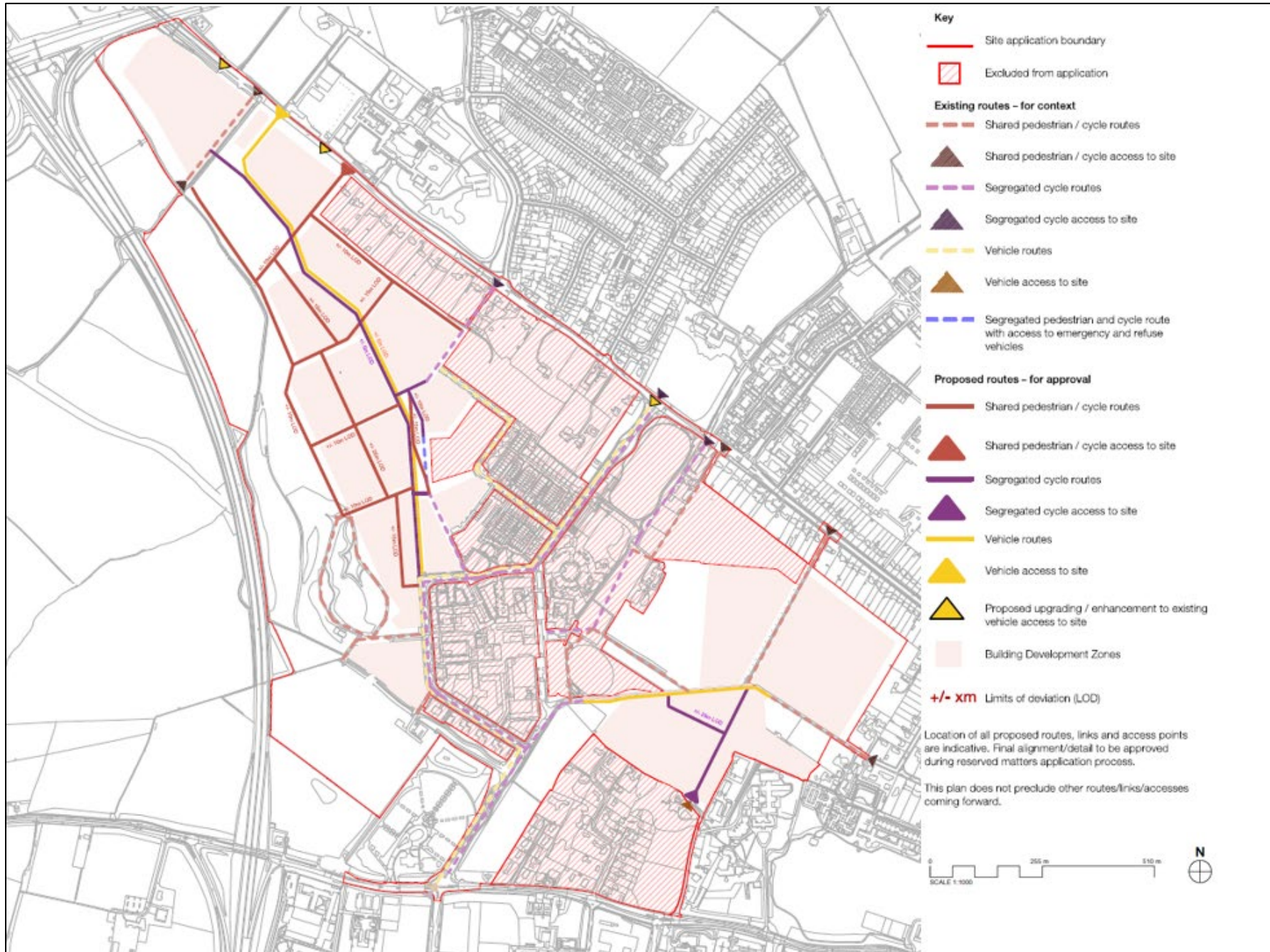
Indicative Mobility Hub Locations



Car and Cycle Parking

Car and cycle parking will be provided in line with the North West Cambridge Area Action Plan, which sets out planning policies to guide development in the area. Car parking provision will meet the needs of the Proposed Development. At least 5% of the total number of car parking spaces will be disabled spaces, in line with the North West Cambridge Area Action Plan. Electric vehicle charging provision will be provided in accordance with Greater Cambridge Sustainable Design and Construction Supplementary Planning Document (2020), which provides greater detail on guidance for Sustainable Design and Construction as set out in the Local Plan.

The Proposed Development's Means of Access and Movement



Character Areas

The Proposed Development will adopt a 'Character Area' approach, meaning each character area has a different identity, appearance and function, keeping in line with the surrounding local area. The character areas are as follows:

- Shared Gardens – informal open space with no vehicle access, including play space and community growing spaces;
- Neighbourhoods – a blend of buildings and landscapes and multi-use streets;
- Community Lane – pedestrian-priority street, connecting the school, community centre and local centre to formal sports areas to the north of the site;
- Gravel Hill – mix of uses including an academic quarter, residential and student accommodation;
- Cartwright Avenue & The Common – a spine providing vehicular access to the west of the site; a key route linking mobility hubs; the Common provides public realm and sits to the south of Cartwright Avenue;
- Innovation Street – cluster of innovation uses, including mid-tech industries and employment uses; and
- Brook Leys – a green edge to the Proposed Development, including the existing Washpit Brook.

Green Infrastructure, Play and Open Space

The Proposed Development will include a variety of landscaping features, with each phase of the Proposed Development providing public and private open space for residents and visitors to the site. Green infrastructure takes the form of the following:

- Informal open space and associated facilities, new planting, public art;
- Formal equipped play spaces, informal playable spaces and play on the way;
- Formal sports pitches and courts, informal fitness and running trails;
- Allotments and community gardens;
- Structural planting; and
- Existing trees / woodlands.

A total of 59.53 hectares of open space will be provided (including informal open space, sports pitches / courts and allotments and community gardens), as well as 2.00 hectares of play space will be provided across the site.

Sports Pitches and Recreational Uses

Sports pitches and recreational uses will be provided within the Proposed Development. Formal sports uses will be provided in two main locations:

- Amenity Cluster C – located immediately west of the existing Madingley Park and Ride; and
- Amenity Cluster D – located in the north-western corner of the site.

The design of the sports and recreational uses will be detailed at a later ('reserved matters') stage.

Energy Strategy

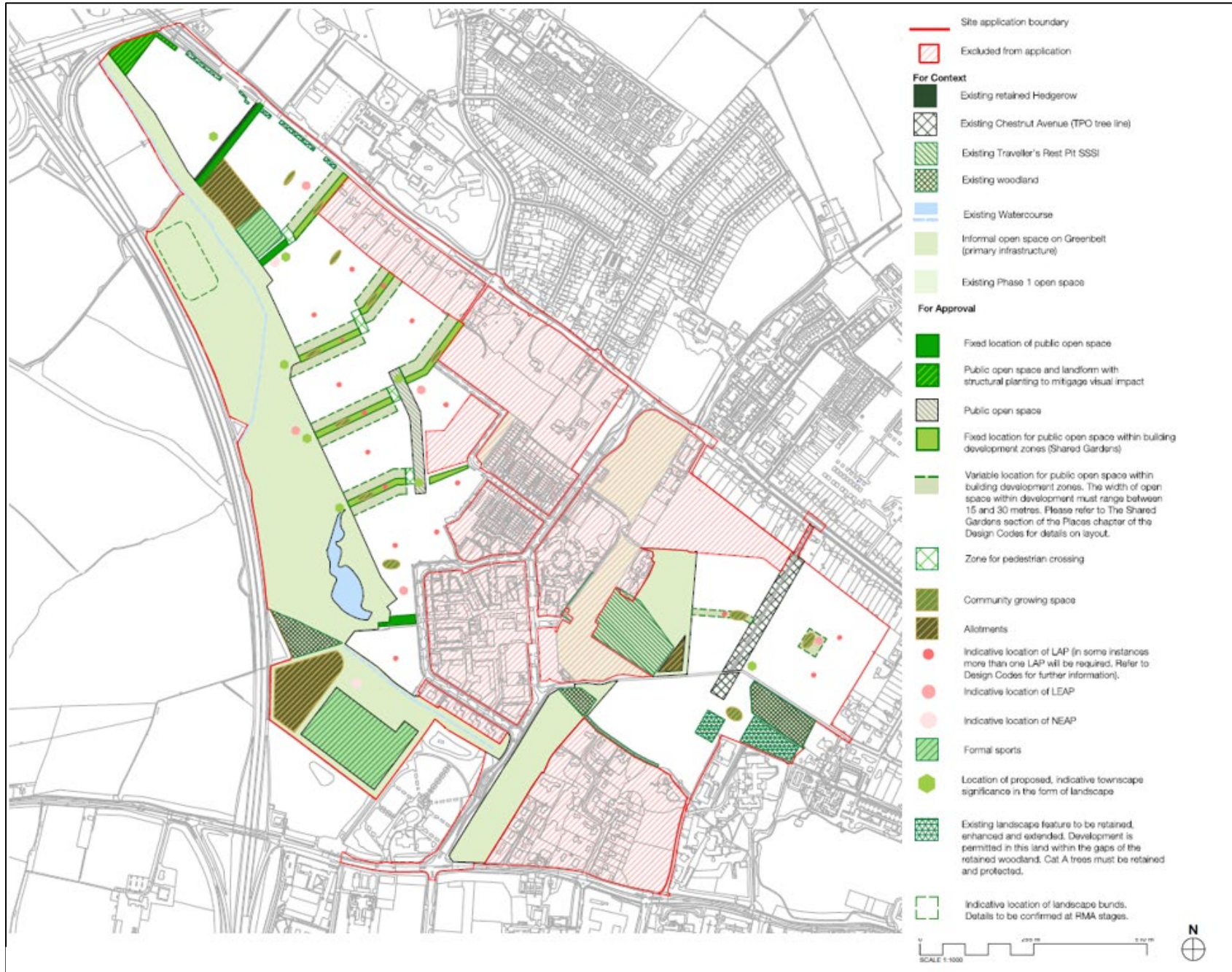
An all-electric heating strategy is proposed, with the utilisation of Air Source Heat Pumps being the preferred option for the provision of space heating, cooling and domestic hot water. It is anticipated that flat roof space will include roof-mounted solar photovoltaic panels. Other energy-saving measures such as energy efficient lights will be used.

Illustrative Masterplan

An Illustrative Masterplan has been developed, which represents one way the Proposed Development could be designed within the maximum proposed floorspace, as detailed on **Page 5**. The Illustrative Masterplan is not sought for approval as part of the planning application, but instead is used for illustrative purposes.

The Illustrative Masterplan is shown below on **Page 12**.

The Proposed Development's Green Infrastructure, Play and Open Space Plan



Illustrative Masterplan



ENABLING, DEMOLITION AND CONSTRUCTION

The current expectation is that the enabling, demolition and construction works would take approximately 10 years, starting with a period of enabling works to prepare the site for the construction of the main infrastructure, before the main construction works commence. The completion of the construction of the Proposed Development is expected by the first quarter (Q1) (January to March inclusive) of 2037.

The Proposed Development will be constructed in phases, with Phase 1 of the 2013 OPP (excluded from this planning application) already part built-out, part under construction. Phases 2, 3 and 4 being sought for approval under this planning application are assumed to be brought forward as follows:

- Phase 2 – located to the north-west of the site;
- Phase 3 – located in the centre of the site; and
- Phase 4 – located to the east of the site.

See the figure below on **Page 13** for a map showing the indicative phasing.

Construction working hours and timing of deliveries will fall in line with best practice and Cambridge City Council and South Cambridgeshire District Council guidance. A Construction Environmental Management Plan has been submitted to accompany the planning application. The Construction Environmental Management Plan explains how the works and the site will be managed including environmental management and precautions and measures to be implemented to minimise the exposure of workers, surrounding commercial users, residents and the general public to potentially adverse effects of construction activity.

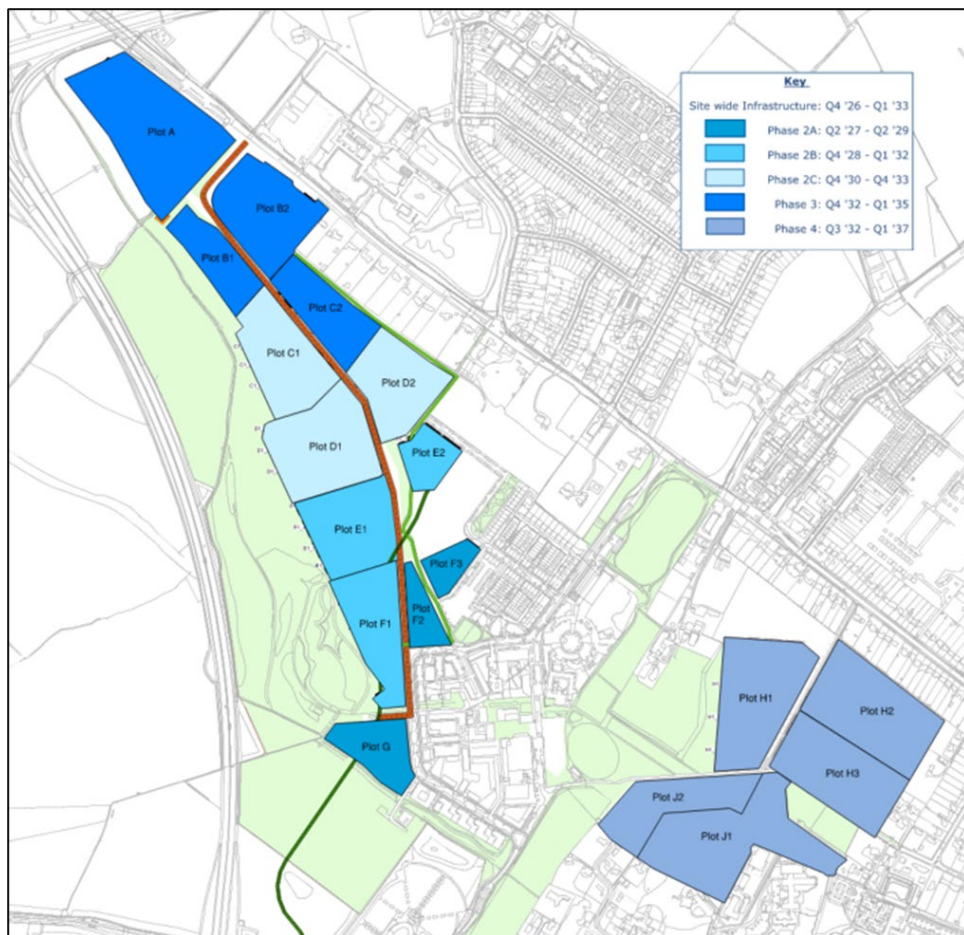
The indicative programme has been prepared by an experienced construction advisor and shows the construction of the phases occurring in distinct periods, with some overlap between the end of the construction of one phase, and the start of construction of the next phase.

Construction vehicles will primarily enter the site from Huntingdon Road. Two additional site access points, accessed from Madingley Road (A1303) will be used at later stages of the construction programme. Construction road traffic is anticipated to peak in the months of August, September, and October 2033 of the construction period and the anticipated daily number of construction vehicles is estimated to peak at approximately 91 vehicles per day (65 Heavy Goods Vehicles, and 26 Light Goods Vehicles) which corresponds with when most construction activity will be occurring on-site.

To minimise the likelihood of congestion during the enabling, demolition and construction period, strict monitoring and control of vehicles entering and egressing the sites will be implemented, and construction vehicles will follow pre-approved routes, where possible. Construction deliveries will be carefully planned with delivery times agreed with each contractor using a delivery management system. Delivery schedules will be produced in order to regulate deliveries and eliminate bottle necks arising from delivery vehicles arriving simultaneously.

Throughout the construction phase, community liaison and complaints procedures will be followed.

Indicative Proposed Development Plot Layout



To read more about the enabling, demolition and construction works and the Proposed Development, see **ES Volume 1, Chapter 4: The Proposed Development** and **ES Volume 1, Chapter 5: Enabling, Demolition and Construction**.

ALTERNATIVES & DESIGN EVOLUTION

The extent to which consideration has been given to alternative sites, the option of not developing the site, and the design evolution process that has taken place is reported in the Environmental Statement. The design of the Proposed Development has been influenced by various environmental studies and discussions/feedback received from various stakeholders. Both the Environmental Statement and the Design and Access Statement submitted with the planning application explain this process in more detail, with a summary below.

Do Nothing / No Development Alternative

The Do-Nothing / No Development Alternative refers to the option of leaving the site in its current state, i.e. no development is undertaken. This would not be desirable as the site offers an opportunity to bring forward the future phases of the North West Cambridge Masterplan. The site is also designated as a Major Development site within the Cambridge Local Plan and the South Cambridgeshire Local Plan, and is also allocated as a Major Development site within the North West Cambridge Area Action Plan.

Therefore, leaving the site in its current site will result in missed opportunities to support the North West Cambridge Development Masterplan. The Proposed Development for the site represents an opportunity for redevelopment to provide new residential units, student accommodation, co-living units, senior living, academic and employment generating floorspace, retail, nursery, health and indoors sports and recreation facilities, and public open space.

Regeneration of this nature will facilitate housing provision, new employment opportunities and other direct and indirect socio-economic benefits (refer to **ES Volume 1, Chapter 6: Socio-Economics** for further details), and will contribute to meeting the long-term housing, academic and employment needs of the University of Cambridge, with 50% of the proposed housing to meet the needs of UoC key workers. The Proposed Development will also provide a new transport corridor through the site (Cartwright Avenue), with pedestrian and cycle access, and the provision high-quality public realm and landscaping. Under a Do-Nothing scenario the benefits associated with the Proposed Development would not be realised and therefore the Do-Nothing Alternative has not been considered further.

Alternative Sites

No alternative sites or locations have been considered for the Proposed Development. The Applicant owns the site which is designated as a Major Development site in the Cambridge Local Plan and the South Cambridgeshire Local Plan for redevelopment. The site is deemed a suitable location for the redevelopment of a residential-led, mixed use scheme and has an extant consent with Phase 1 of the 2013 OPP already built out. The site is therefore considered to be suitable for the Proposed Development; consideration of alternatives sites has not been considered further.

Alternative Designs and Design Evolution

Initial design considerations, design brief and the framework principles have guided the evolution of the Proposed Development. No wholesale alternative designs have been developed, which differ from these starting principles; however, the design of the Proposed Development has emerged and evolved in response to the initial design principles and feedback from the pre-application consultation process (both in terms of the public consultation process and the pre-application discussions with GCSPS) as well as design development, and through technical and environmental analysis of the scheme.

Important Design Considerations

Following analysis of the site and the surrounding context, initial design options were explored. Key factors considered during the design evolution of the scheme included:

- Phase 1 of the 2013 OPP (the phase of the scheme which achieved consent in 2013 and which is part built-out, part under construction) and the opportunity to create an enhanced, integrated masterplan which meets the needs of the wider community;
- Opportunity for the creation of new housing, including affordable housing for University of Cambridge workers;
- The proximity of the site to the M11, which presents an existing source of road traffic noise;
- The existing topography (shape and features of the site);

- Existing ecological considerations, including the Washpit Brook, lagoons, and existing woodlands, with associated no development zone buffers around these features;
- Opportunities for enhancements to existing woodland and hedgerows;
- Proximity to built heritage assets, including Storey's Way Conservation Area and Conduit Head Road Conservation Area;
- Existing routes through the site and improve connectivity within the site and wider area; and
- Existing residential receptors to the east and north of the site

Proposed Development Design Evolution

The design of the Proposed Development has evolved in response to consultation with GCSPS, local stakeholder groups and other statutory consultees and the community via public consultation. It has also evolved in response to the key environmental issues and pre-application consultation as set out above. The key changes included:

- Cartwright Avenue (the primary road through the west of the masterplan) was realigned from the west of the site to a more northerly direction;
- Site layout and land uses have been developed to increase accessibility, to increase cohesion between the different residential groups (for example student accommodation was relocated alongside the academic uses to create an academic cluster, with residential units separate, and senior living was located closer to the local centre and activity hubs);
- Taller buildings were moved towards the centre of the site to reduce the impact on the visibility of built heritage receptors (i.e. listed buildings in the vicinity of the site) and existing residential receptors;
- Green infrastructure has evolved to enhance biodiversity and create vehicle-free green spaces for the community; and
- The western portion of the site (Brook Leys) has been retained as an open green space to provide a natural buffer from the built form of the Proposed Development and forms a key part of the Green Infrastructure.

To read more about the design evolution of Proposed Development, see ES Volume 1, Chapter 3: Alternatives and Design Evolution

ASSESSMENT METHODOLOGY

Scoping

One of the first stages of the Environmental Impact Assessment process is referred to as 'Scoping'. Scoping identifies the environmental topic areas which have the potential at that stage to result in significant effects, and therefore should be investigated further as part of the next stage of the Environmental Impact Assessment process.

As part of the 'Scoping' process, Trium Environmental Consulting LLP prepared and issued a 'Scoping Report' to GCSPS, which set out the nature and purpose of the Proposed Development, and the potential environmental issues and effects to be considered together with the proposed approach to the Environmental Impact Assessment. This was issued to GCSPS in November 2024.

The Scoping process identified that the following technical topics had the potential for significant effects and should be 'scoped-in' (i.e. included) to the Environment Impact Assessment: Air Quality; Built Heritage; Climate Change and Greenhouse Gases; Ecology and Biodiversity; Ground Conditions and Land Contamination; Landscape and Visual Impact Assessment; Land Take and Soils (Agriculture); Noise and Vibration; Socio-Economics; Traffic and Movement; and Water Resources, Flood Risk and Drainage.

All other environmental topics did not need to be assessed within the Environmental Impact Assessment as there were either no likelihood for significant effects; or, where there was, suitable mitigation and control measures could be committed to at the Scoping stage and incorporated into the design of the Proposed Development (as relevant) to ensure there would be no likely significant effects. Standalone planning deliverables have instead been produced for these topic areas.

GCSPS issued their opinion (also known as a 'Scoping Opinion') on 23 January 2025. The EIA Scoping Opinion agreed with the topics to be 'scoped in' and 'scoped out' of the Environmental Statement. The EIA Scoping Opinion also provided commentary around further details the council and statutory consultees would like to see included within the Environmental Statement and wider planning application. Topic specific points are addressed within the relevant Environmental Statement chapters. The Environmental Statement has been prepared with due regard and accordance with the agreed scope.

Impact Assessment Methodology








The Environmental Impact Assessment process is undertaken in a number of stages, with each technical topic assessment following the same process, as shown in the image below. Potential environmental effects have been predicted using desk studies, surveys, computer modelling and professional judgement, as set out within the assessment methodology section of each technical assessment within **Volume 1** (the main report) and **ES Volume 2** (the 'Landscape and Visual Assessment') of the Environmental Statement.











ENVIRONMENTAL IMPACT ASSESSMENT – ENABLING, DEMOLITION AND CONSTRUCTION EFFECTS & MITIGATION

The EIA process has assessed the *potential (or likelihood)* for significant environmental effects, and where relevant and possible, has committed to mitigation to reduce or eliminate adverse (i.e., negative) effects. Potential effects (before mitigation) have been identified in the tables below as either ‘significant’ or ‘not significant’. The two tables below set out a summary of the key mitigation measures that will be put in place to avoid, prevent and reduce the potential significant effects that could arise during the enabling works, demolition and construction of the Proposed Development and once it is complete and in use (i.e., mitigation measures). The tables present mitigation measures that can be secured via planning conditions or obligations. Measures that are embedded into the Proposed Development’s design are largely not included in the below tables, as these will be secured via the granting of the planning application.

Enabling, Demolition and Construction Effects and Mitigation

| Technical Topic | Potential Effect | Mitigation To Reduce the likelihood of Significant Effects |
|-----------------------------|--|--|
| Socio-Economics | Loss or displacement of existing uses currently on site and generation of employment within construction industry. <i>(Significant effects are not likely)</i> |  Existing employment currently on site will be relocated to other University of Cambridge sites. The Proposed Development will provide additional commercial and academic floorspace than currently exists on site. Although not a form of mitigation, this will see beneficial effects once the Proposed Development is complete. |
| Traffic and Movement | Increased vehicular movements in the local area will occur as a result of the construction activities. <i>(Significant effects are not likely)</i> |  The Applicant will develop a Construction Environmental Management Plan and Construction Traffic Management Plan which will detail control measures and activities, such as designated routes for waste removal from the site, construction vehicle routes and the use of vehicle holding areas. |
| Air Quality | Dust will be generated during the enabling, demolition and construction works as a result of works on site and emissions from road traffic. <i>(Significant effects are not likely)</i> |  Measures to reduce dust production during enabling, demolition and construction include developing a Dust Management Plan, which may include measures to control other emissions, approved by CCC / SCDC. The level of detail will depend on the risk and should include at a minimum measures such as the recording of all dust and air quality complaints, a site layout plan so that the machinery and dust causing activities are located away from receptors, and erecting solid screens or barriers around dusty activities.  Mitigation measures for Non-Road Mobile Machinery (NRMM) emissions have also been identified to ensure best practice, with site plant and on-site traffic consideration given to the number of vehicles and operating hours.  General mitigation will be delivered through the Construction Environment Management Plan, and the Proposed Development will follow Construction Best Practice Guidance. This includes avoiding scabbing (roughening of concrete surfaces) if possible, avoiding dry sweeping of large areas, and implementing a wheel washing system. Full mitigation measures are available in ES Volume 1, Chapter 18: Environmental Mitigation, Management and Monitoring Schedule . |
| Noise and Vibration | Noise will be generated during enabling, demolition and construction works that will affect existing surrounding properties. <i>(Some significant effects on residential buildings)</i> |  Measures to reduce noise and vibration during construction will include adherence to agreed working hours, regular monitoring of noise emissions from the works, and the fitting and use of efficient silencing devices on tools, plant, engines, and equipment in line with British Standard 5228.  Measures associated with ‘Best Practicable Means’ (and beyond) will be stated within and implemented via a Construction Environmental Management Plan. A Piling Method Statement will be agreed prior to work commencing, which outlines how piling will be carried out in a safe and efficient manner to reduce significant effects arising from vibration, and vibration limits will be set in accordance with British Standard 5228-2. |
| | Vibration will be produced during the enabling, demolition and construction works. <i>(Some significant effects on residential buildings)</i> | |










| Technical Topic | Potential Effect | Mitigation To Reduce the likelihood of Significant Effects |
|---|---|---|
| | <p>Noise will be generated by construction traffic on surrounding local roads.</p> <p><i>(Some significant effects on residential buildings)</i></p> |  <p>Best Practice Measures will be introduced where possible, such as scheduling of delivery times, the establishment of agreed access routes for deliveries, avoiding traffic diversions via other sensitive areas or bottlenecks arising from delivery vehicles arriving simultaneously, and the implementation of a Construction Traffic Management Plan.</p> |
| Built Heritage | <p>Built heritage assets will be impacted during enabling, demolition and construction works due to construction machinery and activity, and site hoarding impacting the visibility of these assets, and construction noise.</p> <p><i>(Significant effects are not likely)</i></p> |  <p>A Construction Environmental Management Plan will be developed which will set out appropriate mitigation measures for noise, dust, vibration and damage impacts during the enabling, demolition and construction works arising in relation to Built Heritage assets.</p> |
| Ecology and Biodiversity | <p>Potential effects during the enabling, demolition and construction works relate to loss of hedgerows, nest sites (and therefore a reduction in breeding of some species), habitats and bat roosts.</p> <p><i>(Some significant effects on ecological receptors including hedgerows, barn owls, skylarks, linnet, brown hares, water voles and brown long-eared bats)</i></p> |  <p>Where the loss of habitats, nests or species cannot be mitigated, compensation for these losses will be provided through the provision of alternative habitats either elsewhere on site, or in alternative areas off-site.</p>  <p>Measures to reduce dust during enabling, demolition and construction will be included in the Construction Environmental Management Plan and Dust Management Plan. Screening will be used to reduce harm to ecological receptors and sites.</p>  <p>Works will be conducted outside of ecologically sensitive periods of the year and supervised by an ecologist, where possible, to reduce impacts on ecologically sensitive receptors.</p> |
| Land Take and Soils (Agriculture) | <p>Grade 2 (very good quality agricultural land) and Subgrade 3a (good quality agricultural land) agricultural land will be permanently lost due to the Proposed Development.</p> <p><i>(Significant effects on agricultural land)</i></p> |  <p>No mitigation proposed – the site has previously received outline planning permission in 2013 and is allocated for development in the Development Plan, and therefore the decision to remove the land from any potential agricultural use has already been agreed in principle.</p> |
| | <p>Loss or damage to soil resources.</p> <p><i>(Significant effects are not likely)</i></p> |  <p>A Soil Resources Management Plan will be implemented to detail measures to mitigate the impacts on soil resources, which will include confirmation of the different soil types and depths; the most appropriate re-use for the different types of soils within the detailed design; and the proposed methods for handling, storing and replacing soils on site.</p> <p>Adoption of the Soil Resources Management Plan will ensure that the soil resources on site will be able to fulfil their ecosystem services and functions.</p> |
| Ground Conditions and Land Contamination | <p>Potential effects on human health from land contamination including soils, water, vapours or dust could arise during the enabling, demolition and construction works.</p> <p><i>(Significant effects are not likely)</i></p> |  <p>Additional ground investigations could be undertaken prior to the commencement of development including areas not previously investigated. If potential contamination is identified, a remediation strategy will be developed for the site and appropriate remediation measures will be implemented.</p> <p>A Construction Environmental Management Plan will detail control measures and activities to mitigate the effects on human health, such as best practice measures to reduce the risk of spillages.</p> |
| | <p>Potential effects on controlled waters (aquifer and surface water features) arising from contaminated groundwater reaching these controlled waters.</p> <p><i>(Significant effects are not likely)</i></p> |  <p>Additional site investigation could also be undertaken, including groundwater monitoring and assessment prior to works commencing, including areas not previously investigated. As above, appropriate remediation would be implemented as required.</p>  <p>A Construction Environmental Management Plan will detail control measures and activities, such as the use of temporary drainage systems to capture rainfall runoff to reduce the risk of contamination and the use of bunds to capture potential contaminants arising from the refuelling of plant.</p> |
| | <p>Potential contamination of Traveller's Rest Pit SSSI, an important geological feature.</p> |  <p>The Traveller's Rest Pit SSSI will be safeguarded and protected to ensure not adverse impacts. This will include a 10m buffer zone around the feature, where no development can take place.</p> |








| Technical Topic | Potential Effect | Mitigation To Reduce the likelihood of Significant Effects |
|---|---|---|
| | <i>(Significant effects are not likely)</i> | |
| | Corrosion of buried concrete, enclosed spaces, services and gas membranes. <i>(Significant effects are not likely)</i> |  No further mitigation required, as previous ground investigation surveys have shown there are no elevated concentrations of contaminants that could impact in-ground services. |
| Water Resources, Flood Risk and Drainage | Potential effects arising from contamination of water sources from increased sediments, potential exposure of shallow groundwater from construction activities, and increased surface water flooding and foul water discharge. <i>(Significant effects are not likely)</i> |  The Construction Environmental Management Plan will detail control measures such as requirements to ensure appropriate consents / permits are obtained for any construction-phase discharges of waste, and standard construction methods will be used to reduce the risk of groundwater contamination as a result of excavatoin and substructure works. |
| | Construction activities will also lead to a temporary increase in demand on the drinking water supply. <i>(Significant effects are not likely)</i> |  The Construction Environmental Management Plan will detail standard construction practice, which will ensure adequate water supply to the site. |
| Climate Change | Greenhouse gas emissions will be produced during the enabling, demolition and construction works. <i>(Significant effects are not likely)</i> |  Measures to reduce emissions during the enabling, demolition and construction works will include: Consideration to use of construction materials with low embedded carbon. A Construction Environmental Management Plan will detail control measures and activities, including matters regarding waste management, as well as energy and power usage. |
| Landscape | The introduction of machinery, material stockpiles and other construction facilities, which will create a cluttered and noisy area. <i>(Some significant effects on landscape)</i> |  The Construction Environmental Management Plan details measures to reduce effects during the enabling demolition and construction phase, these include: maintenance of aesthetically appropriate site hoardings, measures to control site lighting, and active construction activities will be screened above hoarding levels. |
| Visual | Presence of cranes disrupting the skyline and the replacement of green fields (select views) in the background with construction compounds, which would create a distracting visual clutter. <i>(Some significant effects on selected viewpoints)</i> | |

To read more detail about the mitigation proposed, see **ES Volume 1, Chapter 18: Environmental Management, Mitigation and Monitoring Schedule**

ENVIRONMENTAL IMPACT ASSESSMENT – OPERATIONAL EFFECTS & MITIGATION

Complete and Operational Effects and Mitigation

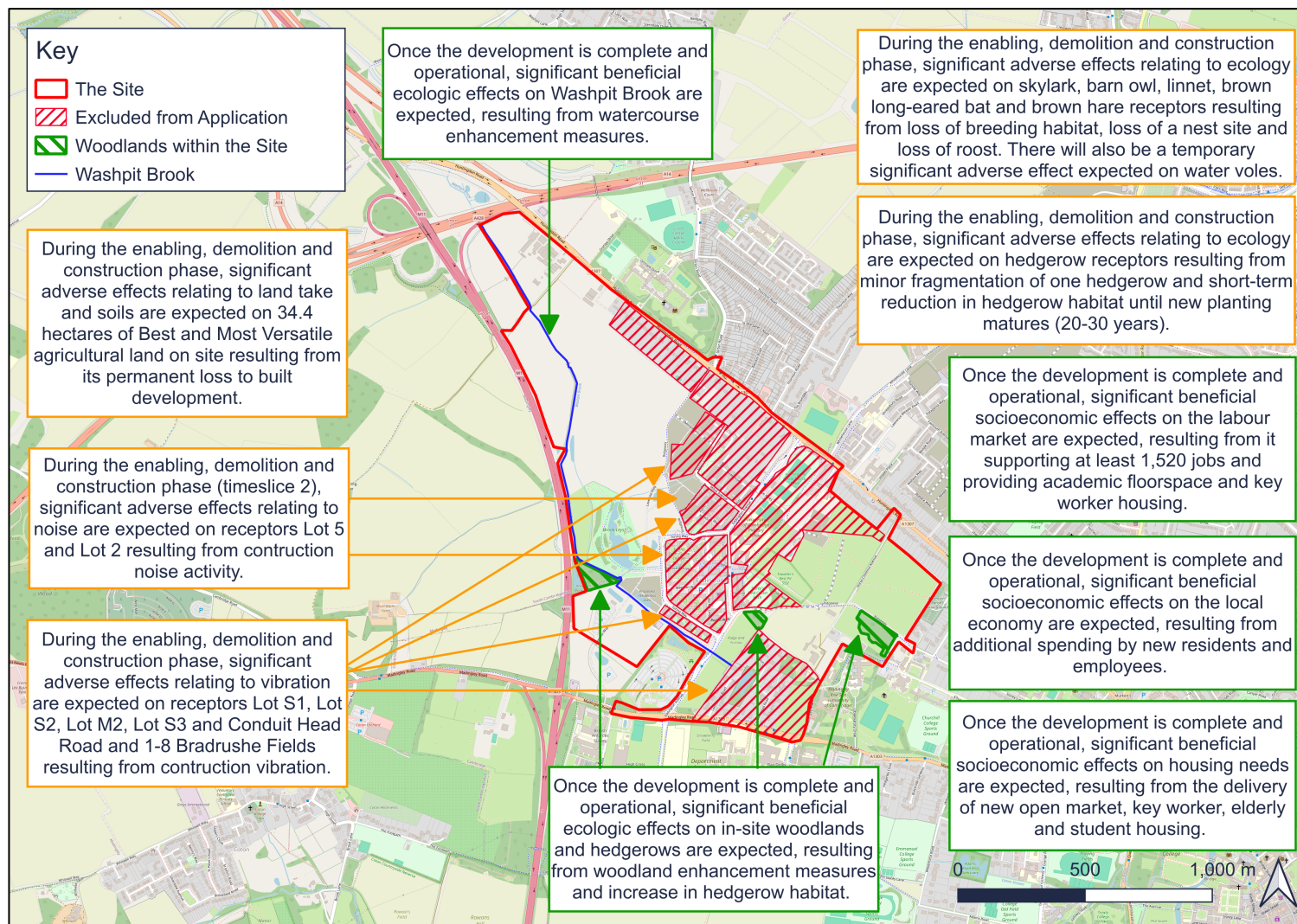
| Technical Topic | Potential Effect | Mitigation |
|----------------------|--|--|
| Socio-Economics | Increase in provision of jobs for the local labour market and increase in local spending, <i>(Some significant effects are likely)</i> |  Increase in the provision of jobs and local spending will result significant beneficial effects, so no mitigation is required. |
| | Delivery of new housing, including key worker homes and student accommodation. <i>(Significant effects are likely)</i> |  The Proposed Development will provide up to 3,800 new homes, up to 1,800 student accommodation and up to 1,800 co-living units, resulting in a significant beneficial effect, so no mitigation is required. |
| | Provision and an increase in the demand on local socio-economic infrastructure such as schools and healthcare facilities. <i>(Significant effects are not likely)</i> |  The Proposed Development includes the provision of up to 3,500m ² of town centre uses, which could include the provision of medical or health services. Community facilities are also being provided within the other nearby schemes identified on Page 24 . Most significantly, Drawin Green (Phase 1, and Phase 2 and 3) will deliver a primary school, a secondary school, a health centre and a library. This will help to reduce the demand strain on socio-economic infrastructure.  Any likely adverse effects on social infrastructure may be mitigated through Section 106 financial contributions, to be agreed between the Applicant and the GCSPS. |
| Traffic and Movement | Increased vehicular movements in the local area will occur as a result of the Proposed Development. <i>(Significant effects are not likely)</i> |  To support the Proposed Development, a range of on and off-site transport infrastructure measures are proposed, including improved wayfinding, on-site car parking, new access points and junctions, mobility hubs, an increase in public transport provision, and an extensive and well-connected pedestrian and cycle network. |
| Air Quality | Air quality emissions once the Proposed Development is completed and operational <i>(Significant effects are not likely)</i> |  The Proposed Development will have an all-electric energy strategy, with no emissions anticipated from on-site combustion plants (Combined Heat and Power units or boilers). Emergency backup generators may be included, which would come forward as part of the later ('reserved matters') stages. The predicted effect from road traffic emissions once the Proposed Development is completed is considered to be not significant, and therefore no additional mitigation is required. |
| Noise and Vibration | Noise generation by building services plant, road traffic noise and sports pitches. <i>(Significant effects are not likely)</i> |  As is standard at the planning stage, precise details of proposed building services plant associated with the Proposed Development are not yet known. Building services plant equipment will therefore be selected, located and attenuated such that the plant noise emission limits detailed are satisfied. Such criteria will be agreed through appropriately worded planning conditions.  Low noise road surfaces will be considered at the detailed design stage to reduce road traffic noise along Garrod Street. |
| Built Heritage | Potential effects on the setting of built heritage assets, including listed buildings and conservation areas. <i>(Significant effects are not likely)</i> |  In terms of the setting of these heritage assets, taller buildings will be located centrally within the site, to reduce the visual impact of tall buildings on the setting of heritage assets. The provision of extensive planting and public open space will also integrate the Proposed Development into the surrounding area. No additional mitigation is proposed, as the Proposed Development does not include any direct works to the built heritage receptors and therefore there are no direct impacts arising from the operational phase. |

| Technical Topic | Potential Effect | Mitigation |
|---|--|---|
| Ecology and Biodiversity | Enhancement to the Washpit Brook and increase in woodland and hedgerow habitats as a result of the Proposed Development. <i>(Some significant effects are likely)</i> |  A number of enhancement measures are proposed for existing habitats and watercourses, as well as the creation of new habitats and replacement habitats as part of the Biodiversity Net Gain commitments of the Proposed Development, which is proposed to result in significant beneficial effects.  An Ecological Enhancement Plan will also detail mitigation measures which will reduce the impacts on sensitive ecological sites arising from an increase in visitors to these sites, as well as enhancement measures such as the provision of bird and bat boxes across the site. |
| Ground Conditions and Land Contamination | Potential risk to site users (residents) and site visitors from inhalation of ground gas and contact with other sources of contamination. <i>(Significant effects are not likely)</i> |  The presence of hardstanding across the majority of the site and contamination testing in areas of soft landscaping will act as a barrier between human health receptors and sources of contamination. |
| Water Resources, Flood Risk and Drainage | Increase in surface water and foul water flows and increase in drinking water demand <i>(Significant effects are not likely)</i> |  The Proposed Development will incorporate Sustainable Urban Drainage Systems, which will restrict surface water flows to greenfield (undeveloped land) water flow rates, which will help to control surface water flow rates, as well reducing the risk of flooding, although this is already low for most of the site. Foul (waste) water will be discharged to proposed foul water network – Anglian Water has been consulted and an application to the Environmental Agency has been made for an interim new permit to address exceedances in foul flows from the Proposed Development. Water saving measures will be implemented to reduce demand on drinking water supply. |
| Climate Change | Greenhouse gas emissions will be produced once the Proposed Development is completed and occupied. <i>(Significant effects are not likely)</i> |  Measures to reduce its operational emissions comprise: The design of the Proposed Development aims to reduce car journeys and encourage low/zero carbon alternatives (e.g. cycling/walking).  Building services will include energy efficient lights, optimised heat distribution and mechanical ventilation with heat recovery. The domestic units are currently showing a CO ₂ emission saving of 37% from energy demand reduction. The preferred energy strategy for the Proposed Development utilises air source heat pumps, which uses heat from the air to heat homes, lowering carbon emissions by reducing reliance on fossil fuels. |
| Landscape | The Proposed Development will have beneficial, neutral and adverse impacts on some of the surrounding landscape features once completed due to the introduction of built form on the site. <i>(Some significant effects are likely)</i> |  Ensuring that the final layout and design does not cause any landscape and visual impact materially greater than the one identified for the Illustrative Masterplan. Ensuring measures such as articulation of the skyline, massing and heights are implemented. Where deviation from such design principles is proposed at detailed design stage, robust justification will be required, with evidence that equivalent visual mitigation is achieved through alternative means. |
| Visual | The Proposed Development will have beneficial, neutral and adverse impacts on some of the surrounding viewpoints once completed due to the introduction of built form on the site. <i>(Some significant effects are likely)</i> | |

To read more detail about the mitigation proposed, see **ES Volume 1, Chapter 18: Environmental Management, Mitigation and Monitoring Schedule**

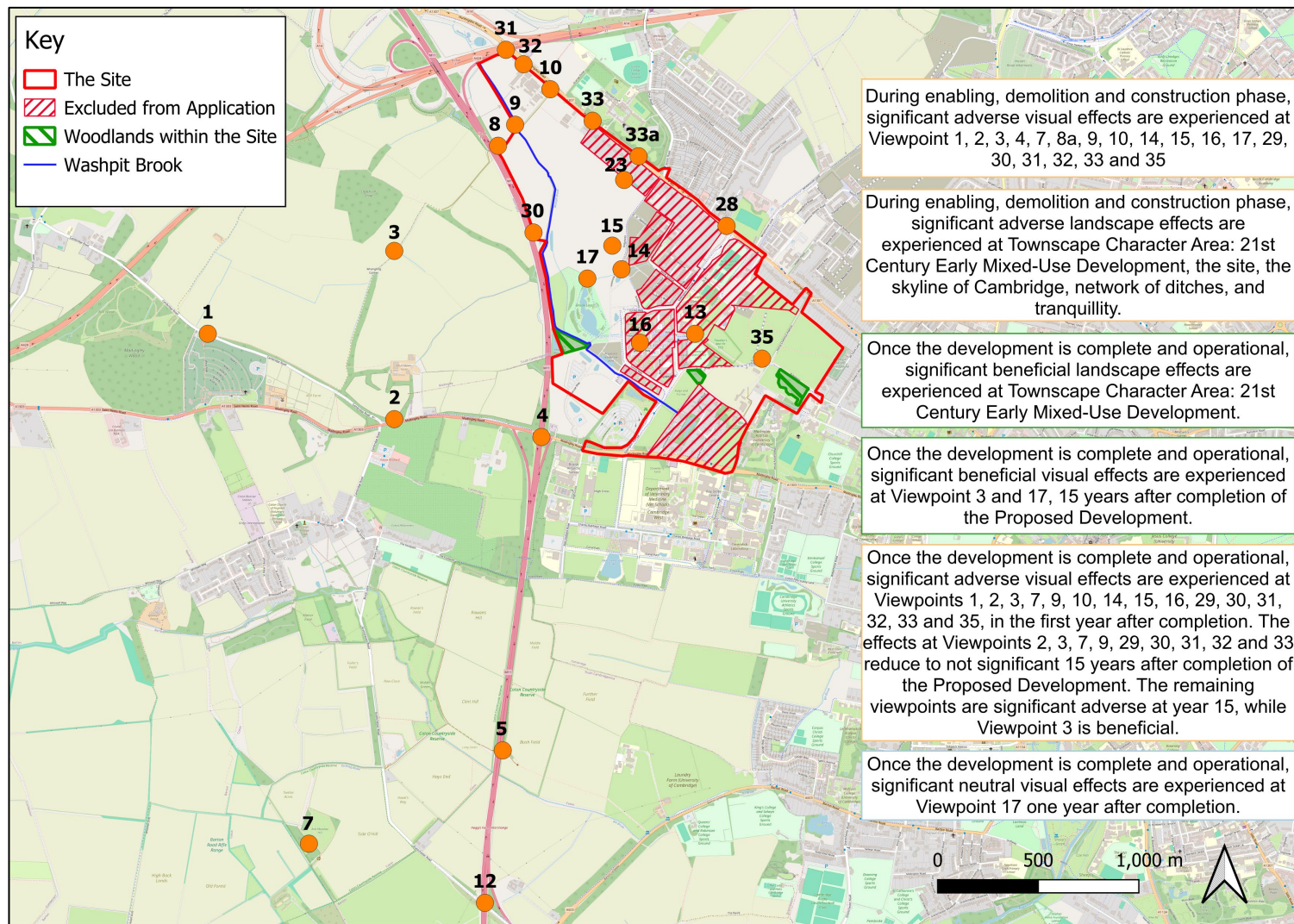
LIKELY SIGNIFICANT EFFECTS

Following the implementation of the mitigation measures (both those that are embedded and additional measures) set out on **Pages 16 to 20**, a number of likely significant effects remained across the assessed technical topics. The figure below illustrates the conclusions of the Environmental Impact Assessment (excluding landscape and visual impact effects, which are shown on **Page 22**), presenting the likely significant effects identified through the EIA process of the Proposed Development on the environment. During the enabling, demolition and construction phase, **significant adverse effects** were identified for noise, vibration, ecology and biodiversity and land take and soils. Once complete and operational, the Proposed Development will have likely **significant beneficial effects** on socio-economics and ecology and biodiversity.



To read more detail about likely significant effects, see **ES Volume 1, Chapter 17: Likely Significant Effects**

Following the implementation of the mitigation measures (both those that are embedded and additional measures) set out on **Pages 16 to 20**, a number of likely significant effects remained across the landscape and visual assessment. The figure below illustrates the conclusions of the landscape and visual impact effects, presenting the likely significant effects identified through the EIA process of the Proposed Development on the environment. During the enabling, demolition and construction phase, **significant adverse effects** were identified for landscape and visual receptors. Once complete and operational, the Proposed Development will have likely **significant adverse effects**, **significant beneficial effects** and **significant neutral effects** on landscape and visual receptors.



To read more detail about likely significant effects, see *ES Volume 1, Chapter 17: Likely Significant Effects*

CUMULATIVE EFFECTS ASSESSMENT

Development projects of a certain scale within the surrounding area that are not yet built (e.g., are consented or being considered for approval by the local authority) have been considered to understand the potential impact of the Proposed Development in combination with these schemes ('cumulative schemes').

A total of eight schemes were identified through desk-study and were agreed via the EIA Scoping process to be assessed within the Environmental Impact Assessment with GCSPS (as shown on **Page 24**). Consideration was given to both schemes which have planning consent and those which are pending determination.

The Environmental Impact Assessment process has considered and assessed likely significant cumulative effects additional to the main assessment of the Proposed Development as summarised in the *Likely Significant Effects* section of this Non-Technical Summary.

No additional likely significant effects have been identified as a result of the enabling, demolition and construction cumulative effects assessments.

One additional likely significant effect has been identified as a result of the cumulative effects assessment for the completed development, namely a Significant Beneficial socio-economics effect on housing delivery, which will exceed the scale of the effect of the Proposed Development in isolation.

EFFECT INTERACTIONS

Effect interactions occur due to the interaction between multiple effects arising due to the Proposed Development on an individual receptor, for example effects in relation to noise and dust on a property. Effect interactions can occur during the enabling, demolition and construction phase and once the Proposed Development is complete and operational. Interactions can be significant or not significant, as well as beneficial, adverse or neutral (i.e., neither positive nor negative), dependent upon the contributing effects.

Enabling, Demolition and Construction

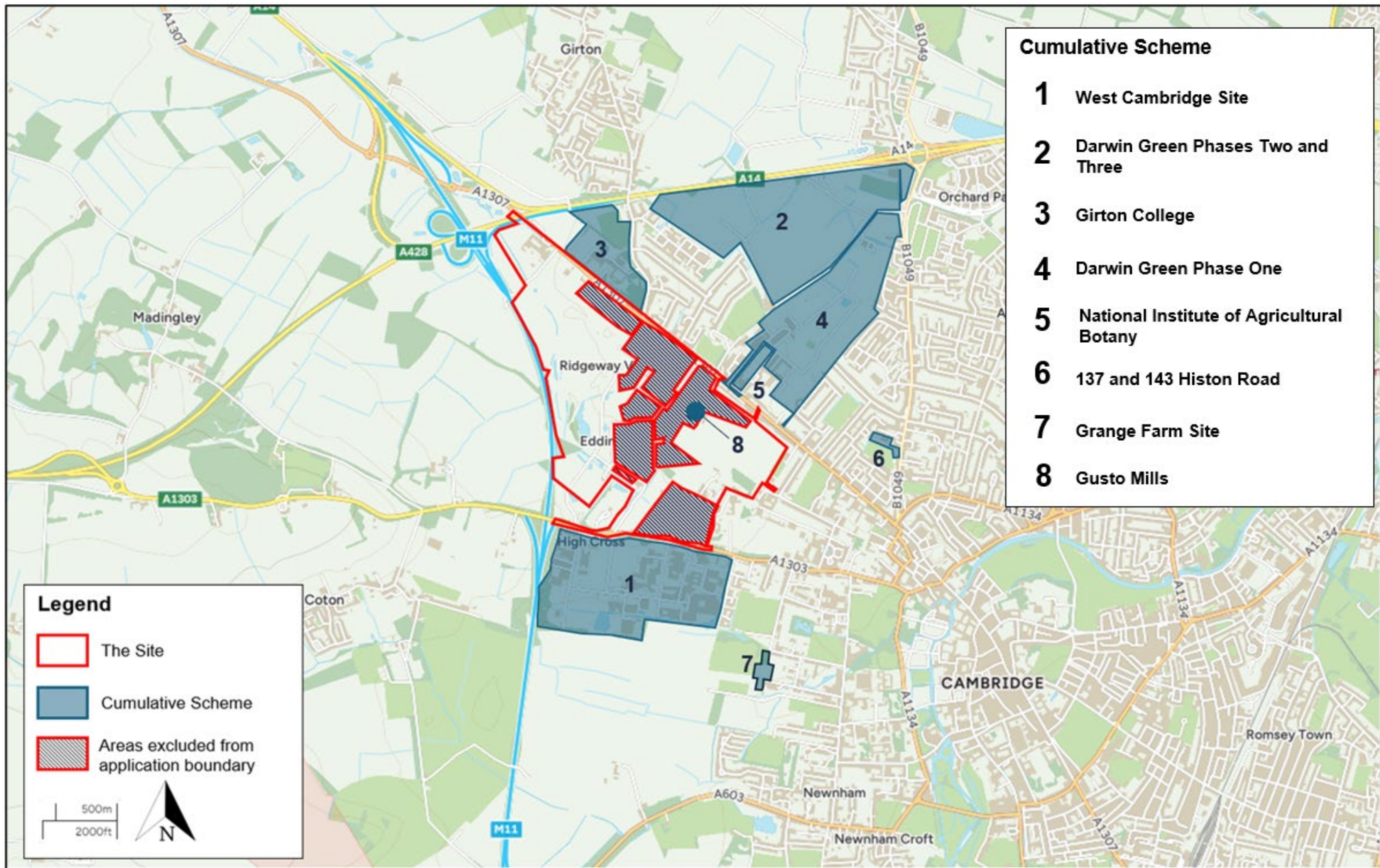
Potential significant effect interactions have been identified as a result of enabling, demolition and construction phase of the Proposed Development for the following receptors:

- A Significant Adverse temporary effect interaction at residential properties within Lots S1 and S2 (Phase 1) due to combined noise and vibration effects;
- A Significant Adverse temporary effect interaction at residential properties at Conduit Head Road and 1-8 Bradrushe Fields due to combined noise and vibration effects;
- A Significant Adverse temporary effect interaction at residential properties within Lot S3 (Phase 1) due to combined noise and vibration effects;
- A Significant Adverse temporary effect interaction to Residents of Huntingdon Road Properties (141, 143 -145, 136, 138, 162, 171, 173 and 183) due to combined noise, vibration and visual effects.

Completed Development

There is the potential for a Significant Beneficial effect interaction to the local economy and labour market as a result of in-combination socio-economics effects. This is related to the effect from additional spending by residents and employees and the provision of full time jobs.

*To read more detail about effect interactions, see **ES Volume 1, Chapter 16: Effect Interactions***



CONCLUSIONS

The Proposed Development would result in the delivery of up to 3,800 residential dwellings, up to 1,800 student accommodation units, up to 1,800 co-living units and senior living. It will also provide flexible employment floorspace, academic floorspace, floorspace supporting retail, nursery, health and indoor sports and recreation uses, as well as public open space, sports facilities, amenity and play space, allotments and landscaping works.

The Environmental Impact Assessment has established that the Proposed Development would result in the following likely significant effects:

- During enabling, demolition and construction:
 - **Significant Adverse** effects relating to land take and soils are expected on 34.4 hectares of Best and Most Versatile agricultural land on site resulting from its permanent loss to built development;
 - **Temporary Significant Adverse** effect relating to noise on residential properties within Lot 5 and Lot 2 of Phase 1 as a result of construction activity;
 - **Temporary Significant Adverse** effect relating to noise on residential properties within Lots S1 and S2 of Phase 1 as a result of construction traffic;
 - **Temporary Significant Adverse** effect relating to vibration on residential properties within Lot S1, Lot S2, Lot M2 and Lot S3 of Phase 1 and Conduit Head Road and 1-8 Bradrushe Fields as a result of construction activity;
 - **Temporary Significant Adverse** ecology effect on hedgerows and Water Voles on site as a result of short-term reduction in habitat. The Proposed Development will provide an increase in hedgerows and habitats for Water Voles, so these effects will reduce to Not Significant in the long-term;
 - **Significant Adverse** ecology effects on Skylark, Barn Owl, Linnet, Brown Hare and Brown Long-Eared Bats. Various measures to compensate for these effects have either been delivered during Phase 1 or are to be delivered as part of the Proposed Development, for example through the implementation of the Construction Environmental Management Plan;
 - **Temporary Significant Adverse** visual effects on 18 viewpoints; and
 - **Temporary Significant Adverse** landscape effects on Townscape Character Area: Early 21st Century Mixed-Use Development, the site, the skyline of Cambridge, network of ditches; and tranquillity.
- Once completed and operational:
 - **Significant Beneficial** socio-economic effects on the labour market due to the Proposed Development delivering floorspace to support the equivalent of 1,520 full time jobs;
 - **Significant Beneficial** socio-economic effects on the local economy due to additional spending by new residents and employees;
 - **Significant Beneficial** socio-economic effects on housing delivery;
 - **Significant Beneficial** ecology effects on woodlands, the Washpit Brook and hedgerows;
 - **Significant Beneficial** effect on the Townscape Character Area: Early 21st Century Mixed-Use Development;
 - **Significant Beneficial** visual effects on two viewpoints, 15 years after completion of the Proposed Development;
 - **Significant Neutral** visual effects at one viewpoint, one year after completion of the Proposed Development;
 - **Significant Adverse** visual effects at six viewpoints in the first year and 15 years after completion of the Proposed Development; and
 - **Temporary Significant Adverse** visual effects at nine viewpoints in the first year after completion of the Proposed Development. The effects at eight of these viewpoints reduce to **Not Significant** 15 years after completion of the Proposed Development, and one viewpoint experiences a significant beneficial effect after 15 years (as described above).

