

# **APPENDIX 2.6**

EIA SCOPING REPORT AND EMAIL TO OFFICERS (FEBRUARY 2016)

MARCH 2019 MEADOW RESIDENTIAL



Our ref: Q090681.ScopingNote.F Your ref: GLA/3736a/VH02

Email: <u>aisling.webb@quod.co.uk</u>

Date: Tuesday, 12 February 2019

Nick Ray Greater London Authority City Hall More London Riverside London SE1 2AA

By email

Dear Nick.

# Pentavia Retail Park, Mill Hill – Environmental Impact Assessment Informal Scoping (Not for Public Domain)

On behalf of Meadow Residential (the 'Applicant'), we enclose for your attention an EIA Scoping Note relating to the planning application for the redevelopment of the Pentavia Retail Park site (GLA ref. GLA/3736a/VH02; London Borough of Barnet ('LB Barnet') ref. 17/8102/FUL).

The Applicant is proposing amendments to the scheme following the decision by the Mayor of London to act as the Local Planning Authority for the purposes of determining the planning application. The Direction was made by the Mayor of London on 5 November 2018 under the arrangements set out in Article 7 of the Town and Country Planning (Mayor of London) Order 2008 and the powers conferred by Section 2A of the 1990 Town and Country Planning Act.

Further to the Mayor's decision to call in the application, the Applicant has taken the opportunity to review the development with a view to increasing the delivery of on-site affordable housing. Scope has been identified to increase/decrease building heights within the development by one to three storeys, thereby retaining the accepted design principles which the Mayor supported in the original application and all of the benefits of the submitted application. The proposed amendments would have a significant impact on the implementation of the London Plan policies on affordable housing.

The development falls under Schedule 2 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) (the 'EIA Regulations') and the Applicant has been undertaking a voluntary Environmental Impact Assessment (EIA) process for the scheme. The detailed planning application, which was submitted to the LB Barnet and validated in December 2017, was accompanied by an Environmental Statement (ES) (the '2017 ES') and an ES Addendum (the '2018 ES Addendum').

Annex 1 provides a Scoping Note with a brief outline of the proposed scope of the EIA, together with the content of an updated ES which will be submitted to the GLA to support the submission of the scheme amendments, and we invite the GLA's comments on this information. Please note we are **not seeking a formal scoping opinion** from the GLA under Regulation 15 of the EIA Regulations. In considering the scope of assessment, we have had regard to baseline studies and technical reports





previously undertaken for the Site. Annex 1 presents a list and map which show the committed developments in the vicinity of the Site that will be subject to cumulative assessment. The Scoping Note also provides justification for topics which we propose are scoped out of the EIA.

The EIA process is being co-ordinated by Quod who are members of the IEMA Quality Mark scheme. A team of competent experts will be responsible for undertaking technical assessments as outlined in Annex 1.

I would be grateful for your consideration of the enclosed scope and approach at your earliest opportunity. Should you wish to discuss further please do not hesitate to contact me or my colleague, Calum Cockerill.

Yours sincerely

Aisling Webb

Associate

encl. Annex 1, Appendix 1

cc. Lee Goldberg Meadow Residential

Ben Ford Quod Neil Wells Quod



### **ANNEX 1**

#### PENTAVIA RETAIL PARK, MILL HILL EIA SCOPING NOTE

#### 1 Introduction

1.1 This note has been prepared to provide the Greater London Authority (GLA) with an update on the proposed amendments to the scheme, following the decision by the Mayor of London to act as the Local Planning Authority for the purposes of determining the planning application, and the EIA implications.

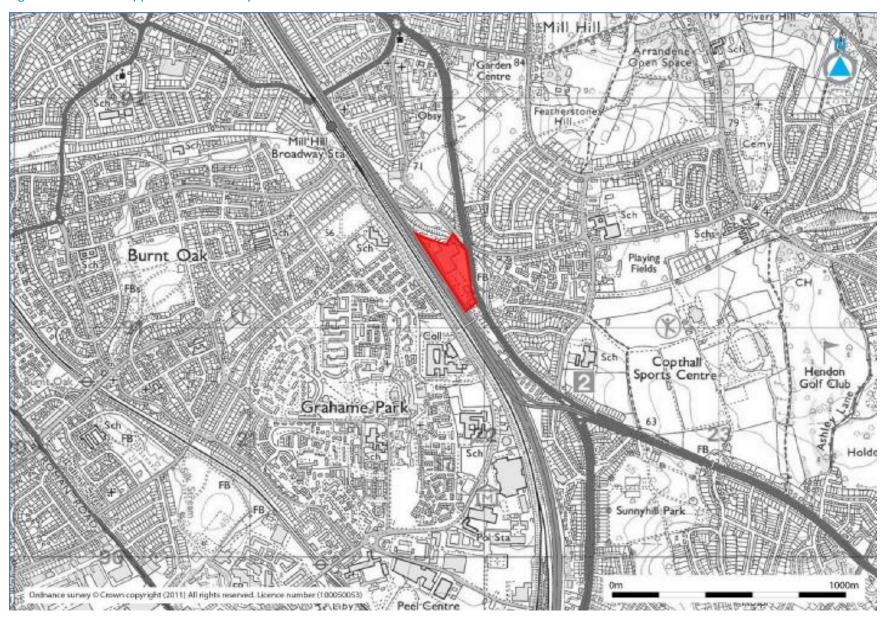
## 2 Background

- 2.1 The detailed planning application for the redevelopment of the Pentavia Retail Park (the 'submitted scheme'), originally submitted to the LB Barnet, is supported by an Environmental Statement (ES) (dated November 2017) and an ES Addendum (dated June 2018) (the 'ES (as amended)') (GLA ref. GLA/3756a/VH02; LB Barnet ref. 17/8102/FUL).
- 2.2 Under the EIA Regulations, seeking a formal scoping opinion is not mandatory and due to project time constraints, a formal scoping opinion was not sought during the EIA process. However, the ES (as amended) was informed by a scoping study (2017 scoping study) undertaken by Quod to identify the issues which will be significant. An informal meeting was held with the LB Barnet Planning Case Officer to present the findings of the scoping study, invite any comments, and agree the scope of the EIA.
- 2.3 The 2017 scoping study was informed by an earlier 2016 scoping study, subsequent 2016 ES and 2017 ES Addendum, which were undertaken for the emerging development proposals at that time (LB Barnet ref. 16/6420/FUL) (the '2016 detailed application'). As part of the 2016 scoping study, an EIA Scoping Report was submitted to LB Barnet on 8<sup>th</sup> April 2016 in accordance with Regulation 13 of the 2011 EIA Regulations (as amended). A formal EIA Scoping Opinion was provided by the LB Barnet on 28<sup>th</sup> July 2016. The previous EIA process undertaken for the 2016 detailed application provided a good level of understanding of the prevailing environmental issues on the Site and likely significant effects.
- 2.4 Since the ES (as amended) was submitted and following the Mayor's decision to call in the application, the Applicant has decided to take the opportunity to review the submitted scheme with a view to increasing the delivery of on-site affordable housing. The Applicant therefore intends to submit scheme amendments with an accompanying updated ES.

#### **3 Updated Site Description**

- 3.1 The Site and surrounding area have remained unchanged (see Figure 1), with the exception of:
  - Churchill Place development is complete and is known by the street names Rosebery Place and Dove Close. A barrier is in place at the entrance to Rosebery Place, restricting access to the public.

Figure 1: Indicative Application Boundary



# Quod

## **NOTE** continued

#### 4 Scheme Description

- 4.1 The key changes to the submitted scheme are summarised below:
  - Overall increase of 120 residential units, from 724 to 844 units;
  - The submitted scheme was a Build to Rent scheme, including 35% affordable housing, comprising Discount Market Rent (DMR) and London Living Rent (LLR) units. The revised application would comprise a 50:50 split between Built to Rent and conventional housing in order to increase the level of affordable housing. The Build to Rent element would comprise a similar mix of private rent, DMR and LLR; the conventional element would comprise a mix of private sale, affordable rent and shared ownership;
  - Building heights would increase or decrease by one to three storeys across building blocks, apart
    from the 15-storey tower (consisting of LG+G+14 storeys) at the southern end of the
    development, to optimise the density and affordable housing delivery whilst bringing additional
    benefits to the visual aspects of the development;
  - The proposed pedestrian access on Bunns Lane will be reoriented, and increased in size, creating a direct visual link to the central courtyard from the bottom of the entrance steps;
  - Decrease in the residential car-parking provision; and,
  - The overall public amenity space is unlikely to change, however private amenity space will increase with the overall increase in unit numbers.

#### 5 EIA Scope and Methodology

#### **Basis of Assessment, Assessment Years and Phasing**

- 5.1 The principal information sources which form the basis of the assessments remains the same as outlined within the ES (as amended).
- 5.2 The indicative delivery programme for the Development is approximately 48 months. For assessment purposes, 2024 is assumed as the year in which the Development will be fully complete and occupied.
- 5.3 The EIA will be based on the following assumptions about temporal scope and assessment years:
  - **Baseline:** The baseline assessment year taken for the EIA is the Site as recorded in the most recent surveys, site inspections and available datasets (i.e. 2016/2017 in most cases unless otherwise stated). In some cases, data has been used which pre-dates or post-dates 2016/2017, however this is clearly stated and the rationale for use and validity is provided within each technical assessment/chapter.
  - Indicative Construction Programme: Approximately 48 months commencing in Q3 2019, with the Development being fully built out by Q3 2023.
  - Future Baseline: 2024.
  - Completed Development: 2024.

#### **Technical Scope**

5.4 Whilst quantum of homes has been increased from the submitted scheme, the proposed technical scope and methodologies of the EIA are not materially affected. The technical scope and methodologies of the EIA therefore remain as outlined within the ES (as amended). Table 1 provides a summary of the ES content and Authors.



## **NOTE** continued

Table 1: Summary of ES Content and Authors

#### **ES Structure**

ES Volume I (ES Chapter)		
Chapter 1: Introduction		
Chapter 2: EIA Methodology		
Chapter 3: Alternatives	Quod	
Chapter 4: Description of Development		
Chapter 5: Demolition and Construction		
Chapter 6: Socio-Economics	Quod	
Chapter 7: Traffic and Transport	Velocity Transport Planning	
Chapter 8: Townscape and Visual Assessment	Peter Radmall Associates	
Chapter 9: Air Quality	Mayer Brown Limited	
Chapter 10: Noise and Vibration	Mayer Brown Limited	
Chapter 11: Wind Microclimate	BMT Fluid Mechanics	
Chapter 12: Effect Interactions	Quod	
Chapter 13: Mitigation Measures and Significant Residual Effects	Quod	
ES Volume II – Appendices	Various	
Non-Technical Summary	Various	

5.5 The following technical topics would remain scoped out of the EIA: archaeology; built heritage; ecology; ground conditions and contamination; water resources and flood risk; daylight, sunlight, overshadowing and solar glare; carbon emissions; light pollution; waste; human health; vulnerability to major accidents; telecommunications; electromagnetic fields; sustainability and climate change adaption and resilience. These topics are identified in Appendix 1.

#### Competency

- 5.6 Each member of the project team is a suitably qualified professional and details of the professional competency of the technical author will be restated in each technical chapter of the ES.
- 5.7 Quod's Environmental Planning team will co-ordinate the EIA, and will be the lead editor of this ES and author of certain chapters, as set out in Table 1. Quod is a member of the Institute of Environmental Management and Assessment (IEMA) EIA Quality Mark Scheme, an accreditation scheme which sets high standards for EIA practice and demonstrates a commitment to excellent in EIA activities.
- 5.8 The Transport Assessment and Traffic and Transport ES chapter will be prepared by Lloyd James Bush, a Director of Velocity Transport Planning, a specialist consultancy dealing in transport planning.
- 5.9 The Townscape and Visual Assessment will be prepared by Peter Radmall, a qualified landscape architect and Chartered Member of the Landscape Institute with extensive experience of townscape and visual assessment work for development of this type.
- 5.10 The Air Quality ES chapter will be prepared by Andea Hughes BSc MSc CEnv MIAQM MIES of Mayer Brown, a Chartered Environmentalist and a member of the Institute of Air Quality Management



## **NOTE** continued

- (IAQM) and the Institution of Environmental Science (IES). Andrea has worked in the environmental assessment industry for 16 years and has specialised in the field of air quality assessment.
- 5.11 Paul Gray BSc MIOA will author the Noise and Vibration chapter. Paul is a highly experienced acoustic consultant, with over twenty-eight year's expertise covering all aspects of noise and vibration assessment, including environmental noise and vibration; architectural acoustics; building services acoustics and industrial noise and vibration. Paul is a corporate Member of the Institute of Acoustics.
- 5.12 David Hankin, Senior Engineer at BMT Fluid Mechanics will oversee the wind microclimate assessment. BMT Fluid Mechanics is a specialist wind consultancy in the assessment of the urban wind microclimate.

#### **Cumulative Assessment**

- 5.13 The ES (as amended) identified the general approach to the cumulative impact assessment and identified the schemes which would be considered.
- 5.14 A planning search has been undertaken to updated the list of committed developments to be included within the assessment of cumulative effects. This list of schemes has been reviewed by the team of technical specialists undertaking this EIA, and has been refined to schemes which are considered likely to result in significant environmental effects. The updated list of committed developments is provided in Table 2 and shown in Figure 2.
- 5.15 Schemes outlined in Table 2 remain as per the ES (as amended), apart from the exclusion of Beaufort Park (W00198AA/04). The majority of the Beaufort Park development is fully constructed and operational (i.e. Block A1 to A9; B1 to B5; C1 to C6; C9 to C12; E1 to E8; F3 to F7; G1 to G5), other than Blocks C7, C8 and C8a ('Block C'); Block D and Blocks F1,F2;F8-F11 ('Block F'). A review of Reserve Matter applications on the LB Barnet online planning portal, prudent to Beaufort Park, shows that 2,548 of the 2,800 residential units have been approved by LB Barnet, and for the proposes of the updated ES are constructed, leaving approximately 252 residential units to be approved and constructed.
- 5.16 Construction on Block C is well advanced with the buildings super structure completed and façade/internal fit out under way. Construction on Block C will therefore likely be completed before construction on the Development commences.
- 5.17 For Block D and Block F, the development Site is over 1km away from these remaining blocks and the quantum of remaining residential units, likely to be less than 252 units once Block C units have been removed from this figure, is not of a scale that would be considered to give rise to cumulative effects with other developments either during its construction or operation. In addition, The Beaufort Park scheme is only visible in one view for the Townscape and Visual Impact Assessment (TVIA), View 1 The Mill Field looking south west, and only the tallest buildings of Beaufort Park are visible in this view. The Beaufort Park buildings that are visible are fully constructed and are within the baseline photography for View 1, and therefore the Beaufort Park scheme can be consider as part of the existing baseline and assessed within the completed development assessment of the TVIA. As a result of the reasons stated above, Beaufort Park (W00198AA/04) is therefore no longer considered to be a cumulative scheme for the updated ES.
- 5.18 We would invite the GLA's view on the cumulative schemes to be considered.

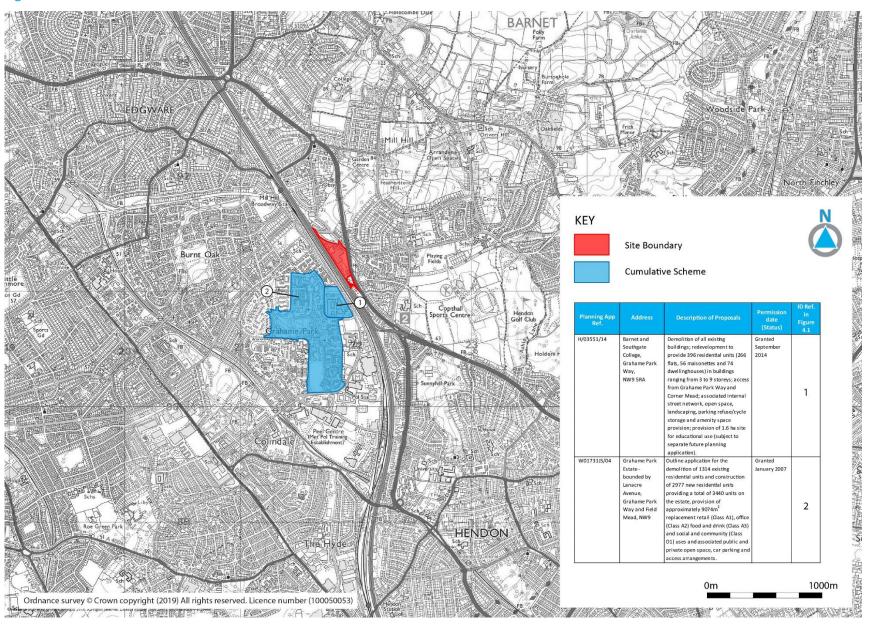


# **NOTE** continued

Table 2: Cumulative Schemes

Address	Reference	Description of development
Grahame Park Estate	17/2840/OUT	Outline planning permission for the demolition of 630 existing residential units, Everglade GP Practice, Community Hall, library and retail units and the construction in three phases (plots 10, 11 and 12) of: 1083 residential units (use Class C3); a Community Hub of approximately 3,766 sqm (GIA) comprising a community hall and workshop rooms, a daycare nursery, a GP Health centre, community health facilities and ancillary office accommodation (all use class D1) along with 186 sqm (GIA) café (use class A3); approximately 340 sqm (GIA) of retail space (predominantly use class A1, along with A2, A3, A4 and/or A5); a flexible ground floor space of approximately 55sqm (GIA) (use class A1 or use class B1) within Block 10B; a new energy centre to provide district heating; and associated car parking, open space, landscaping and access arrangements. Within the outline application: - full details are submitted for the means of access, layout, scale, appearance and landscaping of Plots 10 and 12 and associated works; and - full details of Plot 11 are submitted for the means of access, layout, scale, appearance and landscaping with the exception of Plot 11D, where details of layout and scale are submitted, with means of access, appearance and landscaping reserved.
Barnet and Southgate College, Grahame Park Way	H/03551/14	Demolition of all existing buildings; redevelopment to provide 396 residential units (266 flats, 56 maisonettes and 74 dwelling houses) in buildings ranging from 3 to 9 storeys; access from Grahame Park Way and Corner Mead; associated internal street network, open space, landscaping, parking refuse/cycle storage and amenity space provision; provision of 1.6 hectare site for educational use (subject to separate future planning application).

Figure 2: Cumulative Schemes



# **Appendix 1**

#### **Scoped Out EIA Topics**

5.19 Based on a review of surveys and studies of the Site undertaken to date and considering the nature of the proposed amendments to the submitted scheme, technical topics have been identified where significant effects are not considered likely. The following technical topics would remain scoped out of the EIA: archaeology; built heritage; ecology; ground conditions and contamination; water resources and flood risk; daylight, sunlight, overshadowing and solar glare; carbon emissions; light pollution; waste; human health; vulnerability to major accidents; telecommunications; electromagnetic fields; sustainability and climate change adaption and resilience. These topics are identified in Table 1.1.

Table 1.1: Technical topics to be scoped out of the EIA

Topic	Rationale
Archaeology	A desk-based archaeological assessment (see standalone Desk-Based Archaeology Assessment, prepared by CgMs, dated November 2017) has been carried out to establish the significance and value of known buried heritage assets and the potential for the presence of unknown buried heritage assets. No World Heritage sites, Scheduled Monuments, Historic Battlefield or Historic Wreck sites have been identified within the Site boundary or its immediate vicinity. The Site also does not lie within an Archaeological Priority Area. The assessment concluded that the likelihood for significant effects on archaeology is low.  The Greater London Archaeological Advisory Service (GLAAS) raised no objections to the 2016 detailed application or the ES (as amended), and considered that the proposal is unlikely to have a significant effect on heritage assets of archaeological interest. This rationale is considered to apply to the proposed scheme amendments to the submitted scheme, therefore archaeology has been scoped out of this EIA on the basis that the Development would not result in likely significant effects.
Built Heritage	A heritage assessment has been undertaken to establishes the significant effect of the submitted scheme on any identified heritage assets (see standalone Heritage Statement, prepared by CgMs, dated November 2017).  There are no listed buildings located on the Site or its immediate vicinity and the Site is not located within a conservation area. There are over 60 listed buildings within a 2km radius of the Site, with the closest being the Grade II listed Chase Lodge located approximately 600m east of the Site. Two Conservation Areas are located in the surrounding area, these are the Watling Estate Conservation Area, which lies approximately 300m west of the Site at its nearest boundary, and the Mill Hill Conservation Area, which lies approximately 750m north east of the Site. The principal consideration within the assessment has been whether the proposals could cause harm to the significance of any heritage assets through harm to their respective settings.  The heritage assessment concluded that the proposals to introduce a residential scheme would not have any direct effects upon the significance of any heritage assets due to the topography of the land and the enclosed character of the Site located between two major roads, no or limited intervisibility between the Site and the identified heritage assets, and that the Site does not contribute in any way to significance or setting of any of the heritage assets listed above.  GLAAS raised no objections to the 2016 detailed application or ES (as amended) in

Topic	Rationale
	application. This rationale is considered to apply to the proposed scheme amendments to the submitted scheme, therefore built heritage has been scoped out of this EIA on the basis that the Development would not result in likely significant effects. The Heritage Statement, dated November 2017, will be updated and submitted as a standalone document in support of the application.
Ecology	An extended Phase 1 survey of the Site was completed in January 2016. The surveys completed at that time showed the Site as being of negligible importance in nature conservation terms and of intrinsically low value. Ecology Solutions subsequently undertake an ecological appraisal of the Site in June 2018 to update the extended Phase 1 site survey and desk study that was completed in January 2016. The June 2018 ecological appraisal confirmed the findings of the extended Phase 1 survey, i.e. that the Site offers negligible opportunities for protected species, and that overall, there are no overriding ecological constraints to the redevelopment of the Site. Ecology has therefore been scoped out of this EIA on the based that the proposed amendments to the submitted scheme would not result in likely significant effects.
Waste	Construction of the Development would lead to some waste arisings. Whilst legislation no longer requires the mandatory production of a Site Waste Management Plan for a construction project, the Applicant has committed to a similar plan to be implemented as a means of minimising waste at source via a Construction Environmental Management Plan (CEMP). Estimates of construction waste arisings from demolition and excavation are to be presented in Chapter 5: Demolition and Construction, the effect of its removal will be discussed in Chapter 7: Traffic and Access and more indirectly in other chapters as relevant, e.g. Chapter 9: Air Quality and Chapter 10: Noise and Vibration.  The risk of hazardous materials from construction and appropriate treatment or disposal was considered within Chapter 12: Ground Conditions and Contamination of the 2016 detail application and found to be of negligible significance once adherence to the standard management measures, like the CEMP, where implemented.  Once complete and occupied, a quantity of domestic and commercial waste would result from the Development. A summary of the waste management strategy will be described in Chapter 4: Description of the Development. The Development will be designed to optimise good waste management practices in line with LB Barnet guidance, Building Regulations 2010 Part H and other relevant industry standards so that no significant effects occur once the Development is completed and occupied. A draft Construction Travel Management Plan will also be produced as part of the planning application, and it is anticipated that a Framework Delivery and Servicing Plan for the Development will be secured by planning condition. It is therefore considered that impacts from waste will be considered in the updated ES where these could potentially be significant. A separate chapter is not however considered necessary.
Light Pollution	No night time construction works are required for the Development and therefore light pollution as a result of construction activities has not been considered further within the EIA. However, full details on lighting requirements and positions for activities undertaken during normal construction hours will be outlined within the CEMP prepared for the Development. In determining any temporary construction

#### **Topic**

#### Rationale

lighting arrangements for the Site, due consideration will be given by the Principal Contractor to residents and other sensitive receptors that may experience a nuisance by the light.

Once complete and occupied, the potential nuisance due to obtrusive light at night time from the Development is likely to result in a negligible or barely perceptible change in the level of sky glow, light spill and glare onto surrounding areas. Illuminance levels at the windows of residential properties would cause a negligible or barely discernible change to current baseline conditions. An assessment produced by EB7 regarding potential light pollution from the Site was provided with the submitted scheme. The potential for light spillage emanating from the lighting installations from the submitted scheme was considered unlikely to cause an adverse effect on the existing sensitive locations including adjacent residential accommodation (Churchill Place); areas of special night-time interest (UCL Observatory's) or needless spillage into the night sky. Sky glow is happening at this location as a result of the Sites position within an active urban environment, which is bound to the west and east by significant main roads, namely M1 and Watford A1, both of which have active Road Lighting. The mentioned rationale is considered to apply to the proposed scheme amendments to the submitted scheme, and therefore no quantitative light pollution ES chapter is considered necessary and no further regard to this issue has been given within the EIA.

Ground conditions at the Site have been established by the Listers Geotechnical Consultants – Ground Investigation Reports dated April 2016 and May 2015 (the 'LGC Reports' were provided with the submitted scheme planning application as standalone documents). Ground conditions comprise 8.5m to 11.0m of Made Ground (where proven) overlying London Clay which was proven to a depth of 20mbgl. The Made Ground was largely identified to comprise brown and grey gravelly sandy Clays with brick, concrete, Granite, Chalk, Flint and clinker gravel and plastic, glass and wood inclusions. In the southern section of the Site, an area of shallower Made Ground was identified extending to 4.3m to 5.1mbgl. A number of exploratory holes encountered unknown obstructions throughout the Made Ground resulting in refusals or the requirement to chisel. The London Clay was identified to comprise a stiff brown to grey slightly sandy Clay. Whilst not encountered within the LGC Reports, with reference to BGS records, underlying the London Clay is the Lambeth Group which overlies the Thanet Sands (locally present) and White Chalk Subgroup.

# Ground Conditions and Contamination

A review of historical maps carried out within the LGC Reports and 2016 detailed application Chapter 12: Ground Conditions and Contamination identified the Site to be undeveloped land occupied by fields from 1882 with minimal changes occurring on the Site until the early 1930's. From the 1930's a large proportion of the eastern section of the Site become demarcated as an embankment associated with the A1, from 1964 the northern section of the Site comprised of allotments, and by the 1990's the Site resembled the configuration that remains at present day with the warehouses now present.

Chapter 12: Ground Conditions and Contamination of the 2016 detailed application found that there would be a negligible significance residual effects once adherence to the standard management measures, like the CEMP, where implemented. A detailed review of the proposed scheme amendments to the submitted scheme

Topic	Rationale
	against the 2016 detailed application has been undertaken, and it has been confirmed that there would be no change to the significance of ground conditions and contamination effects from those identified in the 2016 detailed application. Therefore, effects associated with ground conditions and contamination has been scoped out of this EIA on the basis that the proposed scheme amendments to the submitted scheme would not result in likely significant effects.
Water Resources and Flood Risk	A standalone Flood Risk Assessment and Drainage Strategy (FRA) was provided with the submitted scheme.  Surface water flow during construction activities would be controlled by the CEMP. The CEMP would also manage other potential effects like oil spillages, which could have an affect on water quality, through standard management practices and measures.  The Site is in Flood Zone 1, whereby the annual probability of fluvial and tidal flooding is low, classified as being less than 1 in 1,000. The incorporation of Sustainable Urban Drainage Features (SuDs) is standard practice and therefore the design of the Development will ensure that impacts of flood risk and water quality from the completed and occupied Development are reduced to an acceptable level. Given that the Site is not in a flood risk area and would implement SuDS, it is not considered that there would be any significant environmental effects on Flood Risk or water quality as a result of the Development within the area.  The FRA, which informed the 2016 detailed application and the submitted scheme, concluded that drainage design would avoid on / off site flooding and restrict all outflows to greenfield run-off rates, and that the Development would not result in significant effects during the construction and operation of the Development. The Environment Agency raised no objections on the grounds of flood risk to the 2016 detailed application or the ES (as amended).  This rationale is also considered to apply to the proposed scheme amendments to the submitted scheme, therefore flood risk and water resources has been scoped out of this EIA on the basis that the Development would not result in likely significant effects. The FRA will be updated and submitted as a standalone document in support of the planning application.
Daylight, Sunlight, Overshadowing and Solar Glare	The Site is currently in use as a retail park, occupied by low-rise (i.e. two storey) sheds and surface car parking. The Site is separated from neighbouring dwellings by the A1 and M1 trunk roads. The closest residential dwelling is situated on Bunns Lane, Rosebery Place and Dove Close, approximately 30m north of the planning application boundary, with the other neighbouring houses along Bunns Lane running eastwards and north west, away from the Site. The nearest dwellings to the west at Grahame Park Way are a significant distance away (circa 140m) across the M1 motorway and adjacent rail tracks, while the closest dwellings to the east along Longfield Avenue are circa 90m away.  The change in massing from a low-rise, sparsely occupied Site to a denser form of development inevitably has the potential to result in differences to existing daylight and sunlight levels and overshadowing when compared to the above average baseline conditions. However, the general open nature of the surrounding area means existing daylight and sunlight provision is not dependent on the Site and therefore in overall terms the change in massing is not expected to affect a large number of dwellings. Any changes to daylight and sunlight levels are considered to

Topic	Rationale
	be accept
	sunlight le

be acceptable under BRE Guidelines. As such, further assessment for daylight and sunlight levels to neighbouring properties is not considered a requirement within

The maximum building heights of submitted scheme are situated in the south east of the Site and the lowest building heights are located in the north of the Site opposite Bunns Lane. Chapter 14: Daylight, Sunlight and Overshadowing of the 2016 detailed application, which assessed building blocks of Ground + 6 and Ground + 8 in the north, west and east of the Site, included hourly images of the transient shadow for the March 21st. These images showed that the 2016 detailed application would not result in any significant overshowing to surrounding private or public amenity space and would result in a negligible residual effect. Given that the submitted scheme had varying building heights, with most below Ground + 8 as proposed by the 2016 detailed application, it was considered that submitted scheme would not result in significant overshadowing effects to surrounding private or public amenity space. The proposed scheme amendments to the submitted scheme maintain the lowest building heights in the north of the Site, and therefore it is considered that proposed scheme amendments would not result in significant overshadowing effects to surrounding private or public amenity space. There are no proposed amendments to the 15-storey tower of the submitted scheme, which is the tallest building located in the south of the Site, circa 140m, 275m and 130m away from dwellings located to the west, north and east, respectively. As a result, it is considered that there would be no significant overshowing effect to surrounding private or public amenity space from this block. This is due to the distance of receptors from the building block, the location of receptors in relation to the building block, and the orientation of the Site and Development in relation to surrounding properties and the movement of the Sun.

Notwithstanding, the application will be supported by a updated Daylight, Sunlight and Overshadowing report, which will also address the potential for solar glare effects on the nearby M1 motorway and rail tracks.

Internal daylight and sunlight levels have been considered as part of the detailed design for the Development and ensure that building standards are met, however this is a planning consideration and not an environmental issue that must be considered by the ES and therefore has not been assessed further.

#### Carbon emissions

Whilst the Development and its associated traffic use will generate carbon dioxide emissions through its construction and completed Development phases, it is not considered likely to be significant to the UK's carbon budget. Carbon dioxide emissions will be considered in the updated Sustainability and Energy Statements and are therefore not considered further within this EIA.

# Climate change and greenhouse gases

The Development is not of a scale considered large enough to accurately quantify its contribution to climate change. Climate change as a stand-alone topic is therefore not considered further within this EIA. However, the Developments adaption and resilience to climate change is considered within the updated FRA submitted within the application via the incorporation of SuDs (see Flood Risk and Water Resources section within this Table).

Topic	Rationale
Vulnerability to Major Accidents or Disasters	The EIA Regulations require the ES to consider and include "A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned."  Given the existing definition of major accident within Directive 2012/18/EU(c) and the World Health Organisation (WHO) definition of Disasteri it is considered that the most likely foreseeable vulnerability of the Development with regards to risks of major accidents and/or disasters are related to flood risk. Consequently, the description of how the Development will ensure that it these effects are mitigate through design and adaptability is maintained for defined future scenarios has been addressed within the FRA provided with the planning application.  No other significant effects relating to the vulnerability of the Development to major accidents and disasters have been identified for further assessment, as a result the topic is not considered further within the EIA.
Telecommunications	It is highly unlikely that the Development would impede radio and TV signal. No navigational aids or major telecommunication relay stations have been identified in the immediate vicinity of the Site, it is considered unlikely that there will be any significant telecommunications effects as a result of the Development. Accordingly, this topic is not considered further within the EIA.
Electromagnetic Fields	No major sources of electro-magnetic fields (EMF) (such as high voltage transformers or electricity transmission line/cable) are proposed as part of the Development. All new electrical plant will be designed in accordance with the current British Standards (e.g. BS EN 62041:2010) which set the specific limits for electro-magnetic fields. No significant effects in relation to EMFs have been identified and therefore this topic will not be considered further within the EIA.
Human Health	The socio-economic chapter will assess the effect of the proposals on demand for GP services and also the indirect effects of housing, employment, and access to social infrastructure and open space. The assessment will not consider the scale and significance of these effects specifically in relation to human health. Greater access to housing, employment, and services may be positively correlated with good health however, these effects will be uncertain and not measurable. The occurrence of any health effects is likely to be indirect and diffuse and, as such, no significant health effects are expected to arise from the Development. Therefore, a standalone chapter on Human Health has been scoped out of further assessment within this EIA.
Sustainability	The planning application will be supported by a standalone and concise updated Sustainability and Energy Statements in accordance with SODC policy. These assessments negate the need for further energy and sustainability assessment within the ES which accords with the Department of Communities and Local Governments (DCLG) consultation paper on EIA Good Practice (2014) which states: "there is no requirement to include a sustainability appraisal within the Environmental Statement. If such an assessment is required by the Local Planning Authority, it should be provided as a separate document supporting the planning application."

Topic	Rationale
	The main sustainability principles of the Development will be summarised in the
	description of the Development in the ES. As such, all assessments will inherently
	test these aspects of design as defined by the planning application.

<sup>&</sup>lt;sup>i</sup> World Health Organisation, 2008, Humanitarian Health Action, Definitions: emergencies. Available online: http://www.who.int/hac/about/definitions/en/