

APPENDIX 2.1

SCOPING REQUEST

ENVIRONMENTAL IMPACT ASSESSMENT SCOPING REPORT

Quality Assurance

Site name:	Beehive Centre, Cambridge
Client name:	Railway Pension Nominees Ltd
Type of report:	EIA Scoping Report
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Table of Contents

1.0	Introduction	1
2.0	Site Context	3
3.0	Proposed Development	5
4.0	EIA Methodology and Scope	7
5.0	Air Quality	18
6.0	Flood Risk and Drainage	23
7.0	Heritage	26
8.0	Ground Conditions and Contamination	30
9.0	Townscape and Visual	35
10.0	Noise and Vibration	37
11.0	Socioeconomics	43
12.0	Transport	49
13.0	Cumulative Impacts	54
14.0	Proposed Structure of the ES	60

Appendix 1

PARAMETER PLANS

Appendix 2

TVIA BASELINE ASSESSMENT REPORT

1.0 Introduction

Purpose of this Report

- 1.1 This Scoping Report has been prepared by Bidwells LLP on behalf of Railway Pension Nominees Ltd (hereafter ‘the Applicant’) to inform the formal scoping procedures with Cambridge City Council (CCC) (‘the Council’) in the preparation of an Environmental Impact Assessment (EIA) to accompany an outline planning application at the Beehive Centre in Cambridge (hereafter ‘the Site’). The Proposed Development consists of demolition and redevelopment of the Site providing a new local centre (E (a-f), F1(b-f), F2(b,d)), open space and employment (office and laboratory) floorspace (E(g)(i)(ii) to the ground floor and employment floorspace (office and laboratory) (E(g)(i)(ii) to the upper floors; along with supporting infrastructure, including pedestrian and cycle routes, vehicular access, car and cycle parking, servicing areas, landscaping and utilities.
- 1.2 Section 4 of this report sets out the information for the Competent Authority, in this case CCC to confirm its formal Screening Opinion. The purpose of this is to confirm that the Proposed Development, as set out in Section 3 of this report, constitutes a project which has the potential to be considered under Schedule 2 (10) (b) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, and at this stage, likely significant environmental effects cannot be ruled out. As a result, it is the Applicant’s intention to voluntarily submit an Environmental Statement (ES) for the Proposed Development.
- 1.3 We, therefore, now request that CCC provide their formal EIA Scoping Opinion for the Proposed Development. This document sets out the suggested scope for the EIA and requests a formal Scoping Opinion from CCC in accordance with Regulation 15. A plan showing the extent of the Site area under consideration, for the purposes of scoping, is attached in **Appendix 1**.

Legislative Background

- 1.4 A Directive of the European Community on the ‘*assessment of the effects of certain public and private projects on the environment*’ was adopted in 1985 (85/337/EEC). The EIA Directive has been amended several times since its approval in 1985. The most recent and far-reaching amendments were made through Directive 2014/52/EU (‘the EIA Directive’) which was approved in May 2014. In order to implement these Directives, the UK Government has made a series of Regulations. The relevant Regulations for projects that require planning permission are the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, (hereafter referred to as ‘the EIA Regulations’), which came into force in May 2017.
- 1.5 The aim of the EIA Regulations is to ensure that major projects that are likely to have significant effects upon the environment are subject to EIA, and that minor projects and those outside sensitive areas which are extremely unlikely to have significant environmental effects, are not subject to these EIA regulations.
- 1.6 The EIA process is designed to draw together, in a systematic way, an assessment of the development’s likely significant environmental effects (alongside economic and social factors). The process ensures that the importance of the predicted effects, and the scope for reducing them, are

reported and understood by the public, statutory consultees, and the relevant Competent Authority before it makes its decision. The output from the EIA process is reported within an ES submitted with the application. This allows environmental factors to be given due weight when assessing and determining planning applications.

- 1.7 The content of the submitted request, informed by the information that is currently available, outlines the anticipated scope of the assessment process for each environmental topic area likely to give rise to significant environmental effects to the extent we consider they require assessment, the scope of which is outlined in sections 5-12 of this report.

2.0 Site Context

Site Location and Description

- 2.1 The Site, known as the Beehive Centre, is approximately 7.58 hectares (ha) in size and comprises a mid-sized retail park with mixed uses and associated ground level car park.
- 2.2 The Site is located east of Cambridge city centre, along the west side of the railway line. The Site is accessed via Coldhams Lane which forms the northern site boundary and connects to Newmarket Road, which is a main vehicular route into the city, whilst to the east the road leads to Coldham's Common. The Site is approximately 10 minutes' cycle and 25 minutes' walk from the city centre.

Heritage Features

- 2.3 There are no heritage assets within the Site. However, a number of heritage assets are in close proximity to the Site and have the potential to be affected by the Proposed Development including the Mill Road Conservation Area, which is adjacent to the Site, St Matthews Church Grade II Listed Building approximately 200m west of the Proposed Development and 247 Newmarket Road (Grade II Listed Building) approximately 200m north of the Proposed Development.
- 2.4 Additionally, The Old Cheddar's Lane pumping station (Scheduled Monument) is located approximately 670m northeast of the Site. The closest Registered Park and Garden to the Site is Mill Road Cemetery approximately 275m south of the Site.

Flood Risk and Drainage

- 2.5 Environment Agency mapping indicates that the Site lies at low risk of flooding from Main Rivers (including the River Cam and its tributaries) and the Sea. Furthermore, the Site is not traversed by Ordinary Watercourses. The nearest surface water to the Site is Cherry Hinton Brook approximately 350m north-east of the Site.
- 2.6 The majority of the Site is deemed to remain dry or be subject to very shallow (less than 150mm) of surface water flooding from intense or prolonged rainfall even for a significant (between 1 in 100 years up to 1 in 1,000 year) event. Localised areas around the south-eastern and north-eastern periphery of the Site are shown to be subject to ponding during moderate events.
- 2.7 Flood risk to the Site from other sources of flooding, such as groundwater, sewers, failure of pumping installations, or breach of raised reservoir embankments are considered to be low.

Geology, Hydrogeology and Soils

- 2.8 According to the British Geological Society (BGS), the Site lies on Gault Formation with West Mulbery chalk formation and lower greensand formation are also present.

Environmental Designations and Ecological Features

- 2.9 The majority of the Site is dominated by areas of built form and hardstanding, therefore providing habitats of negligible ecological value.
- 2.10 There are no statutory designated sites of nature conservation interest within or adjacent to the Site. The nearest statutory designated sites (designated for their nature conservation interest) are Coldham's Common Local Nature Reserve (LNR) and Logan's Meadow LNR which are situated approximately 0.4km to the east and 0.47km to the north of the Site respectively. The nearest Site of Special Scientific Interest (SSSI) is the Cherry Hinton Pit SSSI, which is located approximately 3.2km south-east of the Site at its closest point. The nearest European Protected Site is Eversden and Wimpole Woods Special Area of Conservation (SAC), which is situated approximately 13km south-west of the Site at its closest point.

Air Quality

- 2.11 The Site is located within the Cambridge City Air Quality Management Area (AQMA) which has been declared due to exceedances of the annual mean Nitrogen Dioxide (NO₂) Air Quality Strategy (AQS) Objective.

3.0 Proposed Development

Planning Application

- 3.1 The Proposed Development consists of demolition of the existing buildings onsite and redevelopment of the Site providing new buildings comprising a new local centre as well as office and laboratory space and associated infrastructure. The full description of development is:

Outline Application for the demolition and redevelopment for a new local centre (E (a-f), F1(b-f), F2(b,d)), open space and employment (office and laboratory) floorspace (E(g)(i)(ii) to the ground floor and employment floorspace (office and laboratory) (E(g)(i)(ii) to the upper floors; along with supporting infrastructure, including pedestrian and cycle routes, vehicular access, car and cycle parking, servicing areas, landscaping and utilities.

Assessment Parameters

- 3.2 Given the application will be an outline application, the EIA will be based on a series of parameters that define those elements of the outline scheme of most relevance for assessment purposes. Draft parameter plans have been prepared to support the EIA Scoping Request and are included in **Appendix 1** of this report.

Land Use (Ground Floor and Upper Floor)

- 3.3 The Land Use parameter plans define the general description and broad location of the proposed land use components within the Site, including areas of built development. Proposed land uses include the new local centre (E (a-f), F1(b-f), F2(b,d)), employment floorspace (office and laboratory (E(g)(i)(ii)) as well as car and cycle parking. A pavilion building is also proposed, (Mixed Use: E(a-f), F2(a, b, d)) which is likely to be located in the centre of the Site.

Access and Circulation

- 3.4 This parameter plan defines the hierarchy of access and main circulation routes for both vehicles and pedestrians and the limits of deviation within which these routes will be positioned.
- 3.5 Vehicular access into the Site will remain as the current situation which is the junction with Coldhams Lane (note the junction may be remodelled as part of the Proposed Development but the location will remain the same). This access point will also cater for cyclists and pedestrians. Two further pedestrian and cyclist access points into the Site are shown on this plan, located off Sleaford Street and York Street, to the western extent of the Site. A mainly pedestrian access point is retained that connects to St Matthew's Gardens.

Landscape and Open Space

- 3.6 This plan defines the parameters for key strategic areas of structural landscaping and ecological areas within the Site.

- 3.7 The majority of the Site boundary will include green planting areas which are areas characterised by soft landscape and tree planting. Areas of publicly accessible hard landscape areas are proposed in the centre of the Site. Pedestrian and cycle routes will be supported by green space planting.

Maximum Building Heights and Plots

- 3.8 This parameter plan defines the maximum heights and plot sizes of the built development across the Site, based on the structure of the Land Use Parameter Plan.
- 3.9 The building heights vary, with the taller elements located along the railway line, and drop towards the west and south boundary where the residential terraces are located.
- 3.10 Maximum buildings heights proposed are 6 storeys + 2 external plant floor. Some of the buildings will have flues which will have a maximum height of an additional 25% of the host building. The number of flues at each location will be determined at the reserved matters stage, but within the limitations expressed by the Parameter Plans.

Construction

- 3.11 An indicative construction programme will be provided in the ES in the form of a likely worst-case in terms of local disturbance, particularly in regard to HGV traffic.

4.0 EIA Methodology and Scope

Introduction

- 4.1 The Applicant has committed to undertaking an EIA of the Proposed Development. The Proposed Development exceeds the applicable screening threshold at Schedule 2,10(b) of the EIA Regulations. Due to the Site location, environmental sensitivities and the scale of development, it is considered at this stage that likely significant environmental effects cannot be ruled out. Therefore, an ES to support the planning application will be prepared voluntarily.
- 4.2 EIA is a systematic process through which the likely significant environmental effects of a Proposed Development can be identified, assessed and where possible, adverse impacts are reduced, and beneficial impacts enhanced. EIA ensures that information on the potential for significant environmental effects is available for decision-makers and the public to consider in the determination of an application.

Need for EIA - Screening

- 4.3 Certain types of development are required to be the subject of EIA ('EIA development'). Schedule 1 of the EIA Regulations lists the type and scale of development that automatically require EIA ('Schedule 1 development').
- 4.4 Schedule 2 of the EIA Regulations sets out the development types that may require EIA ('Schedule 2 development'). To qualify as a Schedule 2 development, it must be either located in a "Sensitive Area" as defined in Regulation 2(1) or exceed the applicable threshold in Schedule 2. Not all Schedule 2 development will require EIA and they consequently need to be screened on a case-by-case basis using the criteria set out in Schedule 3 of the Regulations.
- 4.5 The proposals which form the subject of this report are not of a type or scale described in Schedule 1 but are of a type that falls within Schedule 2(10) 'Infrastructure Projects'; specifically, 10(b) 'Urban Development Projects'. The scale of the Proposed Development exceeds the applicable thresholds. Consequently, the Proposed Development is Schedule 2 development. Schedule 3 of the Regulations sets out the screening criteria in relation to Schedule 2 developments, drawing attention to the character and complexity of effects resulting from the scheme, as well as a range of issues relating to the sensitivity of sites.
- 4.6 It is our view, based upon a review of the EIA Regulations, that the proposed project constitutes Schedule 2 development, and that the scale of the development proposed has the potential to give rise to likely significant environmental effects upon the receiving environment. In view of this, the Applicant volunteers this report to establish the scope of any forthcoming EIA process in connection with this project, and the content of the ES which will subsequently accompany the planning application for the development proposed.
- 4.7 Notwithstanding the above, we would request that CCC, as the Competent Authority for the purposes of the Regulations, considers this section of the report and confirms that the proposals constitute EIA development, and that an EIA is required.

- 4.8 This document also sets out the suggested scope of the EIA and resulting ES. It informs a formal request for a Scoping Opinion from CCC in line with Regulation 15 of the EIA Regulations.
- 4.9 In accordance with Regulation 15(2), this request includes:
- A plan sufficient to identify the land (Appendix 1);
 - A brief description of the nature and purpose of the development, including its location and technical capacity: see Sections 2 and 3;
 - An explanation of the likely significant effects of the development on the environment: see Sections 5-12; and
 - Such other information or representations as the person making the request may wish to provide or make: see other sections of this Scoping Report, notably this Section (4).
- 4.10 Guidance on the EIA Regulations is provided in the National Planning Practice Guidance (NPPG). The NPPG states that:
- "Whilst every Environmental Statement should provide a full factual description of the development, the emphasis should be on the "main" or "**significant**" environmental effects to which a development is likely to give rise. The Environmental Statement should be proportionate and not be any longer than is necessary to assess properly those effects. **Where, for example, only one environmental factor is likely to be significantly affected, the assessment should focus on that issue only. Impacts which have little or no significance for the particular development in question will need only very brief treatment to indicate that their possible relevance has been considered**" (emphasis added) (Paragraph: 035 Reference ID: 4-035-20170728).*
- 4.11 The proposed scope of the EIA is summarised in the following tables. Topics which will be detailed further in the following sections.
- 4.12 **Table 4.1** sets out the broad aspects of the environment required to be considered in Schedule 4 of the EIA Regulations, and identifies which topics are necessary to be considered in this EIA, with reasons provided. Topics listed in **Table 4.1** are those for which significant effects are considered likely or cannot be ruled out at this stage and have consequently been scoped into the EIA. Not all topics scoped into the EIA are considered to merit a full technical assessment in the form of an ES chapter. Some topics are, therefore, proposed to be 'scoped down' such that they would be reported in the ES on a commentary level, drawing on publicly available sources. Scoping has been based on the professional judgement of the EIA consultant team and the information currently available on the Proposed Development, the Site and the surrounding area.
- 4.13 **Table 4.2** summarises topics which are proposed to be scoped out of the EIA on the basis that they are unlikely to give rise to significant environmental effects, together with a justification. Some of these topics may still be covered by technical reports that will be submitted in any event, but not as part of the ES as environmental impacts are not considered likely or significant.
- 4.14 **Table 4.3** synthesises **Tables 4.1** and **4.2** and summarises the proposed scope of the EIA.

Table 4.1: Consideration of Broad Environmental Aspects - Scoped into the EIA

TOPIC	CONSIDERATION
Air and Climate	
Air Quality	The Site is located within the Cambridge City Air Quality Management Area (AQMA) which has been declared due to exceedances of the annual mean NO₂ Air Quality Strategy (AQS) Objective. The Proposed Development has the potential to result in significant impacts during the construction phase, including the following: • Temporary increases in dust deposition; and • Temporary increases in air pollutant concentrations near the local road network due to emissions from construction traffic. Once operational, there may be significant effects as a result of emissions from the combustion plant of the Proposed Development. As discussed further in Section 6, given the Proposed Development would result in a reduction of car parking spaces and subsequent reduction in vehicle movements, assessment of traffic emissions is proposed to be scoped out of EIA. Air Quality impacts may be significant and will, therefore, be scoped into the EIA.
Noise and Vibration	The primary sources of environmental sound affecting the Site have been identified as road traffic on the local road network, particularly vehicles travelling along Coldhams Lane, and trains running along the railway tracks which demark the eastern Site boundary. Potentially significant environmental effects could arise during both the construction and operational phases of the development. These are: • Noise and vibration from demolition and construction activity, including construction traffic. • Noise emissions from the introduction of new building services plant. • Noise emissions from the newly formed events space / public square. As discussed in Section 11, it is proposed to scope out the following: • Operational phase – Changes in noise associated with road traffic from the Proposed Development. Guidance within the Highway's Agency Design Manual for Roads and Bridges (DMRB) suggests that long term noise levels would need to change by 3 dB or more for a minor impact to occur. In the simplest of terms, an increase in noise of 3 dB would require the number of vehicles on the road to double. Conversely, a 3 dB reduction would require a halving of the number of daily vehicle trips. Car parking facilities are to be provided as part of the Proposed Development, but the proposals represent a significant reduction upon the existing parking provision. It is therefore considered highly unlikely that a doubling of vehicles trips would occur. Rather, the reduction of parking bays is expected to decrease daily traffic flows but with the Site located close to Cambridge city centre the overall change in vehicles and therefore noise, is expected to be negligible. • Operational phase – Control of vibration. Operational phase vibration associated with the Proposed Development is expected to be limited to

TOPIC	CONSIDERATION
	items of building services plant. It will be necessary to provide all plant with suitable anti-vibration mounts to minimise impact upon the operation of the facility. This will inherently mitigate potential vibration effects to nearby sensitive receivers.
Population and Human Health	
Economy and Employment	The Proposed Development will generate employment opportunities once fully constructed and in operation. The Proposed Development will also contribute to the local economy from expenditure from operational workers in the local area. Additionally, the Proposed Development will result in the displacement of existing businesses from the Site. The above may be significant and therefore economy and employment will be scoped into the EIA.
Material Assets	
Transport	Construction of the Proposed Development will generate an increase in HGVs travelling to and from the Site. As a result, there may be occasional temporary nuisance where construction traffic is encountered by local road users on local routes. The increase in construction vehicles in the local area has the potential to negatively impact on driver severance, driver delay, pedestrian severance, pedestrian delay, pedestrian amenity, fear and intimidation, and accidents and safety in/along routes within the study area. Potentially significant operational effects will also be considered in terms of • Changes in traffic flows • Severance • Driver delay • Pedestrian delay • Pedestrian amenity • Fear and intimidation • Accidents and safety Transport will, therefore, be scoped into the EIA for both construction and operational phases of the Proposed Development.
Land, Soil and Water	
Water and Flood Risk	The Proposed Development has the potential to cause the following significant effects: • Temporary generation and mobilisation of contaminants and pollutants arising from the construction works leading to potential water quality effects upon the underlying groundwater and nearby sensitive surface water receptors. • Temporary on-site and off-site flood risk effects as a result of uncontrolled discharge of runoff generated during construction works / activities. Once operational, there is the potential for the following significant effects:

TOPIC	CONSIDERATION
	- Increased flood risk to on-site and off-site areas from uncontrolled discharge of runoff. - Generation and mobilisation of contaminants and pollutants potentially leading to potential water quality effects upon the underlying groundwater and nearby sensitive surface water receptors. - Increased foul flows from the Proposed Development potentially leading to increased risk to off-site areas from foul sewer flooding. Flood risk and drainage will, therefore, be scoped into the EIA.
Ground Conditions and Contamination	Potential contaminants of concern associated with historical Site uses include asbestos, polycyclic aromatic hydrocarbons (PAHs), metals, petroleum hydrocarbons, and methyl tert-butyl ether (MTBE). Current off-site potentially significant sources of the contamination include the railway line to the east. Potential contaminants of concern associated with this land use include PAHs, petroleum hydrocarbons, and asbestos. Potential contaminants of concern associated with historical off-site uses include metals, petroleum hydrocarbons, chlorinated solvents, semi-volatile organic compounds (SVOCs), MTBE, and asbestos. The Proposed Development has the potential to cause significant effects to: - construction and ground workers from potentially contaminated soils and groundwater - future site users from exposure to potentially contaminated soils beneath the site or ground gas and vapour emissions from potentially contaminated soils and/or groundwater Ground conditions and contamination will, therefore, be scoped into the EIA.
Cultural Heritage and the Landscape	
Townscape and Visual	As discussed in Section 10, the following visual and townscape effects are to be expected as a result of the Proposed Development: - The building volumes and height would alter the views from strategic green spaces, namely Coldham's Common and Ditton Meadows; - Views from within the Mill Road Conservation Area could be visually impacted by development on Site; - Building heights on Site in excess of those around are likely to have an impact on nearby and long-distance views identified in the relevant Local Plan's policies; and - The change in land use that would come with the proposed diversification of offering on the Site would change the experiential quality of the Site and so the setting of the adjacent residential areas. For this reason, townscape and visual effects will be scoped into the ES.
Cultural Heritage	There are no heritage assets within the Site. However, a number of heritage assets are in close proximity to the Site and have the potential to be affected by the Proposed Development. These are listed in full in Section 8 but include the Mill Road Conservation Area, St Matthews Church Grade II Listed Building approximately 200m west of the Proposed

TOPIC	CONSIDERATION
	Development and 247 Newmarket Road (Grade II Listed Building) approximately 200m north of the Proposed Development. Cultural heritage has therefore been scoped into the EIA.

- 4.15 An EIA should only assess the likely significant environmental effects of a development. A number of topics are not considered to be significant. The topics to be scoped out of the ES and the rationale for their exclusion is set out in **Table 4.2** below.

Table 4.2: Non-Significant Environmental Topics

TOPIC	CONSIDERATION
Air and Climate	
Microclimate	Odour With the implementation of a waste strategy for the operational phase of the Proposed Development, significant odour effects are not anticipated. Lighting The Proposed Development will require external lighting on roads and paths. A separate Lighting Impact Assessment can be prepared if required to assess lighting impacts, but these are not considered to be significant.
Climate Change	Potential climate implications from the Proposed Development are two separate but interrelated issues: 1. Climate Change Adaptation (how the project has been designed to be resilient to a changing climate); and 2. Climate Change Mitigation (how the project may contribute to climate change through the emission of greenhouse gases (GHGs) and how it seeks to mitigate such emissions). The above issues will be considered insofar as they relate to the various topics scoped into the EIA and, therefore, the requirement for a standalone assessment of climate change is proposed to be scoped out of the EIA.
Population and Human Health	
Health and Wellbeing	The construction of the Proposed Development may result in increased noise, dust and vehicle emissions which can have impacts on human health. One of the most common impacts on human health from new developments once operational, is the increase in traffic which can affect pedestrian amenity and safety as well as lead to increased air pollution and noise, with consequential effects on health and quality of life. However, The Proposed Development proposes a decrease in car parking and consequently traffic movement, therefore, impacts on health as a result of increases in traffic are not considered likely. Health Impacts have therefore been scoped out of the EIA.

TOPIC	CONSIDERATION
	A Health Impact Assessment (HIA) will be prepared and will accompany the planning application and is proposed to form a Technical Appendix to the ES but will not be a topic chapter within the ES.
Tourism	The Proposed Development is unlikely to have any significant tourism effects. There will be some business tourism expenditure through the use of local hotels used by future employees of the Site during business trips and business visitors. These effects are not anticipated to be significant and will, therefore be scoped out of the EIA.
Social Infrastructure	The Proposed Development will not result in an increased demand for social infrastructure such as schools, health services, and playing fields. Social Infrastructure will therefore be scoped out of the EIA.
Retail	The socioeconomics ES chapter will assess the impact of retail at local authority level. Additionally, a standalone Retail Statement will be prepared in support of the application. Given this, a retail chapter within the EIA is not considered necessary.
Biodiversity	
Ecology	Ecology Solutions undertook a habitat survey of the Site in January 2021 to ascertain the current ecological value of the Site. The findings of the Site visit as well as a desk study undertaken also in January 2021 are provided below. <u>Habitats</u> The majority of the Site is dominated by areas of built form and hardstanding, all of which are considered to be of negligible ecological significance. Whilst there are areas of amenity grassland and planting scattered throughout the carparking and along boundary areas, these are almost entirely comprised of non-native / ornamental species and as such, of low ecological significance. The more mature trees / treelines are of more moderate ecological significance. Where habitats of relatively more moderate ecological value are present, there will be some disturbance and loss during the construction phase of the Proposed Development. However, opportunities exist to deliver substantial new habitats within the Site, as well as enhancements to retained habitats, providing more than suitable mitigation to any loss. <u>Bats</u> All of the buildings and trees on site are considered to provide a negligible potential to support roosting bats. The Site is considered to offer some (albeit very limited) opportunities for foraging and commuting bats, given the linear vegetation at the Site boundaries and some limited green connectivity to the wider area. However, given the urbanised nature of the area, with extensive artificial lighting at night, such opportunities are considered to be extremely sub-optimal. To avoid potential adverse lighting impacts, the lighting strategy for the Proposed Development will seek to avoid direct lighting of retained treelines

TOPIC	CONSIDERATION
	or areas of new planting. Where lighting is necessary, this will be in the form of LED lighting (with a low UV content) with hoods and cowls used to direct lighting away from linear features and retained habitat corridors, such that dark corridors can be retained/created as appropriate. This will ensure that any existing opportunities for bats within the Site will be enhanced post development. <u>Badger</u> No evidence of Badgers such as setts, latrines, snagged hairs, foraging marks or footprints were recorded within the Site during the survey work undertaken. <u>Amphibians</u> There are no waterbodies within the Site which could be utilised by breeding amphibians, including Great Crested Newt. The terrestrial habitats within the Site, are also sub-optimal for this species. There are no suitable waterbodies within 500m of the Site, the closest one of note being 0.6km to the north of the Site (a large waterbody within the northern extension of Coldham's Common). As such, it is considered that there remains negligible potential to impact amphibians as a result of the Proposed Development. <u>Reptiles</u> The habitats present within the majority of the Site do not provide potential opportunities for reptile species, with expansive areas of built form, cleared ground and areas subject to intensive mowing regimes. As such, it is considered that there remains negligible potential to impact reptiles as a result of the Proposed Development <u>Invertebrates</u> The habitats at the Site are likely to support an extremely limited range of common invertebrate species, but there is no evidence to suggest that any protected or notable species would be present due to the heavily developed and regularly managed nature of the Site. <u>Birds</u> Bird species recorded during the survey include Woodpigeon, Carrion Crow, Magpie, Robin, Great Tit, Black Bird, and Pied Wagtail. The vast majority of these species were recorded within the treelines at the boundaries of the Site. <u>Statutory Sites</u> There are no statutory designated sites of nature conservation interest within or adjacent to the Site. The nearest statutory designated sites (designated for their nature conservation interest) are Coldham's Common LNR and Logan's Meadow LNR which are situated approximately 0.4km to the east and 0.47km to the north of the Site respectively. The nearest Site of Special Scientific Interest (SSSI) is the Cherry Hinton Pit SSSI, which is located approximately 3.2km south-east of the Site at its closest point. The nearest European Protected Site is Eversden and Wimpole Woods Special Area of Conservation (SAC), which is situated approximately 13km south-west of the Site at its closest point.

TOPIC	CONSIDERATION
	Given the significant distances between the Site and any nearby statutory sites, any significant adverse effects during construction (direct or indirect) are considered highly unlikely to arise (either alone or in combination with other plans or projects) and would be mitigated for through adoption of appropriate construction and engineering practices, in line with best practice and legislative requirements, such as a Construction Environment Management Plan (CEMP). Considering the above, significant impacts on habitats, species or designated sites are not likely to be significant and therefore ecology has been scoped out of the EIA. Notwithstanding this, the results of relevant ecological surveys will accompany the planning application as standalone report(s).
Arboriculture	There are several trees near the junction with Coldhams Lane which are protected by Tree Preservation Orders (TPOs). Other arboricultural features on site consist of treelines along the site boundary as well as some other scattered trees throughout the Site. Existing arboricultural features will be retained where possible and where others are required to be removed to facilitate the Proposed Development, will be compensated for through additional planting. Additionally, measures will be implemented to protect trees throughout the construction phase which can be outlined in a CEMP. Significant impacts on arboricultural features are not considered likely, therefore arboriculture has been scoped out of the EIA.
Cultural Heritage and the Landscape	
Archaeology	Given the Site is already developed, the potential for undiscovered archaeological remains is considered to be low. Archaeology has therefore been scoped out of the EIA. A separate archaeological assessment is being undertaken in support of the planning application.
Material Assets	
Utilities	Provision of utilities will be addressed through appropriate technical reports, as needed, but are not considered a likely significant environmental effect. In addition to this, utility providers have a statutory duty to provide capacity in line with permitted demand. For these reasons, utilities will be scoped out of the EIA.
Waste	A Site Waste Management Plan (SWMP) and a waste and recycling strategy will be developed for the operational phase. This will ensure that waste is dealt with appropriately and recycled where possible during operation, ensuring that any wider impacts are sufficiently mitigated. For the construction phase, preparation of a CEMP, in response to appropriate planning conditions will cover the management of construction waste. It is considered that impacts arising from waste are not likely to be significant and, therefore, waste is scoped out of the EIA.
Major Accidents and Disasters	Regulation 4 (4) requires the identification, description and assessment of expected significant environmental effects arising from the vulnerability of the Proposed development to relevant major accidents or disasters.

TOPIC	CONSIDERATION
	Given the Site and the nature of the Proposed Development, it is considered unlikely there will be significant effects from major relevant accidents or disasters.
The Inter-Relationship Between the Above Factors	
Secondary Effects	No significant effects have been identified but will be re-considered during the assessments.

Table 4.3: Scoping Matrix

	CONSTRUCTION		OPERATION	
	LIKELY TO BE SIGNIFICANT?	SCOPE IN/OUT	LIKELY TO BE SIGNIFICANT?	SCOPE IN/OUT
Population and Human Health				
Social Infrastructure	No	Out	No	Out
Economy and Employment	Yes	In	Yes	In
Human Health	No	Out	No	Out
Tourism	No	Out	No	Out
Retail	No	Out	No	Out
Biodiversity				
Ecology	No	Out	No	Out
Arboriculture	No	Out	No	Out
Land, Soil and Water				
Contaminated Land	Yes	In	Yes	In
Flood Risk and Surface Water Drainage	Yes	In	Yes	In
Air and Climate				
Local Air Quality	Yes	In	Yes	In
Noise	Yes	In	Yes	In
Vibration	Yes	In	No	Out
Microclimate (including wind, artificial light and natural light)	No	Out	No	Out
Climate Change (including greenhouse gas emissions, environmental performance, and vulnerability to climate change)	No	Out	No	Out
Material Assets				
Transport	Yes	In	Yes	In
Utilities	No	Out	No	Out
Waste	No	Out	No	Out
Cultural Heritage and the Landscape				

	CONSTRUCTION		OPERATION	
	LIKELY TO BE SIGNIFICANT?	SCOPE IN/OUT	LIKELY TO BE SIGNIFICANT?	SCOPE IN/OUT
Archaeology	No	Out	No	Out
Built Heritage	Yes	In	Yes	In
Townscape and Visual	Yes	In	Yes	In
The Interaction Between the Factors Referred to Above				
No significant interactions identified will be reconsidered in the EIA	No	Out	No	Out

- 4.16 For each of the environment aspects to be scoped into the EIA, further detail relating to the scope of the assessment is provided in sections 5-12 of this report.

5.0 Air Quality

Introduction

- 5.1 The air quality ES chapter will present an assessment of the likely air quality effects of the Proposed Development, during both the construction and operational phases.

Baseline Conditions

Cambridge City Council Review and Assessment Process

- 5.2 In 2004, CCC declared an AQMA for exceedances of the annual mean NO₂ Air Quality Strategy (AQS) Objective. The AQMA covers an area encompassing the inner ring road and all the land within it (including a buffer zone around the ring road and its junctions with main feeder roads). The Site is located within this AQMA.

Cambridge City Council Local Monitoring

- 5.3 Due to Covid-19, 2020 and 2021 monitoring data was not considered representative of air quality concentrations in the area. 2020 and 2021 monitoring data has therefore not been considered further.
- 5.4 CCC currently undertakes monitoring of NO₂ and particulate matter (PM₁₀¹ and PM_{2.5}²) at five automatic monitors. Details of these are:
- Newmarket Road (CM3): a roadside monitor, located approximately 0.4km north-west of the Site, measuring NO₂ and PM_{2.5};
 - Montague Road (CM2): a roadside monitor, located approximately 1.1km north-west of the Site, measuring NO₂ and PM₁₀;
 - Parker Street (CM4): a roadside monitor, located approximately 1.3km south-west of the Site, measuring NO₂ and PM₁₀;
 - Gonville Place (CM1): a roadside monitor, located approximately 1.4km south-west of the Site, measuring NO₂, PM₁₀ and PM_{2.5}; and
 - Regent Street (CM5): a roadside monitor, located approximately 1.5km south-west of the Site, measuring NO₂.

¹ Particulate matter with a mean aerodynamic diameter less than 10 microns (or micrometres – µm)

² Particulate matter with a mean aerodynamic diameter less than 2.5 microns

5.5 Monitored concentrations from the five automatic monitors are presented in **Table 5.1** below.

Table 5.1: Measured Concentrations at the five CCC Automatic Monitors

ID	POLLUTANT	AVERAGING PERIOD	AQS OBJECTIVE	2016	2017	2018	2019
CM3	NO ₂	Annual Mean (µg/m ³)	40µg/m ³	24	26	25	22
		1-Hour Mean (No. of Hours)	200µg/m ³ not to be exceeded more than 18 times a year	0	0	0	0
	PM _{2.5}	Annual Mean (µg/m ³)	25µg/m ³	11	11	10	10
CM2	NO ₂	Annual Mean (µg/m ³)	40µg/m ³	27	24	25	22
		1-Hour Mean (No. of Hours)	200µg/m ³ not to be exceeded more than 18 times a year	0	0	1	0
	PM ₁₀	Annual Mean (µg/m ³)	40µg/m ³	22	20	21	22
		24-Hour Mean (No. of Days)	50µg/m ³ not to be exceeded more than 35 times a year	2	3	1	6
CM4	NO ₂	Annual Mean (µg/m ³)	40µg/m ³	41	37	32	33
		1-Hour Mean (No. of Hours)	200µg/m ³ not to be exceeded more than 18 times a year	0	0	0	0
	PM ₁₀	Annual Mean (µg/m ³)	40µg/m ³	22	21	23	21
		24-Hour Mean (No. of Days)	50µg/m ³ not to be exceeded more than 35 times a year	4	4	1	5
CM1	NO ₂	Annual Mean (µg/m ³)	40µg/m ³	36	31	30	28
		1-Hour Mean (No. of Hours)	200µg/m ³ not to be exceeded more than 18 times a year	0	0	0	0
	PM ₁₀	Annual Mean (µg/m ³)	40µg/m ³	20	18	19	19
		24-Hour Mean (No. of Days)	50µg/m ³ not to be exceeded more than 35 times a year	1	3	1	2
	PM _{2.5}	Annual Mean (µg/m ³)	25µg/m ³	15	15	15	14
CM5	NO ₂	Annual Mean (µg/m ³)	40µg/m ³	32	29	26	27
		1-Hour Mean (No. of Hours)	200µg/m ³ not to be exceeded more than 18 times a year	0	0	0	0

		of Hours)	exceeded more than 18 times a year				
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*Source: Data obtained from the CCC Air Quality Annual Status Report, June 2020³

- 5.6 The monitoring results in **Table 5.1** show that all AQS objectives were met at all five automatic monitors in CCC from 2016 to 2019.
- 5.7 Pollutant concentrations have generally reduced or remained similar from 2016 to 2019. 24-hour mean PM₁₀ was seen to increase between 2016 and 2019 at the CM2, CM4 and CM1 automatic monitors.
- 5.8 In 2019, CCC also measured annual mean NO₂ concentrations at 69 locations using diffusion tubes. The results for the nine NO₂ diffusion tubes within 1km of the Site are presented in **Table 5.2**.

Table 5.2: Measured NO₂ Concentrations at CCC Diffusion Tubes within 1km of the Site

ID	LOCATION	CLASSIFICATION	DISTANCE TO SITE (KM)	ANNUAL MEAN NO ₂ CONCENTRATION (µG/M ³)			
				2016	2017	2018	2019
DT56	Coldhams Lane 2	Roadside	0.2	27	23	23	20
DT61	Newmarket Road 3	Roadside	0.4	-	-	33	34
DT7	Newmarket Road 1	Roadside	0.5	35	32	33	31
DT35	Abbey Road	Roadside	0.6	21	19	17	17
DT17	Coldhams Lane	Roadside	0.6	24	22	21	22
DT13	East Road	Roadside	0.8	26	24	24	22
DT20	Elizabeth Way	Roadside	0.9	31	26	27	26
DT14	Mill Road	Roadside	0.9	25	24	23	21
DT39	Maids Causeway	Kerbside	1.0	32	28	30	27

*Notes: Data obtained from the CCC Air Quality Annual Status Report, June 2020

- 5.9 The results in **Table 5.2** show the annual mean NO₂ AQS objective of 40µg/m³ was met at all nine of the closest diffusion tubes closest to the Site from 2016 to 2019. Annual mean NO₂ concentrations reduced between 2016 and 2019 at eight of the nine diffusion tubes. The annual mean NO₂ concentration at DT61 on Newmarket Road 3, increased slightly from 2018 to 2019.

³ Cambridge City Council Air Quality Annual Status Report, June 2020

- 5.10 In addition to the monitoring undertaken by CCC, background concentrations of NO_x, NO₂, PM₁₀ and PM_{2.5} are available from the Defra Air Quality Archive for 1x1km grid squares for assessment years between 2018 and 2030. **Table 5.3** presents the Defra background concentrations for the grid square the Site is located within (546500, 258500).

Table 5.3: Defra Background Maps in 2019 for the Grid Square of the Site

POLLUTANT	AQS OBJECTIVE	2019 ANNUAL MEAN CONCENTRATION (µG/M3)
NO _x	-	19.5
NO ₂	40µg/m ³	14.3
PM ₁₀	40µg/m ³	16.2
PM _{2.5}	25µg/m ³	10.8

*Data Source: <http://uk-air.defra.gov.uk>

- 5.11 The data in **Table 5.3** shows that all pollutants are below the respective AQS objectives.

Potential Impacts

- 5.12 The air quality chapter of the ES will assess the following likely significant effects of the Development on the environment with respect to air quality:

During construction:

- Temporary generation of dust arising from the construction works leading to potential dust nuisance to surrounding sensitive receptors; and
- Temporary changes in traffic-related emissions during the construction works as a result of changes in traffic generated by such works / activities.

Complete and operational Development:

- Qualitatively consider the potential air quality concentrations future uses of the Proposed Development would be exposed to.

- 5.13 The Proposed Development would result in a reduction of car parking spaces and subsequent reduction in vehicle movements, in annual average daily traffic, when compared to the existing site. In accordance with the Environmental Protection UK (EPUK) and Institute of Air Quality Management (IAQM) planning development guidance criteria⁴ an air quality assessment on vehicle emissions is required if there is a change of:

⁴ Environmental Protection UK & Institute of Air Quality Management (2017), 'Land-Use Planning & Development Control: Planning for Air Quality', EPUK & IAQM, London

- more than 100 Light Duty Vehicles (LDV's) flows in Annual Average Daily Traffic (AADT) within or adjacent to an AQMA or more than 500 AADT elsewhere; or
- more than 25 Heavy Duty Vehicles (HDV) flows AADT within or adjacent to an AQMA or more than 100 AADT elsewhere.

5.14 An assessment of traffic emissions is proposed to be scoped out of the air quality chapter of the ES.

Approach and Method

5.15 It is anticipated that the assessment will comprise the following:

- A review of relevant air quality baseline conditions via a review of relevant CCC air quality review and assessment documents and data from the CCC monitoring network;
- A qualitative assessment of air quality effects resulting from the demolition and construction works following IAQM guidance;
- A qualitative review of the operational traffic data against the criteria set out within the EPUK and IAQM guidance to determine the impact of the Proposed Development;
- If applicable, use of the ADMS 5 air quality dispersion model, using data from the Building Services Engineers, to assess the likely effects of emissions from the combustion plant of the completed and operational Development; and
- Whilst not necessarily applied as direct mitigation measures, details of the measures incorporated within the Proposed Development design that would have a beneficial effect on air quality (such as sustainable transport provisions) will be presented.

Consultation

5.16 Formal consultation has not been undertaken. However, high-level air quality advice and a presentation on the key principles of air quality was provided to CCC in an environmental workshop in April 2022.

6.0 Flood Risk and Drainage

Introduction

- 6.1 The Flood Risk and Drainage ES chapter will present an assessment of the likely hydrological effects of the Proposed Development.

Baseline Conditions

- 6.2 Baseline data relating to the Site and its surroundings have been compiled using the following sources:

- Site walkover to understand the existing hydrological regime and proximity to watercourses;
- Review of online EA data, British Geological Survey (BGS) mapping and Flood Estimation Handbook (FEH) hydrological data;
- Review of Cambridge and South Cambridgeshire Strategic Flood Risk Assessment (SFRA) data and mapping; and
- Consultation with Cambridgeshire County Council in their role as Lead Local Flood Authority (LLFA), and Anglian Water.

Flood Risk

- 6.3 EA mapping indicates that the Site lies at low risk of flooding from Main Rivers (including the River Cam and its tributaries) and the Sea. Furthermore, the Site is not traversed by Ordinary Watercourses.
- 6.4 The majority of the Site is deemed to remain dry or be subject to very shallow (less than 150mm) of surface water flooding from intense or prolonged rainfall even for a significant (between 1 in 100 years up to 1 in 1,000 year) event. However, localised areas around the south-eastern and north-eastern periphery of the Site are shown to be subject to ponding during moderate events and generally align with local topographical low spots and hollows, access routes to service yards etc. Some offsite areas downgradient from the Site are understood to be at an elevated risk of surface water flooding, including the Coldham's Common 'wet spot' as designated by the LLFA.
- 6.5 Flood risk to the Site from other sources of flooding, such as groundwater, sewers, failure of pumping installations, or breach of raised reservoir embankments are considered to be low.

Drainage

- 6.6 The majority of the existing site comprises impermeable surfacing and hardstanding which is drained via linear channel drains and gullies to the public surface water sewer network.

- 6.7 A significant portion of the central and southern areas of the site are drained, via gravity, to an underground box culvert attenuation storage arrangement beneath the southern car park. Flows are released in a northerly direction, ultimately draining to the public surface water sewer network beneath Coldham's Lane.
- 6.8 Foul flows from the existing retail and commercial facilities on the site are drained to the public foul sewer networks beneath public highways that encircle the Site.

Potential Impacts

- 6.9 The Flood Risk and Drainage chapter of the ES will assess the following likely significant effects of the Proposed Development on the environment with respect to flood risk:

During Construction

- Temporary generation and mobilisation of contaminants and pollutants arising from the construction works leading to potential water quality effects upon the underlying groundwater and nearby sensitive surface water receptors.
- Temporary on-site and off-site flood risk effects as a result of uncontrolled discharge of runoff generated during construction works / activities.

Operational Development

- Increased flood risk to on-site and off-site areas from uncontrolled discharge of runoff.
- Generation and mobilisation of contaminants and pollutants potentially leading to potential water quality effects upon the underlying groundwater and nearby sensitive surface water receptors.
- Increased foul flows from the Proposed Development potentially leading to increased risk to off-site areas from foul sewer flooding.

Approach and Method

- 6.10 A Flood Risk Assessment (FRA) will be undertaken broadly in line with BS8533, supplemented by a Foul & Surface Water Drainage Strategy, and presented as a technical appendix to the ES.
- 6.11 Assessment of flood risk and sustainable water management will be undertaken with due consideration of relevant planning policy and best practice, including:
- NPPF and its Planning Practice Guidance;
 - Cambridge Local Plan 2018 Policy 31: Integrated Water Management;

- Cambridge Local Plan 2018 Policy 32: Flood Risk;
- Non-statutory Technical Standards for Sustainable Drainage Systems (SuDS);
- Cambridge and South Cambridgeshire Strategic Flood Risk Assessment Level 1;
- Sustainable Development, Climate Change, Water and Flooding;
- Sustainable Drainage: Cambridge Design and Adoption Guidance;
- Cambridgeshire Flood and Water SPD and Sustainable Design & Construction SPD.

6.12 It is anticipated that the assessment will comprise the following:

- A review of relevant baseline conditions from published mapping, data sources, and walkover surveys;
- Consideration of potential effects upon the local hydrogeological and hydrological receptors and;
- Detailed assessment of flood risk from all potential sources;
- Development of a sustainable drainage strategy that incorporates SuDS and pollutant treatment trains, integrated within the on-site landscape and green infrastructure;
- Demonstration that the proposed drainage strategy follows the drainage hierarchy, with surface water runoff restricted to as close to the greenfield runoff rate as reasonably practicable and/or infiltration into the ground;
- Consideration and future-proofing of climate change effects; and
- Consideration of the existing and proposed foul flows from the site and pre-planning dialogue with Anglian Water to seek to determine the capacity in the existing public sewer network and its ability to receive additional flows from the Proposed Development, such that network reinforcement can be planned as early as possible, if required.

7.0 Heritage

Introduction

- 7.1 This chapter of the ES will identify likely significant effects of the Proposed Development on above-ground built heritage, specifically designated heritage assets including Listed Buildings and Conservation Areas within the vicinity of the Proposed Development as well as locally designated and non-designated assets identified through policies in the Local Plan.

Baseline Conditions

- 7.2 Details of the cultural heritage baseline have been established through proportionate desk-based research contained within a separate Initial Heritage Statement. This was produced at an early stage of an iterative process to be undertaken by the design team.
- 7.3 Information on assets affected by the Site has been gathered to understand the location and relationship of heritage assets to the Site.
- 7.4 There are no heritage assets within the Site. However, the following sensitive receptors have been identified as having the potential to be affected by the Proposed Development, forming the baseline for assessment. These are identified in **Table 7.4**. Assets considered to have the strongest relationship to the Site are italicised.

Table 7.4: Identified Heritage Receptors which form part of the Baseline

NAME	REFERENCE	CATEGORY
<u>Immediate Context</u>		
<i>Mill Road Conservation Area</i>		
<i>St Matthew's Church</i>	<i>1268345</i>	<i>Grade II</i>
<i>247 Newmarket Road</i>	<i>1300768</i>	<i>Grade II</i>
<i>York Street Terraces (excluding nos. 86-92a even, 98-104 even and 101-111a odd)</i>		<i>Positive Unlisted Buildings</i>
<i>Ainsworth Street Terraces</i>		<i>Positive Unlisted Buildings</i>
<i>Stone Street Terraces</i>		<i>Positive Unlisted Buildings</i>
<i>Seaford Street Terraces</i>		<i>Positive Unlisted Buildings</i>
<i>York Terraces</i>		<i>Positive Unlisted Buildings</i>
<i>33-38 Abbey Walk</i>		<i>Buildings of Local Interest</i>
<i>Sturton Street Terraces</i>		<i>Positive Unlisted Buildings</i>
<i>179 Sturton Street</i>		<i>Positive Unlisted Buildings</i>

192-198 Sturton Street		Positive Unlisted Buildings
Milford Street Terraces		Positive Unlisted Buildings
Gwydir Street Terraces		Positive Unlisted Buildings
Edward Street Terraces		Positive Unlisted Buildings
Norfolk Street Terraces		Positive Unlisted Buildings
Norfolk Terrace		Positive Unlisted Buildings
<u>Wider Context</u>		
Central Conservation Area		
Riverside Conservation Area		
New Town and Glisson Road Conservation Area		
Castle and Victoria Road Conservation Area		
West Cambridge Conservation Area		
Jesus College	1125529	Grade I
St John's College	1332216	Grade I
University Library	1126281	Grade II
Church of Our Lady and the English Martyrs (Roman Catholic)	1349061	Grade II*
Kings College Chapel	1139003	Grade I
All Saints Church	1126204	Grade I
St Andrews the Less	1126143	Grade II
Mill Road Cemetery	1001561	Grade II
Church of Christ Church	1126147	Grade II
Old Cheddar's Lane pumping station	1006896	Scheduled Monument

Potential Impacts

7.5 Effects on the historic environment can arise through direct physical impacts, impacts on setting or indirect impacts:

- Direct physical impacts describe those development activities that directly cause damage to the fabric of a heritage asset. Typically, these activities are related to construction works and will only occur within the Site.
- An impact on the setting of a heritage asset occurs when the presence of a development changes the surroundings of a heritage asset in such a way that it affects (positively or

negatively) the cultural significance of that asset. Visual impacts are most commonly encountered but other environmental factors such as noise, light or air quality can be relevant in some cases. Impacts may be encountered at all stages in the life cycle of a development from construction to decommissioning but they are only likely to lead to significant effects during the prolonged operational life of the development.

- Indirect impacts describe secondary processes, triggered by the development, that lead to the degradation or preservation of heritage assets. For example, changes to the setting of a building may affect the viability of its current use and thus lead to dereliction.

7.6 Potential impacts on the settings of heritage assets may occur as a result of changes to key views and approaches.

7.7 The Proposed Development would likely bring about a change to the extent, scale, massing and character of the Site and therefore have the potential to affect the settings of the receptors.

7.8 The receptors listed in **Table 7.1** may be affected by the Proposed Development and this should continue to be monitored throughout the design process.

7.9 The following likely effects have been identified and will be addressed within the ES:

- Temporary changes to the setting of receptors during the construction phase; and
- Long-term change to the setting of receptors as a result of the proposals once completed and operational.

Approach and Method

7.10 A built heritage assessment will be completed in accordance with the NPPF. The assessment will describe the significance of the receptors which may be affected by the Proposed Development including the contribution of the Site to this significance and provide an assessment of the likely effects of the proposals upon the significance and setting of the receptors.

7.11 This assessment will be based on an initial desk-based appraisal of data, current maps and aerial images available on the internet. Where this initial appraisal has identified the potential for a significant effect, the receptor will be visited to define baseline conditions and identify key viewpoints.

7.12 The Heritage Impact Assessment will be carried out in the following stages:

- Desk-based study leading to the identification of heritage assets potentially affected by the Proposed Development;
- A review of cartographic evidence for the Site;
- An examination of national, regional and local planning policies in relation to the built heritage and historic landscape;

- A site visit will be carried out to further inform the assessment, enabling a more accurate understanding of the local topography. The site visit will also be used to identify those aspects of setting which may contribute to the cultural significance of the heritage assets being assessed.
- A definition of baseline conditions, based on results of the desk-based study and visits to assets;
- Assessment of the importance of heritage assets potentially affected by the Proposed Development. As part of this assessment the sensitivity or heritage value of each heritage asset will be determined, taking into account both the relative importance of the asset and the relative weight which statute and policy attach to it.
- Identification of potential impacts on heritage assets, informed by baseline information and site visits;
- Proposal of mitigation measures, to eliminate, reduce or offset adverse effects;
- Assessment of the magnitude of residual effects; and
- Assessment of the significance of residual effects, broadly a product of the asset's importance and the magnitude of the impact.

Consultation

- 7.13 A number of workshops has been undertaken with the CCC, specifically addressing Urban Design, Conservation and Townscape issues.
- 7.14 The Greater Cambridge Shared Planning Team provided Pre-Application Planning Advice in October 2021. The Greater Cambridge Design Review Panel took place in June 2022 and reviewed the proposed masterplan and Outline Planning Application.
- 7.15 Historic England have been consulted regarding development principles and provided feedback at Pre-Application stage in June 2022.

8.0 Ground Conditions and Contamination

Introduction

- 8.1 The Ground Conditions and Contamination chapter of the ES will be prepared by Waterman and will present an assessment of the likely ground condition and contamination effects of the Proposed Development on identified sensitive receptors.
- 8.2 Baseline conditions have been established in a Preliminary Risk Assessment (PRA)⁵ prepared by Waterman for the Site. The PRA developed a preliminary conceptual Site model following a review of environmental datasets, and historical maps. The PRA was undertaken in general accordance with the Land Contamination: Risk Management Guidance (LCRM: Environment Agency, 19 April 2021)⁶.

Baseline Conditions

- 8.3 Historical mapping indicates the Site was disused or in use as allotments up until the 1960s when a dairy, builders' yard, and a bakery are denoted on-site. The north of the Site was redeveloped initially in the 1980's into the existing Beehive Retail Centre layout with remainder of the Site following by 1994. A petrol filling station was constructed on the western Site boundary as part of the initial Beehive Retail Centre before being decommissioned by 2003.
- 8.4 The immediate surrounding area has been subject to significant industrial and commercial land uses. These include large gravel/clay pits which were infilled by 1903 and 1973, a gas works, various factories and works, and a petroleum depot.
- 8.5 Current on-site potentially significant sources of contamination were not identified. However, potential contaminants of concern associated with historical Site uses include asbestos, polycyclic aromatic hydrocarbons (PAHs), metals, petroleum hydrocarbons, and methyl tert-butyl ether (MTBE).
- 8.6 Current off-site potentially significant sources of contamination include railway lines to the east and south-east. Potential contaminants of concern associated with this land use include PAHs, petroleum hydrocarbons, and asbestos. Potential contaminants of concern associated with historical off-site uses include metals, petroleum hydrocarbons, chlorinated solvents, semi-volatile organic compounds (SVOCs), MTBE, and asbestos.
- 8.7 There are no environmental licences, permits, or consents registered to the Site. A waste exemption is registered at the Site for storage of commercial waste associated with existing retail

⁵ Waterman Infrastructure & Environment Ltd, Preliminary Risk Assessment, Beehive Retail Park, Cambridge. Reference WIE17469-100-R-5-1-2-PRA, February 2022

⁶ Land contamination risk management (LCRM). Land contamination risk management (LCRM) - GOV.UK (www.gov.uk). Last updated 19 April 2021

units. A historical environmental permit (Part B) is recorded at the Site, associated with petrol vapour recovery at the former filling station on-site.

- 8.8 Discharges of List 1 and List 2 Dangerous Substances are recorded in the vicinity of the Site. The List 1 Dangerous Substances discharge is recorded 2m north-east of the Site. Its authorised substances include mercury (other) and cadmium. The List 2 Dangerous Substances discharge is recorded 46m east. Its authorised substances include pH.
- 8.9 No landfills have been identified within 500m of the Site. However, infilled historical gravel and clay pits have been identified in the vicinity of the Site.
- 8.10 British Geological Survey (BGS) data, historical borehole records, and EA hydrogeological information indicate the following geological and hydrogeological sequence below the Site (set out within **Table 8.1**). The Site is not in a groundwater Source Protection Zone (SPZ) and there are no recorded potable groundwater abstractions within 1km of the Site.
- 8.11 The nearest surface water to the Site is Cherry Hinton Brook – 350m north-east.

Table 8.4: Site Geology

STRATUM	AREA COVERED	ESTIMATED THICKNESS	TYPICAL DESCRIPTION	HYDROGEOLOGICAL SIGNIFICANCE
Made Ground	Whole Site	1.0 – 2.0m	Granular material generated during the multiple redevelopment phases. Reworked natural material becoming present with depth	Unproductive Strata
River Terrace Deposits	South-west of Site	3.0 – 5.0m	Brown/orange, brown slightly clayey/clayey SAND/GRAVEL.	Secondary A Aquifer
West Mulberry Chalk Formation	Whole Site	3.0 – 5.0m	Grey marly CHALK.	Principal Aquifer
Gault Formation	Whole Site	30m	Grey silty CLAY	Unproductive Strata
Lower Greensand Formation	Whole Site	>20m	SAND/SANDSTONE	Principal Aquifer

Potential Impacts

- 8.12 In consideration of the above, the likely effects to be addressed as part of the ES chapter will include those related to contamination (including soil and groundwater) and ground gas emissions from historical and current land uses, the potential for unforeseen contamination to be encountered during the Works and the potential for the Works to affect ground conditions.

8.13 The assessment will consider effects to:

- Demolition, construction, and ground workers during the Works arising from potentially contaminated soils and groundwater;
- On-site and off-site users during the Works and at the completed Development stage;
- Ground gas and vapour emissions to Development from potentially contaminated soils and groundwater;
- On-site and off-site controlled waters, including underlying aquifers and surface waters during the Works and once the Development is complete and operational;
- Future Site users from exposure to potentially contaminated soils beneath the Site;
- Future soft landscaping from potentially contaminated shallow soils; and
- Underground infrastructure from contaminated soils and groundwater.

Approach and Method

8.14 The PRA will be appended to the ES and will inform the assessment of likely effects as outlined above.

8.15 The ground conditions and contamination chapter of the ES will comprise the following:

- An explanation of the assessment methodology and significance criteria;
- A description of the baseline conditions, including a review of the Site history, geology, hydrogeology and previous environmental assessments for the Site;
- A description of the Site inspections undertaken to determine the environmental sensitivity and current potential for contamination at the Site and in the surrounding area;
- An evaluation of the potential for the historical use of the Site to present potentially contaminative uses and the likelihood of residual contamination being present in the ground or groundwater;
- A preliminary conceptual Site model to identify the potential for contaminant-pathway-receptor pollutant linkages to exist;
- An assessment of the potential effects (arising from both the Works and once the Proposed Development is complete and operational). This will consider the potential impact of (and mitigation measures for) Site users, future Site users, off-site users, buildings, controlled waters and future soft landscaping; and

- An assessment of residual effects during the Works, and once the Proposed Development is complete and operational, on a local basis, taking account of other potential nearby developments.

8.16 Recommendations for further mitigation will be outlined, if necessary, such as intrusive ground investigation and likely remedial measures and how these measures would break identified contamination receptor linkages.

Consultation

8.17 Contaminated land information will be requested from CCC Environmental Health and Building Control Departments. The PRA will be updated with any records obtained and, where necessary, the baseline conditions and preliminary conceptual model updated.

Assumptions

8.18 It is assumed a Construction Environmental Management Plan (CEMP) would be prepared and implemented during the construction works. It is expected the CEMP would be secured by a suitably worded planning condition.

8.19 CEMP mitigation measures relevant to ground conditions and contamination include:

- The use of hoarding around the perimeter of the Site to contain dust arising from within the Site;
- Using dust screens and covers;
- Damping down surfaces during dry weather;
- Using wheel washing facilities on the Site;
- Restricting drop heights onto barges and lorries;
- Stockpiling of contaminated materials would be avoided, wherever practicable;
- Storage and handling of liquids and solids of a potentially hazardous nature;
- Management of surface water, groundwater, and dewatering activities; and
- Waste management.

8.20 Health and safety legislation will be adhered to, and mandatory health and safety measures always applied during the construction works. This includes taking precautions with respect to potential unexploded ordnance (UXO), such as procurement of a detailed UXO desk study to assess and potentially zone UXO hazard level on the Site and implementing the recommendations of the study.

Recommendations may include toolbox talks, a watching brief for UXO in higher risk areas, and presence of a UXO specialist should the requirement for one be identified for certain activities. These recommendations will ensure that site construction and groundworkers are aware of the potential for unexploded ordnance (UXO) to be encountered. Notwithstanding, UXO is a potential health and safety issue and not a source of chemical contamination to soils or groundwater. Therefore, potential effects from UXO will not be assessed in this Chapter.

- 8.21 It is assumed that CCC will condition contaminated land matters, including requirement for detailed ground investigation and a Remediation Strategy, in accordance with the LCRM guidance as part of any planning permission to ensure that the Complete and Operational Development is suitable for use and meets the requirements of the NPPF.
- 8.22 It is assumed, should ground investigation identify significant contamination within the safeguarded wharf, appropriate remediation works will be implemented where potentially unacceptable contaminant linkages are present.

9.0 Townscape and Visual

Introduction

- 9.1 Bidwells has been commissioned to provide townscape and visual assessment advice in respect of the Proposed Development. This advice will culminate in the preparation of a Townscape and Visual Impact Assessment (TVIA).
- 9.2 This section of the EIA Scoping Report provides an overview of the proposed baseline and methodology that will be applied to the TVIA. The detailed baseline and methodology are found in **Appendix 2**.

Baseline Conditions

- 9.3 The TVIA will include townscape and visual baselines, derived from a combination of desk-based study and site visit observations.
- 9.4 The townscape baseline aims to understand and identify the character of the study area including the specific elements, features and aesthetic factors that define it. This evidence will be used to define the townscape value and sensitivity of the study area.
- 9.5 The visual baseline is concerned with the visibility of the Proposed Development and the identification of visual receptors and a series of key or representative viewpoints.
- 9.6 For details on both baselines please see **Appendix 2**.

Potential Impacts

- 9.7 The Site is currently occupied by a large car park area serving large scale commercial buildings that define the edge along the railway line. Whilst it is publicly accessible, it has no formal recreational status or use.
- 9.8 Although embedded in Cambridge's townscape, the Site substantially differs from the finer urban grain of the surrounding residential areas, and it is more akin to the commercial area on the other side of Coldham's Lane and along Newmarket Road.
- 9.9 The preliminary analysis of the Proposed Development against the baseline conditions concludes that the following visual and townscape effects are to be expected:
- The building volumes and height would alter the views from strategic green spaces, namely Coldham's Common and Ditton Meadows;
 - Views from within the Mill Road Conservation Area could be visually impacted by development on Site;

- Building heights on Site in excess of those around are likely to have an impact on nearby and long-distance views identified in the relevant Local Plan's policies; and
- The change in land use that would come with the proposed diversification of offering on the Site would change the experiential quality of the Site and so the setting of the adjacent residential areas.

9.10 It is expected that some of the resulting effects may technically be significant in TVIA terms (see detailed methodology in **Appendix 2**).

Approach and Method

9.11 The TVIA will be prepared in accordance with the guidelines as set out in "Guidelines for Landscape and Visual Impact Assessment: Third Edition", (GLVIA3) published by the Landscape Institute and the Institute of Environmental Management and Assessment. However, given the urban nature of the context of the site, the GLVIA3 approach is applied with reference to townscape impact rather than landscape impact. The term townscape will be used to encompass all the urban and landscape characteristics of the site and its context.

9.12 The 'Design Manual for Roads and Bridges: Volume 11' (DMRB), Section 3 Environmental Assessment Techniques (August 2009) is also considered where appropriate. Particularly, reference is made to Chapter 8 'Variation for Urban Scheme' which emphasises the assessment of impact on townscape features.

9.13 A detailed methodology of how the appraisal of townscape and visual effects will be carried out can be found in **Appendix 2**.

Consultation

9.14 No formal consultation to discuss the scoping of the TVIA has been undertaken so far. However, the overall approach, and in particular the selection of viewpoints, has been discussed with CCC landscape team.

10.0 Noise and Vibration

Introduction

- 10.1 It is proposed that Noise and Vibration is scoped into the ES. The chapter will identify and assess potential noise and vibration effects associated with the Proposed Development.
- 10.2 Consideration will be given to effects associated during both the construction and operational phases which may affect existing noise sensitive receivers and the future users of the Proposed Development.
- 10.3 The chapter will be supported by a technical appendix, which will include further detail on the assessment specifics.

Baseline Conditions

- 10.4 An environmental sound survey has been undertaken in accordance with BS 7445-1⁷ to establish baseline acoustic conditions across the Site, and likely to be experienced by surrounding noise sensitive receptors.
- 10.5 Measurements comprised long-term noise monitoring at two fixed positions on the eastern and western site boundary over a 7-day period between Friday 11th December and Friday 18th December 2020. The data from these positions have been used to establish long term trends in the local acoustic climate and typically occurring background sound levels at neighbouring noise-sensitive receivers.
- 10.6 Further short-term attended measurements have been captured at five positions to determine how sound levels vary across the Site and to provide spectral data to assist with informing the building envelope sound insulation design.
- 10.7 A high-level overview of the measurement positions and data metrics pertinent to the acoustic design are presented in **Figure 10.1**.
- 10.8 The primary sources of environmental sound affecting the Site have been identified as road traffic on the local road network, particularly vehicles travelling along Coldhams Lane, and trains running along the railway tracks which demark the eastern Site boundary.
- 10.9 No notable developments or changes in transport infrastructure have been identified within the local area since 2020 and the survey data are still considered relevant. Nevertheless, it is proposed that short-term attended measurements will be undertaken to verify the suitability of the original data set.

⁷ British Standard 7445-1:2003 Description and measurement of environmental noise – Part 1: Guide to quantities and procedures

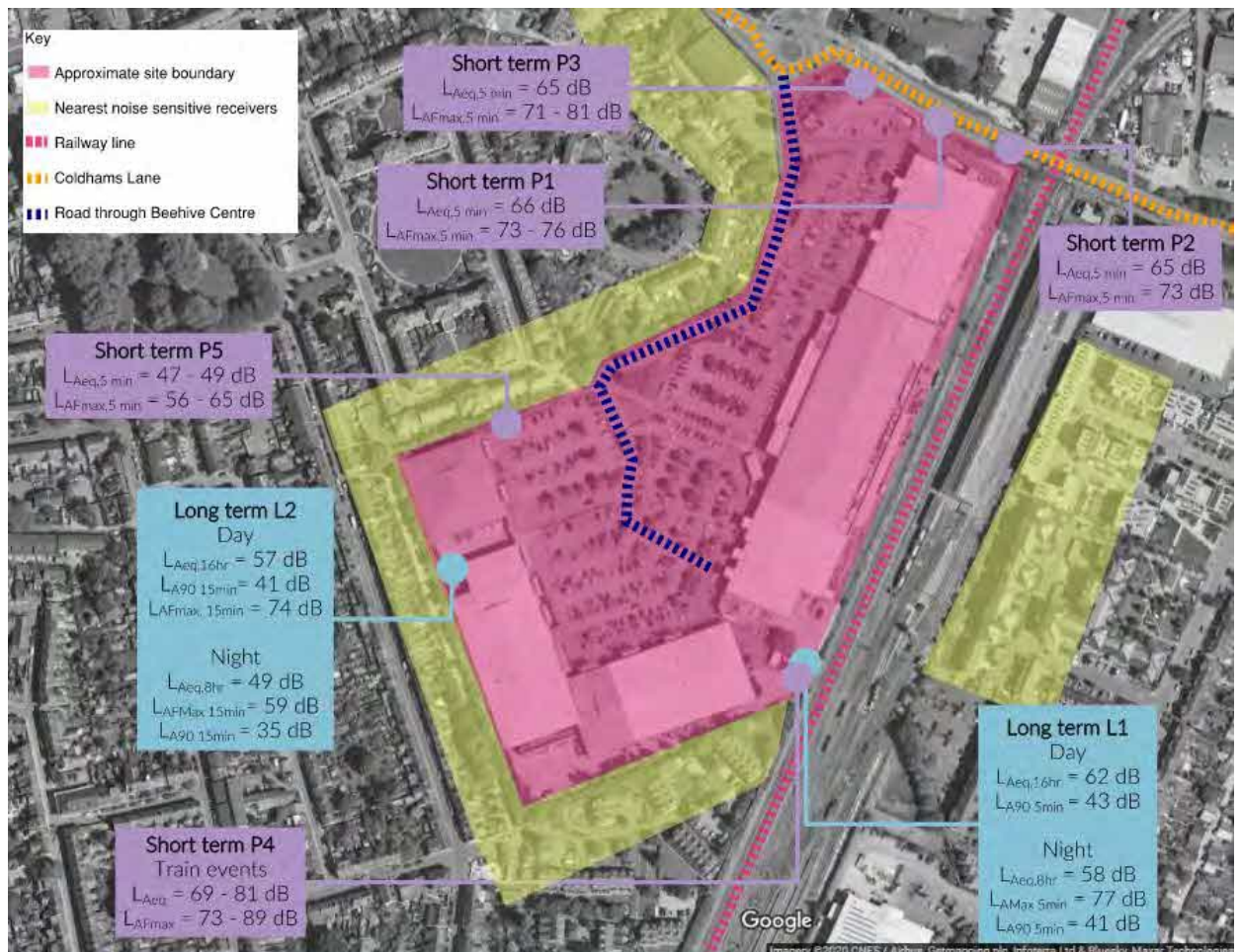


Figure 10.1 Overview of survey results (image courtesy of Google).

- 10.10 The adjoining railway line has been identified as a potential source of vibration, but as a commercial development the control of environmental vibration is ultimately considered to be a commercial matter for the developer/operator. Environmental vibration impacts on the Proposed Development are therefore proposed to be scoped out of the ES Chapter.

Potential Impacts

- 10.11 Potentially significant effects could arise during both the construction and operational phases of the Proposed Development. A brief description of the potential effects that have been identified and included within the scope of the assessment are:

- Noise and vibration from demolition and construction activity, including construction traffic. Assessment will be undertaken to both existing noise sensitive receivers and will also consider the effect on early occupied phases within the Proposed Development itself where applicable.
- Assessment of the Site's suitability with regards to noise. Consideration will be given to achieving suitable internal sound levels throughout the Proposed Development.
- Noise emissions from the introduction of new building services plant.

- Noise emissions from the newly formed events space / public square.

- 10.12 The following impacts have also been considered as part of an initial site review but are proposed to be excluded from the scope of this ES chapter. Justifications for this are outlined below.
- Operational phase – Changes in noise associated with road traffic from the Proposed Development.
- 10.13 Changes in road traffic flows caused by the Proposed Development may lead to changes in noise within the local area.
- 10.14 Guidance within the Highway's Agency Design Manual for Roads and Bridges (DMRB)⁸ suggests that long term noise levels would need to change by 3 dB or more for a minor impact to occur. In the simplest of terms, an increase in noise of 3 dB would require the number of vehicles on the road to double. Conversely, a 3 dB reduction would require a halving of the number of daily vehicle trips.
- 10.15 It is understood that car parking facilities are to be provided as part of the Proposed Development, but proposals represent a significant reduction upon the existing parking provision. It is therefore considered highly unlikely that a doubling of vehicles trips would occur. Rather, the reduction of parking bays is expected to decrease daily traffic flows but with the Site located close to Cambridge city centre the overall change in vehicles and therefore noise, is expected to be negligible.
- 10.16 On this basis, it is proposed that the assessment of changes in noise due to operational phase road traffic is excluded from the scope of the ES.
- Operational phase – Control of vibration.
- 10.17 The assessment of environmental vibration impact upon the Proposed Development is proposed to be scoped out, as described within the baseline conditions section above.
- 10.18 Operational phase vibration associated with the Proposed Development is expected to be limited to items of building services plant. It will be necessary to provide all plant with suitable anti-vibration mounts to minimise impact upon the operation of the facility. This will inherently mitigate potential vibration effects to nearby sensitive receivers. Assessment of operational phase vibration is therefore proposed to be scoped out of the ES.

Approach and Method

- 10.19 The assessments of the identified effects will be undertaken with regards to National and Local policies. Key policies will include National Planning Policy Framework (NPPF), Planning Practice Guidance (PPG), Noise Policy Statement for England (NPSfE), and relevant local policy from Cambridge City Council. Consideration shall also be given to relevant non-statutory guidance,

⁸ DMRB LA 111:2020 – Noise and Vibration Highway's Agency Design manual for roads and bridges

including appropriate British Standards (BS), IEMA guidance and other standard documents as necessary.

Sensitive Receptors

- 10.20 The nearest sensitive receptors have been identified as the residential properties which border the Site to the west and south. Residences to the east, on the opposite side of the railway tracks, have also been identified as sensitive receivers who may be subject to effects associated with noise.
- 10.21 The facades of these receptors are typically within 5 –60 metres of the Site boundary and the approach will be to define a set number of assessment points that represent a wider cluster of individual receptors. The locations of the receptors in relation to the site are presented in **Figure 10.2**.



Figure 10.2 Nearest noise sensitive receptors

Construction phase – noise, vibration, and traffic.

- 10.22 Activities associated with the demolition of the existing buildings, excavation works, and the construction of the Proposed Development have the potential to generate high levels of noise and vibration.
- 10.23 The assessment of noise and vibration associated with demolition and construction activities will be carried out in accordance with the guidance provided in British Standard 5228 (parts 1 and 2)⁹¹⁰. At this stage of the development proposal, it is unlikely that full details of the construction programme, methodology and plant to be utilised will be known. Therefore, reasonable assumptions will be made of the likely plant and construction processes based on the type and scale of the Proposed Development.
- 10.24 Reasonable worst-case construction and demolition noise and vibration levels generated within the Site will be predicted for different stages at both the nearest identified sensitive receptors.
- 10.25 Changes in road traffic noise associated with additional vehicle movements generated during with the construction phase will be assessed using relevant criteria derived from DMRB. This document advises that, for a ‘minor’ impact to occur, short term noise levels would need to change by 1 dB or more.

Site suitability assessment

- 10.26 The Proposed Development should seek to control external noise ingress so that suitable internal acoustic conditions can be achieved. Excessive internal noise can adversely impact upon the intended use of the Proposed Development.
- 10.27 The assessment of noise ingress into the Proposed Development shall be undertaken in accordance with the simplified calculation methodology set down in BS 8233¹¹. The sound insulation requirements for the façade are derived by subtracting the internal sound standard from the external noise level at the façade, with a correction of 5 dB to account for changes in sound absorption within the room, and differences in source sound spectrum (frequency content).
- 10.28 Appropriate internal sound limits within workspaces are to be adopted from good practice guidance drawn from BS 8233, British Council for Offices¹² (BCO) and HTM-08-01¹³.
- 10.29 The assessment will be informed by a 3D environmental noise model, which will be created using Datakustik’s CadnaA software, to predict the anticipated external sound levels at the façades of

⁹ British Standard 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise

¹⁰ British Standard 5228-2:2009 Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration

¹¹ British Standard 8233:2014 Guidance on sound insulation and noise reduction for buildings

¹² British Council for Offices Guide to Specification 2019

¹³ HTM-08-01:2013 Health Technical Memorandum 08-01: Acoustics

the Proposed Development. The model will be verified by comparing the calculated noise levels against those measured during the environmental sound survey.

Operational phase – plant noise emissions.

- 10.30 Noise from fixed items of building services associated with the Proposed Development shall be assessed in accordance with BS 4142¹⁴. Rating noise limits will be derived based upon the background sound levels measured during the environmental survey.
- 10.31 Planning guidance from the Greater Cambridge Shared Planning Service states that noise would generally be considered acceptable where the rating level does not exceed prevailing background sound levels at the site boundary. Compliance with these limits will inherently result in a low impact.

Consultation

- 10.32 Hoare Lea met with Cambridge's Environmental Health team on Wednesday 7th June 2022 to discuss the Proposed Development, the survey works undertaken to date, and the proposed assessment methodologies.
- 10.33 The assessment methodologies and verification survey proposed within this document are considered representative of the approach that was agreed during this meeting.

¹⁴ British Standard 4142:2014+A1:2019 *Methods of rating and assessing industrial and commercial sound*

11.0 Socioeconomics

Introduction

11.1 The need for a socio-economic assessment has been considered by Volterra Partners. It is considered that there is potential for likely significant effects relating to socioeconomics and has therefore been scoped into the EIA.

11.2 The ES chapter will:

- Define the the socio-economic baseline conditions;
- Identify relevant socio-economic receptors;
- Assess:

the potential for socio-economic effects throughout the demolition and construction works and as a result of the completed development;

the likely significant socio-economic effects;

any required mitigation or monitoring to address any likely significant adverse socio-economic effects.

the potential for cumulative socio-economic effects.

11.3 The socio-economic assessment will assess the direct and indirect employment opportunities generated as a result of the Proposed Development. It will also consider the indirect impacts of the employment uses, such as the contribution to commercial space (including life sciences) in Cambridge, as well as the contribution to the public realm and placemaking. As the Proposed Development is solely commercial, no residential impacts will be assessed.

Baseline Conditions

Current Baseline Conditions

11.4 The socio-economic baseline conditions for the existing site and the environment surrounding the Site will be established with reference to a policy review and a desk-top review. The policy review will outline the relevant local, regional, social, and economic policies for the area. This review will include (but may not be limited to) the following planning policy documents:

- **National:** National Planning Policy Framework (2021)
- **Regional:** Cambridge and Peterborough Local Industrial Strategy (2019)

- **Local:** Cambridge Local Plan (2018); Draft Planning Obligations Strategy Supplementary Planning Document (SPD) (2014).

- 11.5 The desk-top review of the existing socio-economic conditions will be undertaken to establish the baseline conditions. Baseline conditions will be assessed at several geographic study areas. The study areas will be defined in detail in the chapter but are likely to include: the local area (the immediate area surrounding the Site – likely to be the ward containing the site, Abbey, and the neighbouring wards Petersfield and Romsey), the local authority (Cambridge), the county (Cambridgeshire), the region (East), and the nation (England/UK depending on data availability) levels.
- 11.6 This review will consider available information relating to the Site from current owners regarding existing uses, published and safeguarded information from database records, such as the Office for National Statistics (ONS) and NOMIS. Information will be processed utilising geographic information systems (GIS) methodology.
- 11.7 The baseline analysis will summarise the socio-economic context of the Site under three broad categories:¹⁵
- **Demographics:** population, residential qualifications, deprivation and crime;
 - **Economy and labour market:** employment, sectoral employment, unemployment and claimant count, labour skill levels, economic activity, local jobs, provision of commercial space (including laboratory and research and retail floorspace); and
 - **Social infrastructure:** access to and provision of publicly accessible open space and public realm.
- 11.8 The baseline will also consider the current socio-economic activity supported at the Site. The Site currently comprises the Beehive Centre (a mid-sized shopping centre with mixed uses) and associated ground level car park.

Future Baseline Conditions

- 11.9 The future baseline assessment will present data on how some socio-economic indicators are anticipated to change. Projections of employment and commercial space will be presented for the possible core assessment year(s). The core assessment year(s) will be confirmed within the socio-economic chapter but will focus on the opening year of the Proposed Development and if required the opening years of different phases.

¹⁵ As with any dataset, the socio-economic baseline will change over time. The socio-economic chapter will define the existing baseline socio-economic conditions of the environment surrounding the site. The most recently published sources will be used in doing so – data sources published in 2021/2022 will be used where possible, but where this is not available the next best alternative (i.e. the most up to date) will be used as a proxy. This will be clearly described in the ES.

Receptors

- 11.10 Receptors are likely to include, but may not be limited to:
- **Current and future residents:** for effects relating to employment, including local jobs and skills, and access to and provision of open space/public realm;
 - **Current and future workers:** for effects relating to employment and local jobs and skills, and displacement of existing businesses on site; and
 - **Current and future businesses:** for effects relating to the displacement of current businesses, commercial floorspace provision, and increased local expenditure from operational workers.
- 11.11 Quantifiable metrics with respect to receptors will be used wherever possible (for example, changes in rates of unemployment, or rates of local working). However, it is not possible to ascribe specific 'values' or a quantifiable scale of 'sensitivity' to all socio-economic receptors due to their diversity in nature and scale. The assessment will therefore focus on the qualitative 'sensitivity' of each receptor, and their ability to respond to change based on recent rates of change and turnover.

Potential Impacts

Demolition and Construction

- 11.12 The scope of the socio-economic in relation to the demolition and construction activities of the Proposed Development will include:
- Displacement of existing businesses at the Site.

Completed development

- Operational employment, and resulting indirect and induced employment, at the local authority level;
- Local jobs and skills at the local area level;
- Additional contribution towards commercial floorspace (including laboratory and office floorspace) at the local authority level;
- Impact on retail at the local authority level;
- Additional expenditure supported from operational workers at the local area level; and
- Provision of open space and public realm at the local area level.

- 11.13 The assessment will identify beneficial and adverse effects, including those that may require mitigation measures. If mitigation is required, mechanisms for their achievement will be identified.

Scoped out effects

- 11.14 The following effects in **Table 11.1** below are considered unlikely to be significant and therefore are proposed to be scoped out of the socio-economic assessment:

Table 11.1: topics scoped out of the socio-economic assessment

EFFECT	RECEPTOR	JUSTIFICATION FOR INSIGNIFICANT EFFECT
Construction Phase		
Construction employment	Current and future residents and workers	Employment generated during the construction phase would be temporary in nature. The construction workforce tends to be one of the most mobile sectors, travelling to wherever the work is based. For this reason, the impact of increased demand for construction workers is likely to be felt at the regional rather than the local level. At this geographical scale, it is not expected to have a significant impact and is therefore proposed to be scoped out.
Construction worker expenditure	Current local businesses	Similarly, it is acknowledged that there is the potential for the construction workers to spend money in the local area for the duration of the construction period, resulting in a beneficial effect upon local businesses. However, in the context of the local area, it is unlikely that this quantum of temporary spending would have a significant effect upon local businesses.
Availability of healthcare services for construction workers	GP and A&E provision (current and future residents)	The construction workers will be temporary and are not expected to have a significant effect on health provision of either GPs or the local A&E service. Prior to the start of work on-site, the Applicant will be required to discharge planning conditions relating to construction and logistics management. The information set out for approval in respect of these aspects will demonstrate how the contractors will follow best practice throughout the enabling and construction works, thus minimising the risk of accidents, and in turn any such minor impacts upon local healthcare facilities.
Completed Development		
Change in demand for educational services	Educational services (current and future residents)	As the Proposed Development provides no housing, it is not envisaged that there will be any impact on the availability of school places in the local area. The children of workers at the Proposed Development are likely to be educated at schools near their places of residence. In any event there seems to currently be spare capacity at primary and secondary schools in Cambridgeshire. Primary schools currently have 15% capacity and secondary schools have 9%