Richmond upon Thames College, Twickenham

Health Impact Assessment

December 2018



Richmond upon Thames College, Twickenham

Health Impact Assessment

Prepared on behalf of Clarion Housing Group

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EXECUTIVE SUMMARY

The importance of healthy communities is a theme running through National, London and local planning policy. A Health Impact Assessment (HIA) is a validation requirement document for all major developments in the London Borough of Richmond upon Thames (LBRT). This HIA has been prepared to accompany a Reserved Matters planning application for the proposed development of 180 residential dwellings at Richmond upon Thames College, Twickenham.

The Site is located in the north-west of Twickenham town centre, Greater London. The Site extends to 1.99 hectares (ha) and is located within the administrative area of LBRT.

Clarion Housing Group seeks to submit a Reserved Matters application under the consented scheme (ref. 15/3038/OUT) to provide a new residential development. The Development will comprise the following:

- 180 affordable homes (14% Affordable Rent and 86% Shared Ownership);
- 160 car parking spaces (132 for residents, 18 accessible parking spaces and the remaining 10 spaces will be allocated for visitor parking);
- 320 secure cycle spaces;
- Ecological corridor and communal gardens;
- On-site children's play and communal amenity spaces; and
- New open space bordering Egerton Road for wider community use.

The assessment has been undertaken using the London Health Urban Development Unit (HUDU) Healthy Urban Planning Checklist¹ and the HUDU Rapid Health Impact Assessment Tool². The assessment has reviewed the potential health effects of the proposed development and provided recommendations to seek to maximise health gains and remove or mitigate potential adverse impacts on health.

As shown in the assessment in Chapter 3, the Development was found to have a positive health effect in relation to the majority of the key health themes. The Development has been designed to provide a high quality, attractive and healthy environment for future residents and users.

As part of the design of the Development particular attention has been given to create a balanced, new community which meets local housing need and provides for all needs of the

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¹ London Health Urban Development Unit (April 2017) Healthy Urban Planning Checklist Third Edition.

² London Health Urban Development Unit (April 2017) Rapid Health Impact Assessment Tool Third Edition.

public. The Development forms part of the Consented Scheme which is for the redevelopment of Richmond upon Thames College, which seeks to provide a regenerated College and educational facilities, along with housing to compliment these changes. In addition, the Development promotes active and sustainable travel, including attractive and safe cycling and pedestrian facilities that connect to the wider area. The proposals also include areas of open space and the design team have incorporated multi-use open space throughout the public and private areas which will provide a range of beneficial health effects.

1 INTRODUCTION

- 1.1 This HIA has been prepared on behalf of Clarion Homes Group (the "Applicant") to accompany a Reserved Matters planning application to the London Borough of Richmond Upon Thames (LBRT) for a residential development (the "Development") on land at Richmond upon Thames College, Twickenham (the "Site").
- 1.2 Outline planning permission was granted on 16th August 2016 by LBRT (ref. 15/3038/OUT) for the redevelopment of Richmond upon Thames College (see Site Location Plan at Appendix 1) which included a new campus for education and enterprise, the upgrading of the existing playing fields, alterations to the access for the wider site, the provision of on-site parking and new residential development (hereafter referred to as the "Consented Scheme"). The outline planning application divided the wider site into a series of Development Zones, as shown at Appendix 2. The Reserved Matters planning application for which this HIA has been prepared concerns the 'Residential Development Zone' of the Consented Scheme (see Appendix 2).
- 1.3 The HIA seeks to identify and assess the potential health effects of the Development and provide recommendations that maximise health gains and remove or mitigate potential adverse impacts on health. The structure of the HIA is set out in the table below.

Chapter	Content
Executive Summary	Summary of the Health Impact Assessment.
Chapter 1	Summary of the Site & Development, the requirement for HIA and a summary
	of relevant planning policy.
Chapter 2	Outlines the assessment methodology.
Chapter 3	Health Impact Assessment
Chapter 4	Provides the conclusions of the HIA and sets out recommendations to
	enhance the beneficial effects and reduce any potential adverse health
	effects identified.

Site Context and Description

1.4 The Site is located to the north-west of Twickenham town centre, within the administrative area of LBRT. The Site is within the southern extent of the Consented Scheme area. The north of the Site is bound by the remainder of the Consented Scheme which will comprise the Schools Development Zone, the College Development Zone and the Tech Hub Development Zone (Appendix 2). The west of the Site is also bound by the College Development Zone, with the Nuffield Health Club and Twickenham rugby stadium beyond. The south of the Site is bound by a line of residential houses on Craneford Way, with Twickenham Rough (an area of open space) beyond. The east of the Site is bound by Egerton Road, with a residential area known as Heatham Estate located beyond.

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- 1.5 The River Crane is located approximately 180m to the south of the Site. The Duke of Northumberland's River is located approximately 240m to the west of the Site.
- 1.6 The Site extends to 1.99ha (see Site Location Plan at Appendix 3) and currently comprises numerous academic and facilities buildings which forms the existing Richmond upon Thames College. These buildings vary from one to three storeys in height, with the exception of the five-storey tower in the south-east corner of the Site.
- 1.7 Pedestrian access to the Site is currently off Egerton Road, with the majority of College pupils approaching the Site from Twickenham Railway Station located approximately 600m to the south-east of the Site. Primary vehicle access is off the A316 via Egerton Road.
- 1.8 The Site benefits from several existing transport infrastructure facilities, including the A316 Chertsey Road dual carriage way and the South-Western railway line. There are a number of existing bus stops located along Whitton Road and London Road. Approved and ongoing developments, which include the Twickenham Rough (ref. 13/1147/FUL) and the Former Royal Main Sorting Office (ref. 12/3650/FUL) near Twickenham Station, will serve to increase public access via a footpath from Twickenham Station, linking into Marsh Farm Road, located to the south of the Site.

The Development

- 1.9 This Reserved Matters application relates solely to the Residential Development Zone of the Committed Scheme (Appendix 2). The Residential Development Zone will provide 180 residential units and the proposed mix is compliant with the Consented Scheme (45 x 1 bed, 81 x 2 bed, 36 x 3 bed and 18 x 4 bed). The Development will provide 100% affordable homes with a split of 14% Affordable Rent and 86% Shared Ownership.
- 1.10 The heights for the Development will be 3 storeys for the houses and a mixture of 4/5-storey blocks of flats.
- 1.11 The Development will provide 160 car parking spaces, 132 will be provided for residents, 18 will be accessible parking spaces and the remaining 10 spaces will be allocated for visitor parking. The Development will also provide 320 cycle parking spaces.
- 1.12 The Development will be served by a single vehicular access point from Marsh Farm Lane in the north-west corner of the Site. As part of the Consented Scheme, Marsh Farm Lane will be upgraded and will connect to the existing access from Langhorn Drive (which will also be upgraded) which links up to Chertsey Road (A316) to the north of the Site. There will be two pedestrian and cycle access points; from Marsh Farm Lane and from the existing entrance in

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the south-east corner of the Site, from Egerton Road. The existing gate in the south-east corner of the Site which already serves as a pedestrian and cycle access point from Egerton Road will be maintained as part of the Development.

Green Infrastructure

- 1.13 The Development will comprise private rear gardens for the houses along the eastern and southern boundaries of the Site.
- 1.14 The Development will provide three separate but connected public open spaces in the centre of the Site, each with their own character and purpose; west garden, central garden and east garden. Within these gardens, a total of 640sqm of play space will be provided.
- 1.15 The existing grass and trees along the eastern boundary of the Site will be retained as part of the Development to provide public realm.
- 1.16 A 4m ecological corridor will also be provided along the northern boundary of the Site.

Requirement for HIA

1.16 The importance of healthy communities is a theme running through National, London and local planning policy. The requirement for HIA in this case specifically comes from LBRT's adopted Local Plan³. A summary of the relevant planning policy relating to health is set out below.

National Planning Policy Framework (NPPF)⁴

- 1.17 The revised NPPF published in July 2018 identifies the key principles in relation to health that local planning authorities should consider. In particular Chapter 8 of the NPPF 'Promoting healthy and safe communities' states that decisions should aim to achieve the following key features to a healthy and safe community:
 - a) "Promote social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other for example through mixed-use development, strong neighbourhood centre, street layouts that allow for easy pedestrian and cycle connections within and between

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³ London Borough of Richmond upon Thames (2018): London Borough of Richmond upon Thames – Local Plan

⁴ CLG (July 2018) National Planning Policy Framework

- neighbourhoods, and active street frontages;
- b) Are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion for example through the use of clear and legible pedestrian routes, and high quality public space, which encourage the active and continual use of public areas; and
- c) Enable and support healthy lifestyles, especially where this would address identified local health and well-being needs for example through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling."

The Adopted London Plan (2016)⁵

1.18 Policy 3.2 of the London Plan states that the impacts of major development proposals on the health and wellbeing of communities should be considered, for example through the use of HIA. For the purposes of HIA, a 'major development' comprises '10 or more residential units (or a site of 0.5 ha or more), or 1,000 square metres or more of non-residential floorspace (or a site area of 1.0 ha or more)'. The Development exceeds these thresholds.

The Draft London Plan (2017)⁶

- 1.19 Whilst still in draft, the Draft London Plan is a material planning consideration. The Draft London Plan highlights the importance in assessing development proposals on all aspects of health and wellbeing to improve Londoners' health and reduce health inequalities through the use of HIA. The Draft London Plan states that the environment to which Londoners live in largely determines the mental and physical health of the public. There are areas within London that are more deprived than others, and this is reflected in the life expectancies that differ across London which is acknowledged within the Draft London Plan. Policy GG3 'Creating a healthy city' addresses how planning and development must promote healthy lifestyles and hence reduce health inequalities:
 - A. "Ensure that the wider determinants of health are addressed in an integrated and co-ordinated way, taking a systematic approach to improving the mental and physical health of all Londoners and reducing health inequalities.
 - B. Promote more active and healthy lives for all Londoners and

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⁵ Greater London Authority (2016); *The London Plan The Spatial Development Strategy for London Consolidated with Alterations Since* 2011

⁶ Greater London Authority (2017) *The Draft London Plan*

- enable them to make healthy choices.
- C. Use the Healthy Streets Approach to prioritise health in all planning decisions.
- D. Assess the potential impacts of development proposals and development plans on the mental and physical health and wellbeing of communities, in order to mitigate any potential negative impacts, maximise potential positive impacts and help reduce health inequalities, for example through the use of Health Impact Assessments.
- DA. Plan for appropriate health and care infrastructure to address the needs of London's changing and growing population.
- DB. Seek to improve London's air quality, reduce public exposure to poor air quality and minimise inequalities in levels of exposure to air pollution.
- E. Plan for improved access to and quality of green spaces, the provision of new green infrastructure, and spaces for play, recreation and sports.
- F. Ensure that new buildings are well-insulated and sufficiently ventilated to avoid the health problems associated with damp, heat and cold.
- G. Seek to create a healthy food environment, increasing the availability of healthy food and restricting unhealthy options."

London Borough of Richmond upon Thames Local Plan⁷

- 1.20 LBRT defines a major development (which is compliant with the adopted London Plan) as:
 - A residential development of 10 or more homes;
 - A residential development on a site of at least 0.5 hectares;
 - Creation or change of use of a commercial development, where the floorspace is 1,000sqm or more; and
 - A non-residential development on a site of at least 1 hectare.
- 1.21 LBRT's Local Plan was adopted in July 2018 and sets out its strategy to promote healthy lifestyles and reduce health inequalities within the borough. The Local Plan states that "A Sustainable Future" is a strategic objective in the Local Plan's strategic vision for LBRT over the next 15 years.

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⁷ London Borough of Richmond upon Thames (2018): London Borough of Richmond upon Thames – Local Plan

- 1.22 Policy LP 30 'Health and Wellbeing' recognises the role of planning in achieving healthy lifestyles and sets out the criteria for LBN to support development proposals that respond to the following:
 - 1 "Sustainable modes of travel such as safe cycling routes, attractive walking routes and easy access to public transport to reduce car dependence.
 - 2 Access to green infrastructure, including river corridors, local open spaces as well as leisure recreation and play facilities to encourage physical activity.
 - 3 Access to local community facilities, services and shops which encourage opportunities for social interaction and active living, as well as contributing to dementia-friendly environments.
 - 4 Access to local health food, for example, allotments and food growing spaces.
 - 5 Access to toilet facilities which are open to all in major developments where appropriate (linked to the Council's Community Toilet Scheme).
 - 6 An inclusive development layout and public realm that considers the needs of all, including the older population and disabled people.
 - 7 Active Design which encourages wellbeing and greater physical movement as part of everyday routines."
- 1.23 Within Policy LP 30, it is stated that "A Health Impact Assessment must be submitted with all major development proposals." The Development exceeds the thresholds that LBRT considers as a major development, as stated in paragraph 1.20.
- 1.24 LBRT will support developments that will provide "safe and convenient access to public transport services" and "opportunities for walking and cycling, including through the provision of links and enhancements to existing networks" as reflected within Policy LP 44 'Sustainable Travel Choices' to assist in reducing impacts of development in relation to congestion and air pollution within LBRT.
- 1.25 Another objective of LBRT to promote healthy lifestyles across the borough is to ensure that development proposals will include sufficient amount of open space for new residents, whilst linking up to the wider Green Infrastructure network, as set out in Policy LP 31 'Public Open Space, Play Space, Sport and Recreation'.
- 1.26 Policy LP 28 'Social and Community Infrastructure' states that the Council will ensure that

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adequate provision of community services and facilities will be provided to accommodate the needs arising from the new development.

2 ASSESSMENT METHODOLOGY

- 2.1 The assessment has been based on the London HUDU Healthy Urban Planning Checklist⁸ which has been used to screen the health impacts of the proposed development. The HUDU Rapid Health Impact Assessment Tool⁹ has then been used to undertake the main assessment of health effects.
- 2.2 The Development is for 180 residential units and forms part of the Consented Scheme for the redevelopment of Richmond upon Thames College. As mentioned in Chapter 1 of this HIA, LBRT considers residential developments that comprise 10 or more residential units as a major development. HIA is a validation requirement at LBRT for all major developments (paragraph 1.23 of LBRT Local Plan), hence one has been prepared for the Development.
- 2.3 A preliminary assessment was undertaken during preparation of the planning application documents. Initial conclusions and recommendations for enhancing positive health outcomes and minimising adverse health effects were communicated to the client and design team. The assessment was then finalised upon receipt of the final Design and Access Statement to be submitted in support of the planning application.

HUDU Healthy Urban Planning Checklist

- 2.4 The HUDU Healthy Urban Planning Checklist aims to promote healthy urban planning by ensuring that the health and wellbeing implications of local plans and major planning applications are consistently taken into account. The checklist was originally created by with input from the six London Olympic and Paralympic Host Boroughs (Barking and Dagenham, Greenwich, Hackney, Newham, Tower Hamlets and Waltham Forest), the local NHS, the NHS London Healthy Urban Development Unit, Greater London Authority and Groundwork London. The latest version of the HUDU Healthy Urban Planning Checklist was updated in April 2017 to be consistent with the adopted London Plan (March 2016). In this assessment, the checklist has been used as a desktop assessment to screen the health impacts of the proposed development.
- 2.5 The HUDU checklist is divided into four main themes:
 - 1. Healthy housing;

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⁸ London Health Urban Development Unit (April 2017) *Healthy Urban Planning Checklist Third Edition*.

⁹ London Health Urban Development Unit (April 2017) Rapid Health Impact Assessment Tool Third Edition.

- 2. Active travel;
- 3. Healthy environment; and
- 4. Vibrant neighbourhoods.
- 2.6 Each theme contains a number of questions focused on a planning issue and a number of related health and wellbeing issues as set out in the table below. The checklist has been used as a screening exercise to inform the more detailed Rapid Health Impact Assessment and is included at Appendix 4. To avoid repetition, full details on how the development responds to the themes in the checklist is provided in Chapter 3 as part of the Rapid Health Impact Assessment.

Table 1: Themes within the HUDU Healthy Urban Planning Checklist

Theme	Planning Issue	Health and Wellbeing Issue
Healthy Housing	 Housing design Accessible housing Healthy living Housing mix and affordability 	 Lack of living space – overcrowding Unhealthy living environment – daylight, ventilation, noise Excess deaths due to cold / overheating Injuries in the home Mental illness from social isolation and fear of crime
Active Travel	 Promoting walking and cycling Safety Connectivity Minimising car use 	 Physical inactivity, cardiovascular disease and obesity Road and traffic injuries Mental illness from social isolation Noise and air pollution from traffic
Healthy Environment	 Construction Air quality Noise Contaminated land Open space Play space Biodiversity Local food growing Flood risk Overheating 	 Disturbance and stress caused by construction activity Poor air quality - lung and heart disease Disturbance from noisy activities and uses Health risks from toxicity of contaminated land Physical inactivity, cardiovascular disease and obesity Mental health benefits from access to nature and green space and water Opportunities for food growing – active lifestyles, healthy diet and tackling food poverty Excess summer deaths due to overheating
Vibrant Neighbourhoods	 Healthcare services Education Access to social infrastructure Local employment and healthy workplaces Access to local food shops Public buildings and spaces 	 Access to services and health inequalities Mental illness and poor self-esteem associated with unemployment and poverty Limited access to healthy food linked to obesity and related diseases Poor environment leading to physical inactivity Ill health exacerbated through isolation, lack of social contact and

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Theme	Planning Issue	Health and Wellbeing Issue
		fear of crime

- 2.7 The checklist (see Appendix 4) and the Rapid HIA have been completed using professional judgement and information from the following planning application documents:
 - Consented Scheme Environmental Statement (ES) (ref. 15/3038/OUT);
 - · Covering Letter, Application Form and CIL Form;
 - Compliance Statement;
 - Design and Access Statement (DAS);
 - · Architectural Design Drawings;
 - Landscape Design Drawings;
 - Landscape Management Plan;
 - Daylight and Sunlight Report;
 - Tree Survey;
 - Transport Assessment;
 - Archaeological Statement;
 - Drainage and Flooding Report;
 - Statement of Community Involvement;
 - Energy Report;
 - Dust Management Assessment;
 - Fire Statement; and
 - Sustainable Construction Checklist.
- 2.8 The ES submitted in support of the Consented Scheme has been used to inform this HIA. The Development assessed in this HIA forms the 'Residential Development Zone' of the Consented Scheme, therefore it presents a worst-case scenario for the Development. The content in the ES has been extracted which is specific for the Development and thus, provides evidence to inform the HIA.

The HUDU Rapid Health Impact Assessment Tool

- 2.9 The rapid assessment tool is designed to assess the likely health impacts of development plans and proposals. The scope of assessment has been informed by the completed HUDU checklist at Appendix 4. The assessment matrix (see Chapter 3) identifies eleven topics of broad determinants:
 - Housing quality and design;
 - Access to healthcare services and other social infrastructure;
 - Access to open space and nature;

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- Air quality, noise and neighbourhood amenity;
- · Accessibility and active travel;
- Crime reduction and community safety;
- Access to healthy food;
- Access to work and training;
- Social cohesion and lifetime neighbourhoods;
- · Minimising the use of resources; and
- Climate change.
- 2.10 Under each topic, planning issues which are likely to influence health and wellbeing are identified. The Rapid Assessment Tool provides assessment criteria and these have been tailored where possible to the proposed development. Where an impact has been identified recommendations to mitigate an adverse impact or enhance a beneficial impact are included where possible. Chapter 4 includes a high-level summary of effects and identified mitigation and enhancement measures.

Health and Wellbeing in Homes

2.11 In addition to the use of the HUDU checklist and impact assessment tool, a review of the UK Green Building Council Health and Wellbeing in Homes¹⁰ document has been undertaken. The document provides advice in relation to building and neighbourhood design features which can enhance the health and wellbeing of residents and recognises that design and quality of a home and neighbourhoods is a key contributor to the health and wellbeing. The document highlights that it is vital to consider all three aspects of health and wellbeing equally – mental, social and physical. The key findings of the report have helped to inform the consideration of the potential health effects of the Development.

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¹⁰ UK Green Building Council (July 2016) Health and Wellbeing in Homes.

3. RAPID HIA

3.1 The tables below set out the potential health and wellbeing impacts associated with the Development during the construction and operational phases. As set out in the Assessment Methodology section in Chapter 3, the tables have been adapted from the HUDU Rapid Health Impact Assessment Tool¹¹.

1. Housing Quality and Design

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal seek to meet all 16 design criteria of the Lifetime Homes Standard or meet Building Regulation requirement M4 (2)?	Yes ✓ No N/A	The Development will meet the standards set out in the London Plan and the SPG documents; Housing and Accessible Housing. The Development has been designed to make the former Richmond College into a new residential area of exceptional quality and unique design. In light of this, 90% of all units are compliant with M4(2) and 10% of all units are compliant with M4(3).	Positive ✓ Negative Neutral Uncertain	N/A
Does the proposal address the housing needs of older people, i.e. extra care housing, sheltered housing, lifetime homes and wheelchair accessible homes?	Yes ✓ No N/A	The Development forms the Residential Development Zone of the Consented Scheme which will seek from the outset to ensure the delivery of homes for the needs of the whole community. As mentioned above, 10% (18 units) of the residential dwellings to be provided on the Site will be compliant with Building Regulation requirement M4(3).	Positive ✓ Negative Neutral Uncertain	N/A
Does the proposal include homes that can be adapted to support independent living for older and disabled people?	Yes ✓ No N/A	As mentioned above, 10% (18 units) of the residential dwellings to be provided on the Site will be compliant with Building Regulation requirement M4(3). These consist of flat types which are a mixture of adaptable and adapted layouts.	Positive Negative Neutral Uncertain	N/A
Does the proposal promote good design through layout and orientation, meeting	Yes ✓ No N/A	The Development promotes good design through layout and orientation. The Development has been through a process of consultation and public exhibitions to inform the design process	Positive ✓ Negative Neutral	N/A

¹¹ London Health Urban Development Unit (April 2017) Rapid Health Impact Assessment Tool Third Edition.

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
internal space standards?		to ensure all requirements are met, including internal space standards.	Uncertain	
Does the proposal include a range of housing types and sizes, including affordable housing responding to local housing needs?	Yes ✓ No N/A	The Development includes a range of housing types and sizes, including affordable housing. The Development will deliver 180 affordable homes. The unit sizes range from a 1-bed/2-persons flat up to 4 bedroom/6 persons house. Of the 180 residential dwellings proposed, 26 will be provided as affordable rent and 154 will be provided as shared ownership.	Positive ✓ Negative Neutral Uncertain	N/A
Does the proposal contain homes that are highly energy efficient (e.g. a high SAP rating)?	Yes ✓ No N/A	The Applicant is committed to provide a sustainable development and an Energy Report has been submitted in support of the planning application. The Development will be highly energy efficient and include energy efficiency measures as appropriate. The energy efficient measures to be included in the Development comprise, among others: • High levels of insultation and high-performance glazing on all of the facades to significantly reduce the demand for space heating; • Good construction detailing and the use of best practice construction techniques will be adopted to minimise the amount of air infiltration into a building; • Low energy lighting fittings will be implemented throughout the buildings; and • Internal areas of infrequent use will be fitted with occupant sensors.	Positive Negative Neutral Uncertain	N/A

2. Access to Healthcare Services and Other Social Infrastructure

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal retain or reprovide existing social infrastructure?	Yes ✓ No N/A	The Site currently comprises the Richmond upon Thames College which provides further and higher education and training to 16- to 18- year olds and adults. The Reserved Matters application for the Development forms part of the Consented for Richmond upon Thames College, where the existing College will be replaced with a new College, a 'Technical Hub', a new secondary school and upgraded playing fields. Therefore, the proposal will form part of a wider scheme that will re-provide existing social infrastructure.	Positive ✓ Negative Neutral Uncertain	N/A
Does the proposal assess the impact on healthcare services?	Yes No ✓ N/A	Chapter 18 Socio-economics of the ES submitted in support of the Consented Scheme assessed the impact of the proposals on existing healthcare services. The assessment identified that there are five GP Practices in the study area, all of which were accepting new patients. The assessment concluded a negligible effect on primary healthcare as a result of an increase in population by 416 when the Development is completed, thus the assessment concluded that no mitigation measures were considered necessary.	Positive Negative Neutral ✓ Uncertain	N/A
Does the proposal include the provision, or replacement of a healthcare facility and does the facility meet NHS requirements?	Yes No ✓ N/A	The Development is a new residential development and does not include the provision or replacement of a healthcare facility. However, as stated above the ES submitted in support of the Consented Scheme concluded that the Development would have a negligible effect on primary healthcare services, thus it was considered no mitigation measures were necessary.	Positive Negative Neutral ✓ Uncertain	N/A
Does the proposal assess the capacity, location and accessibility of other social infrastructure, e.g. schools, social care and community facilities?	Yes √ No N/A	Chapter 18 Socio-economics of the ES submitted in support of the outline planning application (ref. 15/3038/OUT) assessed the capacity, location and accessibility of other social infrastructure within the surrounding area. The Development is anticipated to generate up to 416 people. The assessment calculated that the Development will yield 48 nursery age children. Nursery places are oversubscribed in LBRT, thus the impact the Development will have on nursery places was identified as minor adverse. The proposals of the wider scheme (ref. 15/3038/OUT) include the provision of new secondary school facilities, a nursery facility, as well as improved and upgraded special education needs and further education facilities. Therefore, the assessment identified that the provision of these facilities within the wider scheme would have a major beneficial effect on education provision and will facilitate the	Positive V Negative Neutral Uncertain	N/A

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
		Development. Furthermore, the Socio-economic assessment of the ES for the wider scheme (ref. 15/3038/OUT) assessed the effects on community facilities. The estimated increase in population of 416 as a result of the Development has been assessed to have a negligible effect on community facilities within the study area.		
Does the proposal explore opportunities for shared community use and co-location of services?	Yes ✓ No N/A	As mentioned above, the Development is part of a Consented Scheme for the redevelopment of Richmond upon Thames College. This includes the provision of new secondary school facilities, as well as improved and upgraded special education needs and further education facilities. The proposal does not directly explore the opportunities for shared community use and co-location of services, as it concerns residential development only. However, the Development forms part of a wider scheme that does provide shared community use and co-location of services.	Positive ✓ Negative Neutral Uncertain	N/A

3. Access to Open Space and Nature

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal retain and enhance existing open and natural spaces?	Yes ✓ No N/A	The Site currently comprises the existing Richmond upon Thames College with the majority of the Site being hardstanding. Along the eastern boundary of the Site is an area of open grassland and trees that will be retained and enhanced to provide open spaces for the public to use.	Positive V Negative Neutral Uncertain	
In areas of deficiency, does the proposal provide new open or natural space, or improve access to existing spaces?	Yes ✓ No N/A	The Site is currently deficient in quality of open space as described above. The landscape proposals for the Development identify the provision of the open spaces. The proposed terraced housing along the eastern and southern extent of the Site will all have private gardens at the rear of the houses. In addition, the Development will provide three separate but connected public open spaces; West Gardens, Central Garden and the East Gardens. The residential blocks have dual entrances to the cores, which will allow the residents to use the central space to journey through on the way to the station or to their car, as well as have access to play spaces. Therefore, the Development does provide new open space for future residents to enjoy which also promotes healthy living. The Development will also include an access (in the south-west corner) from Marsh Farm Lane which will allow residents to access the Craneford Way East playing fields. The playing fields are located in the southern extent of the Consented Scheme, approximately 50m to the south of the Development's site boundary. In addition, this access point will also allow future residents to access the Craneford Way Recreation Ground play area and more open space located approximately 50m south-west of the site boundary.	Positive V Negative Neutral Uncertain	N/A
Does the proposal provide a range of play spaces for children and young people?	Yes ✓ No N/A	Within the three separate but connected open spaces as described above, three separate play garden spaces will be provided that are associated with the adjacent resident blocks. A total of 640sqm of play space will be provided in the Development. These play areas are designed to be part of the garden and will not be fenced off. The play features will be arranged to compliment the overall garden spaces. Each of these three gardens will have its own design to distinguish from the other.	Positive Negative Neutral Uncertain	N/A

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal provide links between open and natural spaces and the public realm?	Yes ✓ No N/A	As discussed previously, the Development includes links between the open space that will be provided in the form of three separate open spaces. Furthermore, the access point in the south-west corner of the Site from Marsh Farm Lane will allow the residents of the Development to access the wider public realm to the south of the Site.	Positive Negative Neutral Uncertain	N/A
Are the open and natural spaces welcoming and safe and accessible for all?	Yes ✓ No N/A	The open and natural spaces will be welcoming, safe and accessible for all. Street lighting will be designed to ensure that anti-social behaviour will be discouraged and provide a safe environment to all. The three separate but connected spaces have been clearly defined, each with their own character to help organise and create a sense of ownership. Additionally, landscaping and changes in materials, as far as paving, texture and colour are introduced into spaces to act as psychological barriers which help signal where property is private, or where people shouldn't access. Furthermore, the windows and balconies have been designed to provide additional natural surveillance so that maximum visibility of the open areas of the Site can be achieved, without having views looking into the buildings.	Positive Negative Neutral Uncertain	N/A
Does the proposal set out how new open space will be managed and maintained?	Yes ✓ No N/A	A Landscape Strategy Statement has been submitted in support of this planning application, which details how the Applicant will seek to manage and maintain the landscape proposals for the Residential Development Zone of the Consented Scheme. The Applicant has committed to be the long-term stewards of the Development and will undertake or procure the management, maintenance and repair of the Development to an agreed standard. In addition, the Landscape Strategy Statement has set out the following objectives, among others: • Monitor and safeguard against invasive weeks; • All paving/surfacing to be regularly weeded and inspected for damage; • It is anticipated that there will be two maintenance visits per year by trained operatives for the Green Roofs; and • Any planting that dies or fails to thrive will be replaced.	Positive Negative Neutral Uncertain	N/A

4. Air Quality, Noise and Neighbourhood Amenity

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal minimise construction impacts such as dust, noise, vibration and odours?	Yes ✓ No N/A	The Development has sought to minimise construction impacts such as dust, noise, vibration and odours where possible. The technical chapters of the ES submitted in support of the Consented Scheme each considered effects during demolition and construction phase on the respected disciplines. Within Chapter 9 Noise of the ES, the construction phase activities were assessed in respect to noise and vibration. The assessment concluded that there would be a negligible effect for both construction vibration and noise generated from construction traffic. Chapter 10 Air Quality of the ES assessed the impact the Consented Scheme would have upon air quality. The assessment identified that the significance of likely dust impacts on nearby receptors following the implementation of the Construction Method Statement during the construction phase was considered to be negligible. A Dust Management Plan has been submitted with this planning application in support of the Residential Development Zone. The Dust Management Plan sets out the measures that will be implemented to control dust and emissions during the construction and demolition phase. All the measures included have been adopted from Greater London Authority's supplementary planning guidance 'The Control of Dust and Emissions During Construction and Demolition' 2. In addition, the Applicant is committed to providing a specified person to be responsible for the control of environmental impacts of construction activities. The responsibilities of this position will also be to keep a site logbook documenting the maintenance of effective emissions control methods and details of any complaints or incidents and the actions taken. Furthermore, this position will also liaise regularly with LBRT and other stakeholders where required.	Positive V Negative Neutral Uncertain	Mitigation Measure: Construction Method Statement to be secured by a planning condition and implemented throughout the construction phase.
Does the proposal minimise	Yes ✓	Chapter 10 Air Quality of the ES submitted in support of the	Positive ✓	Mitigation Measure:

¹² Greater London Authority (July 2014) *The London Plan Supplementary Planning Guidance; The Control of Dust and Emissions During Construction and Demolition.*

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
air pollution caused by traffic and energy facilities?	No N/A	Consented Scheme assessed the impacts of the proposals on the air quality caused by traffic and energy facilities. The Development will provide 150 secure bicycle spaces and electrical charging capacity for at least 40% of the 160 car parking spaces to be provided. These provisions will contribute to minimising air pollution as a result of the Development and thus, reduce the impact from traffic.	Negative Neutral Uncertain	Construction Method Statement to be secured by a planning condition and implemented throughout the construction phase. Sustainable Travel Information Pack to be prepared for the residents. The Sustainable Travel Information Pack would include a section on safe walking routes to local parks and green spaces to encourage
Does the proposal minimise noise pollution caused by traffic and commercial uses?	Yes √ No N/A	Chapter 9 Noise of the ES submitted in support of the Consented Scheme assessed the noise effects generated by traffic. The assessment concluded that the changes in traffic noise levels would have a negligible effect on sensitive receptors.	Positive ✓ Negative Neutral Uncertain	Mitigation Measure: Planning conditions to be attached to the permission to ensure plant such as heating and cooling units operate to acceptable noise standards, on completion of the development.

5. Accessibility and Active Travel

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal prioritise and encourage walking (such as through shared spaces?)	Yes √ No N/A	The Development incorporates two access points for pedestrians and cyclists to access the Site; one from Marsh Farm Lane and the other from the existing point on Egerton Road. Key pedestrian routes will be provided through the Site which will be created through strong marker features in the buildings and landscape which will lead people through the key spaces in the scheme. The Site has been designed to be pedestrian and cycle dominant, with vehicles being secondary with shared surface. The three separate but connected gardens provided within the centre of the Site will be accessible to all with connected routes to encourage walking throughout the Site. Furthermore, the Consented Scheme, of which the Development forms the Residential Development Zone, will upgrade the Marsh Farm Lane to provide pedestrian access to Twickenham Station and thus, encourage walking to the wider public transport network, whilst also providing access to the playing fields and open space located approximately 50m to the south of the Site.	Positive V Negative Neutral Uncertain	Recommended Enhancement Action: A Sustainable Travel Information Pack will be prepared for the residents of the Development. The Sustainable Travel Information Pack would include a section on safe walking routes to local parks and green spaces.
Does the proposal prioritise and encourage cycling (for example by providing secure cycle parking, showers and cycle lanes)?	Yes ✓ No N/A	The Development encourages cycling by providing the infrastructure and connections to do so. As mentioned above, there are two access points onto the Site for cyclists; one in the south-east corner of the Site and one in the north-west corner of the Site. The Development will also provide 360 cycle parking spaces which will encourage cycling as there will be the provision of safe storage for bikes.	Positive V Negative Neutral Uncertain	N/A
Does the proposal connect public realm and internal routes to local and strategic cycle and walking networks?	Yes √ No N/A	In addition to the cycle access and lanes described above, which will be provided across the Site, the Development will seek to adjoin and connect these up to the existing local cycle and walking networks. As mentioned above, the Consented Scheme will upgrade Marsh Farm Lane which is located along the western boundary of the Site. The upgrading of Marsh Farm Lane is to improve connectivity to Twickenham Station. Therefore, the Development will connect to strategic walking networks. Additionally, the access from Marsh Farm Lane will allow the future residents of the Development to use the open space located approximately 50m to the south-east of the Site. Furthermore, there is existing access from Craneford Way to the	Positive Negative Neutral Uncertain	N/A

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
		south of the site to an existing cycle path, approximately 100m to the west of the Site. Thus, the Development will connect to existing cycle networks.		
Does the proposal include traffic management and calming measures to help reduce and minimise road injuries?	Yes ✓ No N/A	The Transport Assessment submitted in support of the planning application details the measures taken to manage and calm traffic to reduce and minimise road injuries. The internal road layout of the Development has been designed to reduce vehicle speeds through localised narrowing and bends in the carriageway, in addition to a staggered road layout creating chicanes to reduce the speed of traffic. Safe pedestrian and cycle routes have been incorporated into the Development to encourage the reduction in the use of cars on the Site and in the surrounding area to help reduce and minimise road injuries.	Positive Negative Neutral ✓ Uncertain	Mitigation Measure: A Sustainable Travel Information Pack will be prepared for the residents of the Development.
Is the proposal well connected to public transport, local services and facilities?	Yes ✓ No N/A	The Site is currently accessed via the existing Chertsey Road (A316) via Egerton Way and Landhorn Drive. Twickenham Station is located approximately 640m south-east of the Site, which is already accessed from the Site via Marsh Farm Lane and via the A316 via Whitton Road. There are a number of bus and coach stations located along Whitton Road, approximately 300m to the north of the Site which also services Twickenham Stadium located adjacent to Whitton Road. All these existing facilities can be accessed from the Site via Egerton Road. Therefore, the Site is well connected to public transport, local services and facilities.	Positive V Negative Neutral Uncertain	N/A
Does the proposal seek to reduce car use by reducing car parking provision, supported by the controlled parking zones, car clubs and travel plans measures?	Yes ✓ No N/A	The Transport Assessment submitted with the planning application has assessed the impact the Development could have on the local highways network. The total provision of car parking on the Site will ensure that the Development does not generate any parking overspill. The Applicant will seek to appoint a Travel Plan Co-ordinator for the Site who will promote the measures for a period of 5 years. A Sustainable Travel Information Pack will be provided to each dwelling upon occupation which will provide information on walking and cycling routes and public transport links. This provision of this information will seek to reduce car use by the future residents of the Development.	Positive V Negative Neutral Uncertain	Mitigation Measure: The success of the Sustainable Travel Information Packs should be monitored against clearly defined targets. If the targets are not being met then measures will be reviewed and amended to step up the effectiveness of the

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
				measures. Such measures would need to be agreed with LBRT's Travel Plan Officer.
Does the proposal allow people with mobility problems or a disability to access buildings and places?	Yes ✓ No N/A	 The Design and Access Statement sets out the details of the design to ensure that the entirety of the Site is accessible to all. These provisions include: Accessible routes to all connections with local pedestrian routes and public transport; Inclusion of accessible car parking provision; Level access across the Site and access to all the flat blocks complying with M4(2); and 10% of the dwellings will be designed to be easily adaptable to meet the needs of a wheelchair user, as required by London Plan Policy and to meet Building Regulation requirements for wheelchair user dwellings. 	Positive V Negative Neutral Uncertain	N/A

6. Crime Reduction and Community Safety

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal incorporate elements to help design out crime?	Yes ✓ No N/A	The design of the Development includes consideration of personal safety. This relates not only to ensuring that the layout of the Development does not create an environment conductive to crime, but also to how occupiers and visitors to the Site can move freely without the risk of injury.	Positive V Negative Neutral Uncertain	N/A
Does the proposal incorporate design techniques to help people feel secure and avoid creating 'gated communities'?	Yes ✓ No N/A	The Development has incorporated careful and appropriate design techniques to the open space to be provided as part of the Development to help people feel secure and avoid the creation of gated communities. These measures include: • Highway design and the layout of footpaths ensure that the risk to injury to road users is reduced to a minimum; • The three open space gardens will be connected so that each are permeable for all users of the Site; • Comprehensive management measures are installed to ensure road and public routes are carefully monitored; and • A carefully designed Lighting Strategy will be delivered on the Site to discourage anti-social behaviour on the Site.	Positive V Negative Neutral Uncertain	N/A
Does the proposal include attractive, multi-use public spaces and buildings?	Yes ✓ No N/A	As mentioned previously, the Development includes three separate but connected gardens within the centre of the Site. Each of these have been designed to have its own distinctive character. In addition, the existing open space in the eastern extent of the Site will be retained as part of the proposals and provide another open space of public realm for the residents to enjoy.	Positive V Negative Neutral Uncertain	N/A
Has engagement and consultation been carried out with the local community?	Yes ✓ No N/A	Public exhibitions have taken place on 26 th and 27 th September 2018, where 60 visitors came to the exhibition over the two days. The Applicant invited over 6,900 households and businesses to the attend the public exhibition. The invitation was distributed 10 days prior to the exhibition. Online advertising also was placed on St Margaret's community website and on the Richmond Council events website. The feedback from the exhibitions have been taken into account and reflected in the design of the Development.	Positive V Negative Neutral Uncertain	N/A

7. Access to Healthy Food

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal facilitate the supply of local food, i.e. allotments, community farms and farmers' markets?	Yes ✓ No N/A	The Development does not include the provision of allotments on the Site. The proposal concerns residential development, there is no retail provision included in the Development.	Positive Negative Neutral ✓ Uncertain	Recommended Mitigation Action: Provide residents with a welcome pack that includes details of local Farmers' Markets.
Is there a range of retail uses, including food stores and smaller affordable shops for social enterprises?	Yes No ✓ N/A	The Development comprised residential units, with no proposed commercial or retail floorspace.	Positive Negative Neutral ✓ Uncertain	N/A
Does the proposal avoid contributing towards an over-concentration of hot food takeaways in the local area?	Yes No ✓ N/A	As above, therefore the proposal will avoid contributing towards an over-concentration of hot food takeaways in the local area.	Positive V Negative Neutral Uncertain	N/A

8. Access to Work and Training

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal provide access to local employment and training opportunities, including temporary construction and permanent 'end-use' jobs?	Yes ✓ No N/A	The Development, as part of the Consented Scheme has been assessed within Chapter 18 Socio-economics of the ES that was prepared for the outline planning application. The assessment identified that the construction phase of the Consented Scheme is likely to generate 112 full-time employment jobs. Some of these jobs will be for the construction of the Development which forms the Residential Development Zone of the Consented Scheme. Furthermore, Chapter 18 Socio-economics of the ES identified that overall the Consented Scheme will provide 460 full-time employment jobs. Therefore, the Development will provide opportunities of work for local people during the construction phase and the Consented Scheme will provide permanent 'end-use' jobs for the future residents of the Development.	Positive V Negative Neutral Uncertain	Recommended Enhancement Action: Commit to sourcing construction workforce from the local area where possible. Consider whether any apprenticeship positions could be provided.
Does the proposal provide childcare facilities?	Yes No ✓ N/A	The proposal is for residential purposes and does not provide childcare facilities. However, the Development forms part of a wider scheme (ref. 15/3038/OUT) which includes the provision of a nursery facility which would facilitate the Development.	Positive Negative Neutral ✓ Uncertain	N/A
Does the proposal include managed and affordable workspace for local businesses?	Yes No ✓ N/A	The Development is for residential development of 180 units, therefore the proposal does not include managed and affordable workspace for local businesses.	Positive Negative Neutral ✓ Uncertain	N/A
Does the proposal include opportunities for work for local people via local procurement arrangements?	Yes No ✓ N/A	The Development comprises residential dwellings, with no commercial or retail floorspace proposed. However, as mentioned above, the construction phase of the Development will provide opportunities for work for local people. In addition, the Development forms part of the Consented Scheme which will provide employment opportunities for local people through the redevelopment of Richmond upon Thames College and the provision of a secondary school and a 'tech-hub'.	Positive Negative Neutral ✓ Uncertain	N/A

9. Social Cohesion and Lifetime Neighbourhoods

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal connect with existing communities, i.e. layout and movement which avoids physical barriers and severance and land uses and spaces which encourage social interaction?	Yes ✓ No N/A	The Development seeks to connect the Site with the existing and established surrounding communities of Heathfield to the west and the centre of Twickenham to the south. The existing Chertsey Road (A316) will provide the main access from to the Consented Scheme which will connect to the upgraded Marsh Farm Lane to service the Development in the north-west corner of the Site. Chertsey Road (A316) is a dual carriage-way that connects to other urban areas of Greater London such as Richmond to the east. The Development has been designed to have free, unrestricted movement across the Site. The two Site entrances that have been proposed in the north-west and southeast corner of the Site have been enhanced to maximise capacity, visibility and enjoyment of the Site entrance points to prevent physical barriers and severance between communities and instead encouraging the connection with broader communities.	Positive Negative Neutral Uncertain	N/A
Does the proposal include a mix of uses and a range of community facilities?	Yes ✓ No N/A	The proposal concerns residential development, however the proposal forms part of a Consented Scheme comprising a number of 'development zones' which will bring forward the redevelopment of Richmond Upon Thames College. The other 'development zones' will provide mix-uses and a range of community facilities which include a new secondary school, an upgrade college for further education, a 'Tech Hub', a new nursery and upgraded college fields.	Positive ✓ Negative Neutral Uncertain	N/A
Does the proposal provide opportunities for the voluntary and community sectors?	Yes ✓ No N/A	As mentioned above, the Development is for residential purposes and forms the Residential Development Zone of the Consented Scheme for the redevelopment of the Richmond upon Thames College site. The proposal does not directly provide opportunities for the voluntary and community sectors.	Positive Negative Neutral ✓ Uncertain	N/A
Does the proposal address the six key components of Lifetime Neighbourhoods?	Yes No ✓ N/A	Five of the six key components to achieving Lifetime Neighbourhoods will be achieved in the Development. Through public exhibitions, the public have been kept up-to-date with the design process and their comments have been incorporated into the design evolution of the Development. Vehicular, pedestrian and cycle access have all been provided to ensure the Site is permeable and accessible to all. In addition, a Waste Strategy has been produced to ensure waste collection is efficient and	Positive ✓ Negative Neutral Uncertain	N/A

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
		regular to promote a clean environment. The Development seeks to provide an attractive built and natural environment across the Site with the provision of a range of attractive open spaces and distinctive character areas. The Development also seeks to ensure the future residents and users of the Site have a healthy well-being by including sustainable measures such as attractive open spaces, promoting walking and cycling and the provision of a range of services that promote healthy living. Furthermore, a mixture of housing will be provided to accommodate all needs from first time buyers, to larger families and older people. The only key component to not be achieved as a result of the Development is the provision of services. The Development is for residential purposes, however the proposal is part of Consented Scheme that would satisfy this component through the provision of a redeveloped College, a secondary school, a 'Tech Hub' and a nursery facility. The above, in addition to all the information provided in this document, it is evident that the proposal with the wider scheme addresses and achieves the six key components to successfully deliver a Lifetime Neighbourhood.		

10. Minimising the Use of Resources

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal make best use of existing land?	Yes ✓ No N/A	The Site is currently brownfield and used for the existing Richmond upon Thames College. The proposal incorporates residential use which will provide a new community in the area. The proposal forms the Residential Development Zone of the Consented Scheme which seeks to retain the educational and community use, as well as providing employment opportunities. With the existing access and public transport services, the proposal utilises, and builds on, the existing infrastructure. The Development seeks to enhance biodiversity in the area by creating an area of enhancement along the northern boundary of the Site (described further below).	Positive ✓ Negative Neutral Uncertain	N/A
Does the proposal encourage recycling (including building materials)?	Yes ✓ No N/A	The application will be supported by a Construction Method Statement will be submitted pursuant to planning condition U08011, which will include the details for the recycling of waste resulting from demolition and construction works during the construction phase of the Development. Each of the residential blocks have been designed to include access to adequate bin stores provision based on the LBRT Local Plan 'Refuse and Recycling Storage Requirement' ¹³ . These areas have been located specifically to allow easy collection by refuse vehicles on collection days. In addition, every house will have its own individual bin storage within the front gardens for ease of collection.	Positive ✓ Negative Neutral Uncertain	N/A
Does the proposal incorporate sustainable design and construction techniques?	Yes ✓ No N/A	A Construction Method Statement will be submitted pursuant to planning condition U08011. The Statement will set out how the demolition and construction phases of the Development will meet the planning policy requirements related to sustainable development.	Positive ✓ Negative Neutral Uncertain	N/A

¹³ London Borough of Richmond upon Thames (April 2015) *The Local Plan Supplementary Planning Document; Refuse and Recycling Storage Requirements.*28156/A5/HIA

11. Climate Change

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
Does the proposal incorporate renewable energy?	Yes ✓ No N/A	The design of the Development is compliant with the Mayor of London's Be Lean, Be Clean, Be Green principle taken from the Energy Hierarchy approach. An Energy Report has been submitted in support of the planning application. The Energy Report has identified that a wide range of efficiency measures have been incorporated within the design of the Development which will achieve significant reductions in emissions compared to the regulatory baseline. In addition, the Energy Report concluded that Photovoltaic Cells were considered the most suitable renewable energy technology as the Development has large roof areas to mount the arrays. In accordance with the Consented Scheme Energy Statement, the inclusion of Photovoltaic Cells in the Development will achieve a minimum of 20% contribution to total energy demand.	Positive Negative Neutral Uncertain	N/A
Does the proposal ensure that buildings and public spaces are designed to respond to winter and summer temperatures, i.e. ventilation, shading and landscaping?	Yes ✓ No N/A	As mentioned above, the Development has been supported by an Energy Statement that has been submitted in support of the planning application. The Energy Statement has identified that mechanical ventilation with heat recovery is proposed for all dwellings in order to achieve ventilation in the most energy efficient way.	Positive Negative Neutral ✓ Uncertain	N/A
Does the proposal maintain or enhance biodiversity?	Yes ✓ No N/A	The proposal incorporates an Ecological corridor on the north boundary which will provide a 4-6m buffer to the wider scheme. It will include large native tree species, that will in time, soften the impact of the 5-storey residential blocks, particularly when viewed from the north. Furthermore, this Ecological Corridor will include native shrub thicket planting, long meadow grass areas and habitat enhancement measures such as bird boxes and wood piles. These measures will promote and enhance biodiversity in the Site.	Positive V Negative Neutral Uncertain	N/A
Does the proposal incorporate sustainable urban drainage techniques?	Yes ✓ No N/A	The Development has been supported by a Flood Risk Assessment and Surface Water Drainage Strategy which has been submitted in support of the planning application. The Site has been assessed as not being at any significant risk of flooding from river and tidal sources, water bodies and infrastructure. The Development will seek to have finished floor levels to be at least 300mm above surrounding ground levels, where possible.	Positive V Negative Neutral Uncertain	N/A

Assessment criteria	Relevant?	Details/evidence	Potential health impact?	Recommended mitigation or enhancement actions
		The FRA and Drainage Strategy has identified a number of sustainable urban drainage techniques which are suitable for the Site. These include, among others: • Biodiverse roofs – proposed for 70-80% of all flat roofs with pitch up to 30 degrees area; and • Permeable paving.		

4 CONCLUSION

- 4.1 An assessment of the potential health effects of the Development has been undertaken. The HUDU Healthy Urban Planning Checklist has been completed (see Appendix 4) which has helped focus the assessment of effects (set out in Chapter 4) using the HUDU Rapid Health Impact Assessment Tool.
- 4.2 The performance of the Development has been assessed against 11 key health themes:
 - Housing quality and design;
 - Access to healthcare services and other social infrastructure;
 - Access to open space and nature;
 - · Air quality, noise and neighboured amenity;
 - Accessibility and active travel;
 - · Crime reduction and community safety;
 - Access to healthy food;
 - Access to work and training;
 - · Social cohesion and lifetime neighbourhoods;
 - Minimising the use of resources; and
 - Climate change.
- 4.3 As shown in the assessment in Chapter 3, the Development was found to have a positive health effect in relation to the majority of the key health themes. The Development has been designed to provide a high quality, attractive and healthy environment for future users.
- As part of the design of the Development particular attention has been given to create a balanced, new community which meets local housing need and provides for all needs of the public. The Development forms part of the Consented Scheme which is for the redevelopment of Richmond upon Thames College, which seeks to provide a regenerated College and educational facilities, along with housing to compliment these changes. In addition, the Development promotes active and sustainable travel, including attractive and safe cycling and pedestrian facilities that connect to the wider area. The proposals also include areas of open space and the design team have incorporated multi-use open space throughout the public and private areas which will provide a range of beneficial health effects.
- 4.5 The table below sets out potential mitigation and enhancements measures that have been identified.

28156/A5/HIA 33 December 2018

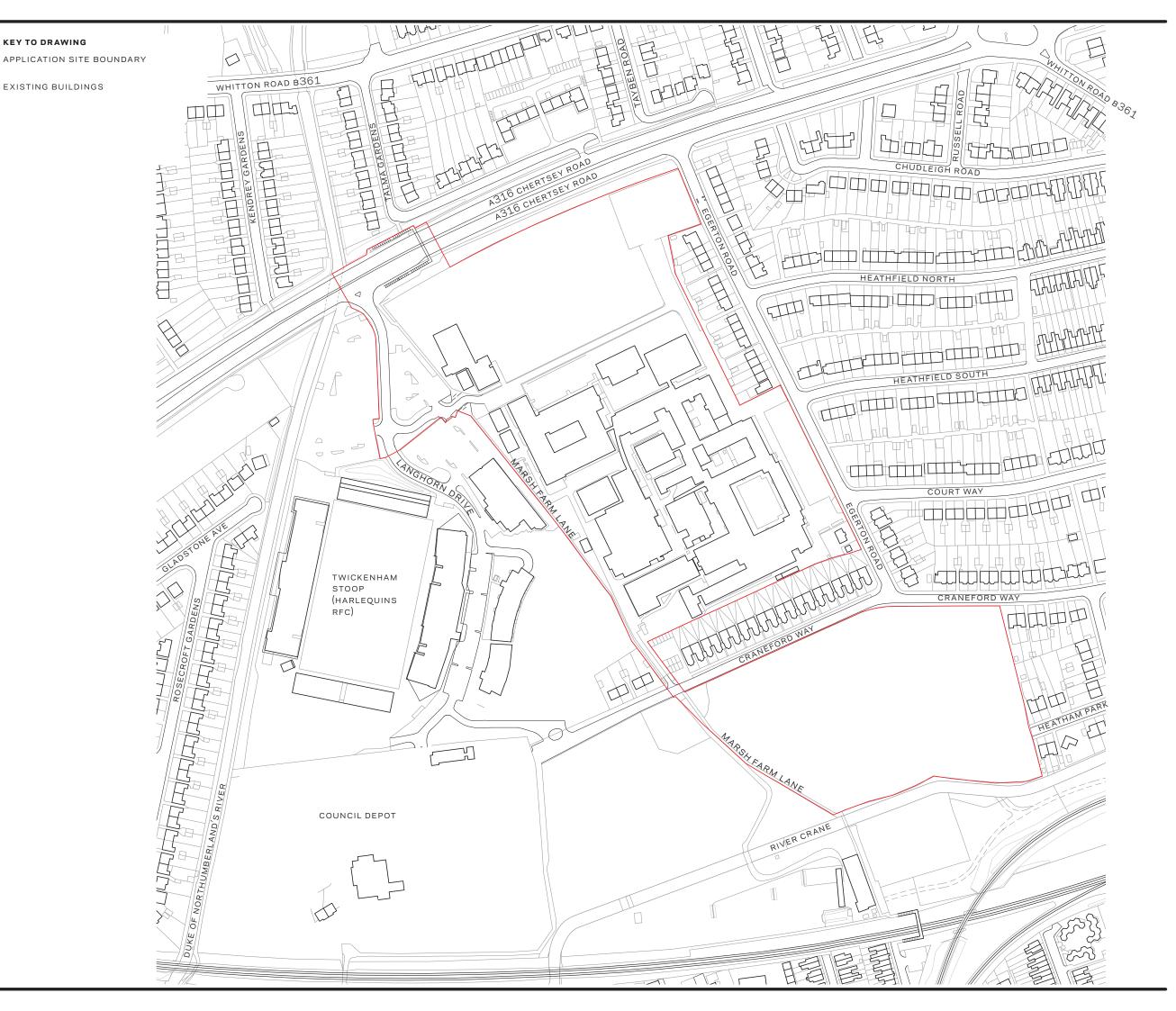
Health Theme	Recommended Mitigation or Enhancement Action
Housing quality and design	No mitigation or enhancement measures considered necessary.
Access to healthcare services and other social infrastructure	No mitigation or enhancement measures considered necessary.
Access to open space and nature	No mitigation or enhancement measures considered necessary.
Air quality, noise and neighboured amenity	 Construction Environment Management Plan to be secured by condition to ensure effective control of noise and air quality emissions during the construction stage; A Sustainable Travel Information Pack to be prepared for the future residents. The residential Sustainable Travel Information Pack could include a section on safe walking routes to local parks and green spaces to encourage sustainable travel and health active lifestyle; and Planning conditions to be attached to the permission to ensure plant such as heating and cooling units operate to acceptable noise standards, on completion of the development.
Accessibility and active travel Crime reduction and community	 In relation to encouraging active travel, the Sustainable Travel Information Pack would also include a section on safe walking routes to local parks and green spaces to encourage physical and mental wellbeing; and Monitoring of the Sustainable Travel Information Pack to ensure its effectiveness and where measures are not proving successful, review of the proposals. No mitigation or enhancement measures considered
Access to healthy food	necessary. In relation to access to healthy foods, the Residents' Welcome Pack could include details of local Farmers Markets.
Access to work and training	 Commit to sourcing construction work force from the local area where possible; Consider whether any commitment could be made to employment opportunities for local people; and Consider whether any apprenticeship positions could be provided.
Social cohesion and lifetime neighbourhoods	 No mitigation or enhancement measures considered necessary.
Minimising the use of resources and	No mitigation or enhancement measures considered necessary.
Climate change.	No mitigation or enhancement measures considered necessary.

28156/A5/HIA 34 December 2018

APPENDIX 1

CONSENTED SCHEME SITE LOCATION PLAN

28156/A5/HIA December 2018



Project

REEC Richmond Education & **Enterprise Campus**

Prepared for

Richmond-upon-Thames College

Client Location

Richmond upon Thames College | Egerton Road | Twickenham | Middlesex | TW2 7SJ



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CGMS CONSULTING

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Red Line based on 3Sixty Meas Drawing Number 07404-01 D

No. Description Date

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Project No: 12.33036

Sheet Title:

Site Location Plan

Original drawing is A3. Do not scale this drawing.

Sheet Number:

PL-01

APPENDIX 2

DEVELOPMENT ZONES FOR THE CONSENTED SCHEME

28156/A5/HIA December 2018



Project

REEC Richmond Education & **Enterprise Campus**

Prepared for

Richmond-upon-Thames College

Client Location

Richmond upon Thames College | Egerton Road | Twickenham | Middlesex | TW2 7SJ



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Reviewed by: AA 1:2000 @ A3 Scale: Project No: 12.33036

Sheet Title:

Development Zones

Parameter Plan

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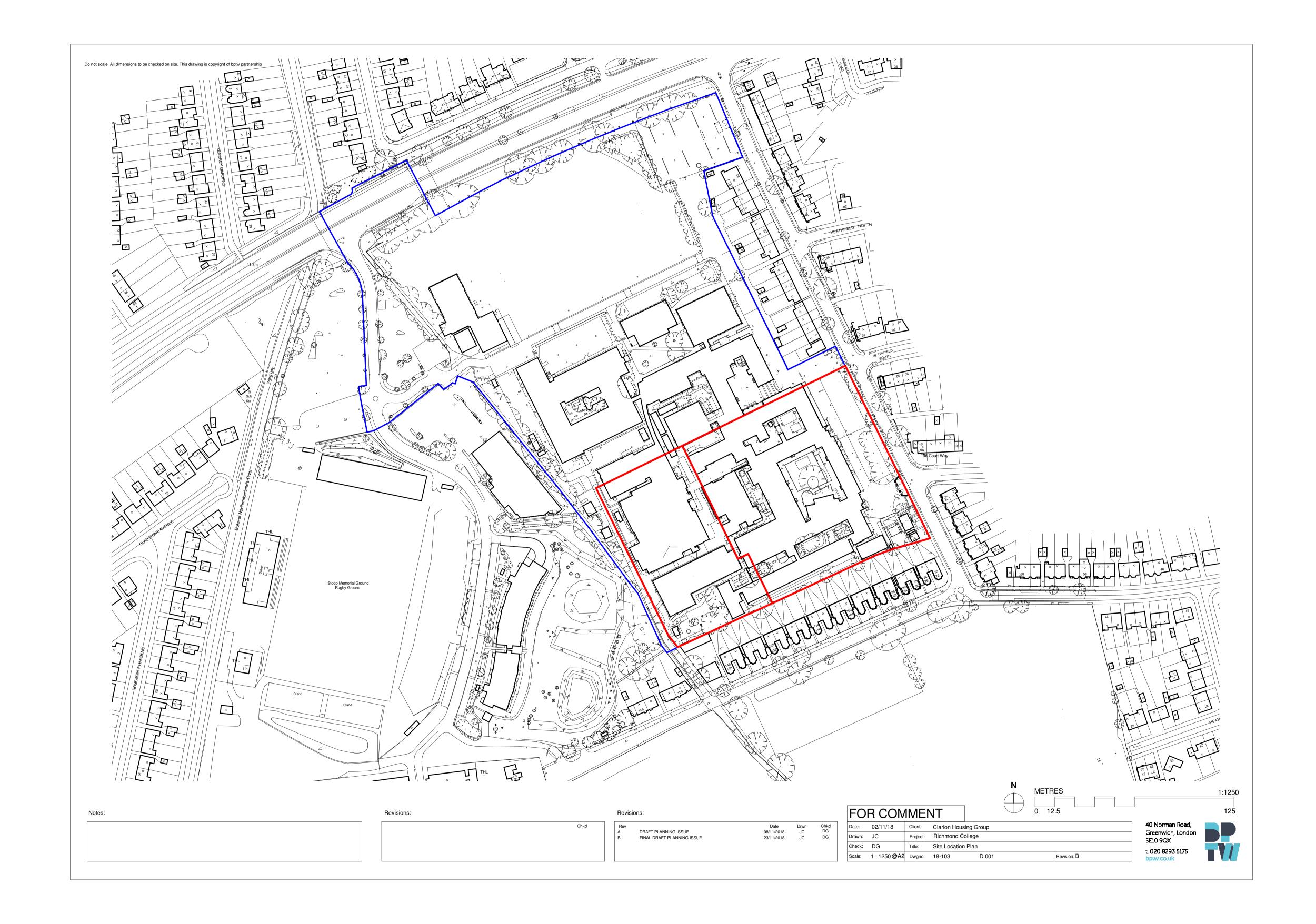
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PL-03

APPENDIX 3

SITE LOCATION PLAN

28156/A5/HIA December 2018



APPENDIX 4

HUDU HEALTHY URBAN PLANNING CHECKLIST APRIL 2017

28156/A5/HIA December 2018



London Healthy Urban Development Unit

HUDU Planning for Health

Healthy Urban Planning Checklist







Third Edition May 2017

Purpose of the checklist

The checklist aims to promote healthy urban planning by ensuring that the health and wellbeing implications of local plans and major planning applications are consistently taken into account. By bringing together planning policy requirements and standards that influence health and wellbeing the checklist seeks to mainstream health into the planning system.

The checklist was originally developed in 2012 by representatives from the six London Olympic and Paralympic Host Boroughs, the local NHS, the NHS London Healthy Urban Development Unit, Greater London Authority and Groundwork London. This third edition has been fully updated to be consistent with The London Plan, the Spatial Development Strategy for London consolidated with alterations since 2011, published in March 2016. This will be referred to simply as the London Plan 2016. From this date, the formal alterations to the London Plan form part of the statutory development plans for London Boroughs.

Who is the checklist for?

The <u>National Planning Policy Framework (March 2012)</u> promotes a collaborative approach to health and planning whereby local planning authorities should work with public health leads and health organisations to understand and take account of the health status and needs of the local population and the barriers to improving health and well-being (paragraph 171). The supporting online <u>Planning Practice Guidance</u> refers to the use of health impact assessment as a useful tool to assess the impacts of development proposals.

The checklist supports this collaborative approach and encourages different stakeholders to work together to address the health impacts of plans and development proposals. As such, the checklist could be used by:

- Developers, to screen and scope the health impacts of development proposals;
- Planning officers, to help identify and address the health impacts of plans and development proposals;
- Public health and environmental health professionals, to comment and scrutinise plans and development proposals;
- Neighbourhood forums, community groups and housing associations to comment on major planning applications to help foster community engagement

To create and develop healthy and sustainable places and communities, the Marmot Review of Health Inequalities in England <u>'Fair Society Healthy Lives'</u> recommends that the planning system should be fully integrated with transport, housing, environmental and health policy.

Therefore, the checklist will also be of interest to environmental health officers concerned with environmental impacts and risks, transport planners concerned with promoting active travel and housing officers seeking to ensure that new housing is affordable and accessible.

What is healthy urban planning?

Healthy urban planning aims to promote healthy, successful places for people to live and work in. This can be achieved by providing the homes, jobs and services that people need, reducing environmental risks and delivering well designed buildings and urban spaces which will create the conditions for healthy, active lifestyles. In addition to access to healthcare services, a number of other factors are known to influence a person's health status and lifestyle, including economic, environmental and social conditions. These factors are referred to as the wider or social determinants of health.

Healthy urban planning seeks to highlight and promote the role of planning to influence these social determinants of health. In many ways, planners already 'do' health, by promoting sustainable development and travel, enhancing green spaces, reducing pollution and protecting residential amenity. However, healthy urban planning goes further by explicitly recognising the role of planning and by using health issues as a way to promote good planning and design and raise standards. Poorly planned and designed buildings and spaces could deter healthy lifestyles and exacerbate poor physical and mental health. The principles of healthy urban planning apply to both new development and urban regeneration programmes such as housing estate renewal schemes.

Local authorities are responsible for a number of regulatory functions, which are separate from planning controls, such as building regulations, traffic regulations, environmental protection and a range of licensing regimes. The checklist refers only to planning controls, although other regulatory controls, particularly environmental protection, food premises licensing and traffic regulations are closely related and required in order to achieve a 'healthy' development.

Urban design and healthy urban planning

Healthy urban planning means good planning and high quality urban design. Good design and good planning can help reduce health care costs over time by preventing ill-health from risks attributed to urban planning, including air pollution, road injuries, worklessness and poor housing. Good design also generates financial, social and environmental value. A well designed 'healthy' development will add economic value by increasing sales and lettings of residential units and producing higher returns on investment.

'Active Design' is a key element of healthy urban planning. Design has a crucial role to support activity in buildings and places in response to rising levels of obesity and related chronic diseases. New York City has produced <u>Active Design Guidelines</u>, which provides guidance on creating healthier buildings, streets, and urban spaces. The Guidelines demonstrate that active design will help to reduce energy consumption, increase sustainability, and be cost effective. It is recognised that active design can also address mental health and wellbeing.

Bringing together policy requirements, standards and assessments

The checklist aims to bring together key policy requirements and standards, which influence health and wellbeing to assist the decision-making process. A 'healthy' development can be achieved when these requirements and standards are met and exceeded.

The <u>London Plan 2016</u> provides a strong policy framework for integrating health and spatial planning. It seeks to improve health and address health inequalities by requiring new developments to be designed, constructed and managed in ways that improve health and promote healthy lifestyles to help to reduce health inequalities (<u>Policy 3.2</u>).

The checklist refers to London Plan policies and standards set out in Mayoral supplementary planning guidance, notably the quality and design standards in the <u>Housing Supplementary Planning Guidance (2016)</u>. This guidance updates London housing standards to reflect the implementation of the Government's new national technical standards. In addition to these standards the checklist also includes good practice standards which seek to 'raise the bar' and demonstrate that a development has fully considered health and wellbeing issues.

There are a range of national standards and assessments which when used together constitute healthy urban planning, such as the <u>Housing - Optional Technical</u>

<u>Standards</u>, <u>Lifetime Homes</u> and <u>Lifetime Neighbourhoods</u>, <u>Building for Life</u> and <u>Secured by Design</u>. These assessments are illustrated in Figure 1.

Figure 1 – Assessments and standards



Much of the information needed to complete the checklist will be contained in documents submitted with a planning application required to validate the application (see Table 1 below). The checklist seeks to bring together existing information and assessments to demonstrate that health, as a material planning consideration, has been addressed.

Table 1 - Planning application information requirements

	Air Quality assessment	Biodiversity and ecology report	Housing Optional Technical Stand's	Design and Access Statement	Flood risk assessment	Landscaping Strategy	Noise impact assessment	Open space assessment	Planning Statement	Regeneration statement	Retail impact assessment	Sustainability statement	Transport Assessment and Travel Plan
Healthy homes			✓	✓					✓	✓		✓	
Active Travel				✓					✓				✓
Healthy environment	✓	✓	√		✓	√	✓	✓	✓			√	
Vibrant neighbourhoods				✓		√			✓	√	✓		

The Growth and Infrastructure Act 2013 introduced measures to speed up the planning application process. The amount of information submitted with a planning application has been reduced to a 'reasonable' level and design and access statements are now only required for major applications.

When to use the checklist?

The Mayor of London's Social Infrastructure Supplementary Planning Guidance (May 2015) describes three types of health impact assessment (HIA): a 'full' HIA involves comprehensive analysis of all potential health and wellbeing impacts; a 'rapid' HIA is a less resource intensive process, involving a more focused investigation of health impacts; and a 'desktop' assessment which draws on existing knowledge and evidence, often using published checklists. It suggests that the Healthy Urban Planning Checklist could be used as a 'desktop' assessment tool.

The checklist can be used to ensure that health and wellbeing issues are embedded into local plans, masterplans and major planning applications.

The checklist should be customised for local use to reflect local circumstances and priorities and could be used:

- as part of a Local Plan review to ensure that health and wellbeing issues are identified and addressed
- to screen possible health impacts as part of Health Impact Assessment, Integrated
 Impact Assessment or Environmental Impact Assessment processes
- to accompany a planning application, subject to local policy guidance and validation requirements
- by internal and external consultees to comment on and scrutinise major development proposals
- to help develop a neighbourhood plan and neighbourhood 'health' projects.

It is important that the use of the tool is monitored and evaluated. The checklist could be periodically reviewed by local health and wellbeing boards and recommendations could outline where further evidence is needed, using the Joint Strategic Needs Assessment or action supported by wider public health initiatives. The Public Health Outcomes Framework could be used to measure impacts and assess the effectiveness of the checklist. At a local level, the checklist should be updated by local authority planning departments to ensure that the national, regional and local policy and guidance references are up to date.

Neighbourhood planning

Neighbourhood planning was introduced as part of the Localism Act 2011. In London, neighbourhood forums can draw up a neighbourhood development plan. A proportion of Community Infrastructure Levy (CIL) funding can be spent on local community priorities. Therefore, local communities have a greater opportunity to shape local policy and infrastructure priorities and influence development proposals. This checklist could be used to help develop a neighbourhood plan, including identifying possible neighbourhood CIL 'health' projects and as a resource to help community groups comment on a planning application.

The planning application process

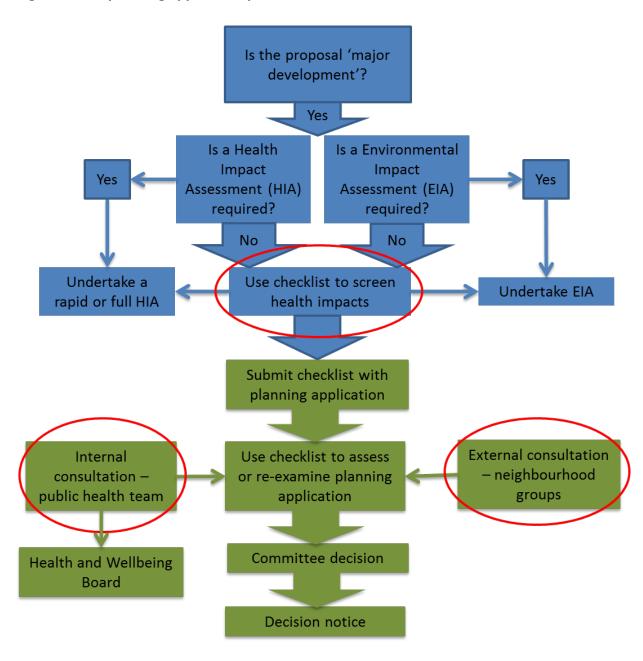
It is intended that the checklist should be applied to major development proposals comprising 10 or more residential units (or a site area of 0.5 hectares or more), or 1,000 square metres or more of non-residential floorspace (or a site area of 1.0 hectares or more). The checklist is most effective when used throughout the lifecycle of a development proposal from pre-application discussions to the determination of a planning application. At the pre-application stage, there is more scope to influence the design, layout and composition of a development proposal.

For large scale development proposals a Health Impact Assessment (HIA) may be required, with a full assessment providing information on health needs and priorities, including

community engagement, and setting out a detailed assessment of health impacts and proposed mitigation and enhancement measures. For large scale development proposals such as strategic planning applications referred to the Mayor of London, it is recommended that other assessment tools, such as the
HUDU Rapid HIA Tool">HIDDU Rapid HIA Tool is used.

Figure 2 below illustrates how the checklist could be used as part of the planning application process. Three key areas where the checklist could be used are highlighted.

Figure 2 - the planning application process



How to use the checklist

The checklist is divided into four themes. Each theme contains a number of questions focused on a planning issue. Under each theme there are a number of related health and wellbeing issues many of which are identified in local joint strategic needs assessments and health and wellbeing strategies, such as those related to:

- Obesity and diseases related to physical inactivity and poor diet
- Excess winter deaths
- Air and noise pollution
- Road safety
- Social isolation

Theme	Planning issue	Health and wellbeing issue
1. Healthy housing	 Housing design Accessible housing Healthy living Housing mix and affordability 	 Lack of living space - overcrowding Unhealthy living environment – daylight, ventilation, noise Excess deaths due to cold / overheating Injuries in the home Mental illness from social isolation and fear of crime
2. Active travel	 Promoting walking and cycling Safety Connectivity Minimising car use 	 Physical inactivity, cardiovascular disease and obesity Road and traffic injuries Mental illness from social isolation Noise and air pollution from traffic
3. Healthy environment	 Construction Air quality Noise Contaminated land Open space Play space Biodiversity Local food growing Flood risk Overheating 	 Disturbance and stress caused by construction activity Poor air quality - lung and heart disease Disturbance from noisy activities and uses Health risks from toxicity of contaminated land Physical inactivity, cardiovascular disease and obesity Mental health benefits from access to nature and green space and water Opportunities for food growing – active lifestyles, healthy diet and tackling food poverty Excess summer deaths due to overheating
4. Vibrant neighbourhoods	 Healthcare services Education Access to social infrastructure Local employment and healthy 	 Access to services and health inequalities Mental illness and poor self-esteem associated with unemployment and poverty Limited access to healthy food linked to obesity and related diseases Poor environment leading to physical

Theme	Planning issue	Health and wellbeing issue
	 workplaces Access to local food shops Public buildings and spaces 	 inactivity Ill health exacerbated through isolation, lack of social contact and fear of crime

It may be the case that not all the issues and questions will be relevant to a specific plan or development proposal and the user should select and prioritise the issues accordingly. Some issues may be directly related to an individual development, others may be relevant at a neighbourhood level where the cumulative impact of development can contribute to a healthy neighbourhood.

Each section summarises the impact on health. Under each theme, key questions are asked linked to policy requirements and standards. The checklist identifies why each issue is important to health and wellbeing. An appendix providing general policy references and sources of evidence is provided. This should be supplemented with local information.

The checklist aims to ensure a development proposal is as 'healthy' as possible, by achieving as many 'Yes' ticks and avoiding 'No's. A 'No' gives a warning that an aspect of a development may need to be reconsidered. Local circumstances may justify why a scheme cannot meet the expected standard.

Where the response to a question is unclear or not known, more information may be required. The checklist can stimulate discussions and negotiations on planning applications, supported by internal and external consultation and supporting information, for example from public health officers.

Note on Code for Sustainable Homes and Lifetime Homes Standards

Following the technical housing standards review, the Government has withdrawn the Code for Sustainable Homes, aside from the management of legacy cases.

Legacy cases are those where residential developments are legally contracted to apply a code policy (e.g. affordable housing funded through the national Affordable Housing Programme 2015 to 2018, or earlier programme), or where planning permission has been granted subject to a condition stipulating discharge of a code level, and developers are not appealing the condition or seeking to have it removed or varied. In these instances, it is possible to continue to conduct code assessments.

Details of the new approach to the setting of technical housing standards in England were announced on 27 March 2015 and a new set of streamlined national technical standards were published. The Code for Sustainable Homes is now no longer Government policy and has been archived.

The Government has also withdrawn the Lifetime Homes concept. However, many local planning policies will continue to require Lifetime Homes standards in new developments. However, as of October 2015, the London Plan will no longer be linked to Lifetime Homes standards. In particular, the requirement in London Plan Policy 3.8 B(c) that 'all new housing is built to The Lifetime Homes standard' is replaced by 'ninety percent of new housing meets Building Regulation requirement M4 (2) "accessible and adaptable dwellings". The Healthy Urban Planning Checklist has been updated to include the modified London Plan requirements.

	Theme 1: Healthy Housing							
Issue	Key questions	Yes /No / Not relevant Comment	Policy requirements and standards	Why is it important				
a. Healthy design	Does the proposal meet all the standards for daylight, sound insulation, private space and accessible and adaptable dwellings?		London Plan Policy 5.2 Minimising carbon dioxide emissions and Housing SPG Standard 35: zero carbon residential buildings from 2016 and non-domestic buildings from 2019. Housing SPG Standard 29 on dual aspect and Standard 32 on daylight and sunlight. Housing SPG Standard 4 on communal open space, supported by London Plan Policy 2.18, Standards 1 and 2 on defining good places, and Standard 3 on public open space. Housing SPG Standards 26 and 27 on minimum provision of private (amenity) open space. London Plan Policy 3.8 Housing choice and Housing SPG Standard 11 on access require 90% of new homes meet Building Regulation M4(2) 'accessible and adaptable dwellings'. Sound insulation and noise - London Plan Policy 7.15 and Housing SPG Standard 30 on noise. Housing SPG Standards 8 and 9 on entrance and approach.	Satisfying these standards can help meet carbon dioxide emissions targets. Good daylight can improve the quality of life and reduce the need for energy to light the home. The provision of an inclusive outdoor space, which is at least partially private, can improve the quality of life. Improved sound insulation can reduce noise disturbance and complaints from neighbours.				

	Theme 1: Healthy Housing						
Issue	Key questions	Yes /No / Not relevant Comment	Policy requirements and standards	Why is it important			
Accessible housing	Does the proposal provide accessible homes for older or disabled people? Does the proposal ensure		London Plan Policy 3.8 and Housing SPG Standard 11 on access require 10 per cent all new housing to be designed to be wheelchair accessible or easily adaptable such that they meet Building Regulation M4(3) 'wheelchair user dwellings'.	Accessible and easily adaptable homes can meet the changing needs of current and future occupants.			
b. Accessib	that every non-ground floor dwelling is accessible by a lift that can accommodate an ambulance trolley?		Housing SPG Standards 15 and 16 relate to the provision of lifts. Good practice standard - the provision of an ISO standard 13 person lift in a configuration which can accommodate a trolley bed (see Department of Health Technical Memorandum 08-02 : Lifts).	One of the main methods of transportation of immobile patients is by trolley bed. Non-ground floor dwellings should be accessible by a lift that can accommodate an ambulance trolley.			
c. Healthy living	Does the proposal provide dwellings with adequate internal space, including sufficient storage space and separate kitchen and living spaces? Does the proposal encourage the use of stairs by ensuring that they are well located, attractive and		London Plan Policy 3.5 (Table 3.3 - minimum space standards for new dwellings) and Housing SPG Standard 24 on dwelling space standards. Housing SPG Standard 25 - dwellings should accommodate the furniture, access and activity space requirements relating to the declared level of occupancy. Also, Housing SPG Standard 28 on privacy and Standard 31 on ceiling heights. Housing SPG Standards 12 to 16 relate to	Sufficient space is needed to allow for the preparation and consumption of food away from the living room to avoid the 'TV dinner' effect. Rather than having lifts at the front and staircases at the back of buildings, it is preferable to have them located at the front to encourage people that can			
	welcoming?		shared internal circulation, cores and lifts.	to use them.			

	Theme 1: Healthy Housing							
Issue	Key questions	Yes /No / Not relevant Comment	Policy requirements and standards	Why is it important				
d. Housing mix and affordability	Does the proposal provide affordable family sized homes?		London Plan Policy 3.8 Housing choice. London Plan Policy 3.11 Affordable housing targets seeks to maximise affordable housing provision and to ensure an average of at least 17,000 more affordable homes per year in London over the term of the London Plan. 60% of the affordable housing provision should be for social and affordable rent and 40% for intermediate rent or sale. The Mayor's Homes for Londoners: Affordable Homes Programme 2016-21 is a £3bn fund to help start building at least 90,000 affordable homes by 2021.	The provision of affordable housing can create mixed and socially inclusive communities. The provision of affordable family sized homes can have a positive impact on the physical and mental health of those living in overcrowded, unsuitable or temporary accommodation. Both affordable and private housing should be designed to a high standard ('tenure blind').				

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		Theme 2: Active	Travel	
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
a. Promoting walking and cycling	Does the proposal promote cycling and walking through measures in a travel plan, including adequate cycle parking and cycle storage?		London Plan Policy 6.3 (C) Travel plans London Plan Policy 6.9 Cycling. London Plan Policy 6.10 Walking. London Plan - Parking Addendum to Chapter 6 on cycle parking: Table 6.3 Cycle parking minimum standards. Housing SPG Standards 20 and 21 on cycle storage.	A travel plan can address the environmental and health impacts of development by promoting sustainable transport, including walking and cycling. Cycle parking and storage in residential dwellings can encourage cycle participation.
b. Safety	Does the proposal include traffic management and calming measures and safe and well lit pedestrian and cycle crossings and routes?		London Plan Policy 6.9 Cycling. London Plan Policy 6.10 Walking.	Traffic management and calming measures and safe crossings can reduce road accidents involving cyclists and pedestrians and increase levels of walking and cycling.
c. Connectivity	Does the proposal connect public realm and internal routes to local and strategic cycle and walking networks and public transport?		London Plan Policy 6.9 Cycling - Map 6.2 Cycle superhighways. London Plan Policy 6.10 Walking - Map 6.3 Walk London Network. Green Infrastructure: The All London Green Grid SPG (March 2012). Transport for London Legible London. Transport for London Bus Service Planning Guidelines.	Developments should prioritise the access needs of cyclists and pedestrians. Routes should be safe, direct and convenient and barriers and gated communities should be avoided. Developments should be accessible by public transport.

	Theme 2: Active Travel							
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important				
d. Minimising car use	Does the proposal seek to minimise car use by reducing car parking provision, supported by the controlled parking zones, car free development and car clubs?		London Plan Policy 6.13 Parking - Table 6.2 Car parking standards (Parking addendum to chapter 6). Housing SPG Standards 17 to 19 on car parking provision.	Space for pedestrians and cyclists should be given priority over commercial and private vehicles. Maximum car parking levels allows for provision to be reduced as far as practicable. Car clubs can be effective in reducing car use and parking demand at new residential developments.				

		Theme 3: Healthy E	nvironment	
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important
a. Construction	Does the proposal minimise construction impacts such as dust, noise, vibration and odours?		London Plan Policy 5.3 Sustainable design and construction. London Plan Policy 5.18 Construction, excavation and demolition waste. The Control of Dust and Emissions During Construction and Demolition SPG (July 2014). Housing SPG Standard 34 on environmental performance.	Construction sites can have a negative impact on an area and can be perceived to be unsafe. Construction activity can cause disturbance and stress, which can have an adverse effect on physical and mental health. Mechanisms should be put in place to control hours of construction, vehicle movements and pollution. Community engagement before and during construction can help alleviate fears and concerns.
b. Air quality	Does the proposal minimise air pollution caused by traffic and energy facilities?		London Plan Policy 7.14 Improving air quality. At least 'air quality neutral' - Housing SPG Standard 33 on air quality. London Plan Policy 5.10 Urban greening. London Plan Policy 5.3 Sustainable design and construction.	The long-term impact of poor air quality has been linked to life-shortening lung and heart conditions, cancer and diabetes.

	Theme 3: Healthy Environment						
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important			
c. Noise	Does the proposal minimise the impact of noise caused by traffic and commercial uses through insulation, site layout and landscaping?		London Plan Policy 7.15 Reducing and managing noise, improving and enhancing the acoustic environment and promoting appropriate soundscapes. Limit the transmission of noise to sound sensitive rooms - Housing SPG Standard 30 on noise.	Reducing noise pollution helps improve the quality of urban life.			
d. Open space	Does the proposal retain or replace existing open space and in areas of deficiency, provide new open or natural space, or improve access to existing spaces? Does the proposal set out how new open space will be managed and maintained?		London Plan Policy 7.1 Lifetime neighbourhoods. London Plan Policy 7.18 Protecting open space and addressing deficiency, Table 7.2 Public open space categorisation. London Plan Policy 7.19 Biodiversity and access to nature. Housing SPG Standards 3 and 4 on communal and public open space.	Access to open space has a positive impact on health and wellbeing. Living close to areas of green space, parks, woodland and other open space can improve physical and mental health regardless of social background. To maintain the quality and usability of open spaces an effective management and maintenance regime should be put in place.			

	Theme 3: Healthy Environment					
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important		
e. Play space	Does the proposal provide a range of play spaces for children and young people?		London Plan Policy 3.6 Children and young people's play and informal recreation facilities. Shaping Neighbourhoods: Play and Informal Recreation SPG (Sept 2012) - quantity Benchmark Standard of a minimum of 10 square metres per child regardless of age (4.24) and accessibility to play space Benchmark Standard (Table 4.4). Housing SPG Standard 5 on play space.	Regular participation in physical activity among children and young people is vital for healthy growth and development. The location of play spaces should be accessible by walking and cycling routes that are suitable for children to use.		
f. Biodiversity	Does the proposal contribute to nature conservation and biodiversity?		London Plan Policy 7.19 Biodiversity and access to nature. Table 7.3 - London regional Biodiversity Action Plan habitat targets for 2020. Housing SPG Standard 40 on ecology.	Access to nature and biodiversity contributes to mental health and wellbeing. New development can improve existing, or create new, habitats or use design solutions (green roofs, living walls) to enhance biodiversity.		
g. Local food growing	Does the proposal provide opportunities for food growing, for example by providing allotments, private and community gardens and green roofs?		London Plan Policy 5.10 Urban greening. London Plan Policy 7.22 Land for food. London Plan Policy 5.11 Green roofs and development site environs.	Providing space for local food growing helps promote more active lifestyles, better diets and social benefits.		

	Theme 3: Healthy Environment				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important	
h. Flood risk	Does the proposal reduce surface water flood risk through sustainable urban drainage techniques, including storing rainwater, use of permeable surfaces and green roofs?		London Plan Policy 5.3 Sustainable design and construction. London Plan Policy 5.11 Green roofs and development site environs. London Plan Policy 5.13 Sustainable drainage. Flooding and drainage - Housing SPG Standards 38 and 39.	Flooding can result in risks to physical and mental health. The stress of being flooded and cleaning up can have a significant impact on mental health and wellbeing. It is likely that increasing development densities and building coverage coupled with more frequent extreme weather events will increase urban flood risk.	
i. Overheating	Does the design of buildings and spaces avoid internal and external overheating, through use of passive cooling techniques and urban greening?		London Plan Policy 5.3 Sustainable design and construction. London Plan Policy 5.9 Overheating and cooling. London Plan Policy 5.10 Urban greening. London Plan Policy 5.11 Green roofs and development site environs. Overheating - Housing SPG Standards 36.	Climate change with higher average summer temperatures is likely to intensify the urban heat island effect and result in discomfort and excess summer deaths amongst vulnerable people. Urban greening - tree planting, green roofs and walls and soft landscaping can help prevent summer overheating.	

	Theme 4: Vibrant Neighbourhoods				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important	
a. Health services	Has the impact on healthcare services been addressed?		London Plan Policy 3.17 Health and social care facilities. NHS London Healthy Urban Development Unit Planning Contributions Tool (the HUDU Model). Social Infrastructure SPG (2015).	Poor access and quality of healthcare services exacerbates ill health, making effective treatment more difficult. The provision of support services and advice on healthy living can prevent ill health.	
b. Education	Has the impact on primary, secondary and post-19 education been addressed?		London Plan Policy 3.18 Education facilities.	Access to a range of primary, secondary and post-19 education improves selfesteem, job opportunities and earning capacity.	
c. Access to social infrastructure	Does the proposal contribute to new social infrastructure provision that is accessible, affordable and timely? Have opportunities for multi-use and the colocation of services been explored?		London Plan Policy 3.16 Protection and enhancement of social infrastructure. London Plan Policy 7.1 Lifetime neighbourhoods. Social Infrastructure SPG (2015).	Good access to local services is a key element of a lifetime neighbourhood and additional services will be required to support new development. Not doing so will place pressure on existing services. Future social infrastructure requirements are set out in Borough infrastructure plans and developments will be expected to contribute towards additional services and facilities.	

	Theme 4: Vibrant Neighbourhoods				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important	
d. Local employment and healthy workplaces	Does the proposal include commercial uses and provide opportunities for local employment and training, including temporary construction and permanent 'end-use' jobs? Does the proposal promote the health and wellbeing of future employees by achieving BREEAM health and wellbeing credits?		London Plan Policy 4.12 Improving opportunities for all and London Plan Policy 8.2 Planning obligations. London Plan Policy 7.1 Lifetime neighbourhoods. Workplace environment - BREEAM health and wellbeing credits.	Unemployment generally leads to poverty, illness and a reduction in personal and social esteem. Employment can aid recovery from physical and mental illnesses. Creating healthier workplaces can reduce ill health and employee sickness absence.	
e. Access to local food shops	Does the proposal provide opportunities for local food shops? Does the proposal avoid an over concentration or clustering of hot food takeaways in the local area?		London Plan Policy 4.7 Retail and town centre development. London Plan Policy 4.8 Supporting a successful and diverse retail sector. London Plan Policy 4.9 Small shops. London Plan Policy 7.1 Lifetime neighbourhoods.	A proliferation of hot food takeaways and other outlets selling fast food can harm the vitality and viability of local centres and undermine attempts to promote the consumption of healthy food, particularly in areas close to schools.	

	Theme 4: Vibrant Neighbourhoods				
Issue	Key questions	Yes / No / Not relevant Comment	Policy requirements and standards	Why is it important	
f. Public realm	Does the design of the public realm maximise opportunities for social interaction and connect the proposal with neighbouring communities? Does the proposal allow people with mobility problems or a disability to access buildings and places?		London Plan Policy 7.1 Lifetime neighbourhoods. London Plan Policy 7.2 An inclusive environment. London Plan Policy 7.5 Public realm. Shaping Neighbourhoods. Accessible London: Achieving and Inclusive Environment SPG (Oct 2014). Housing SPG Standard 10 on active frontages.	The public realm has an important role to play in promoting walking and cycling, activity and social interaction. It also affects people's sense of place, security and belonging. It is a key component of a lifetime neighbourhood. Shelter, landscaping, street lighting and seating can make spaces attractive and inviting. Implementing inclusive design principles effectively creates an accessible environment, in particular for disabled and older people.	

Appendix - References and sources of evidence

General references

Allen, J., Boyce, T., Geddes, I., Goldblatt, P., Grady, M., Marmot, M., McNeish, D. (2010) Fair Society, Healthy Lives, The Marmot Review, Strategic Review of Health Inequalities in England Post-2010

<u>Department of Health (2011) Healthy Lives, Healthy People: A Call to Action on Obesity in</u> England

<u>Department of Health (2012) Healthy lives, healthy people: Improving outcomes and supporting transparency - Public Health Outcomes Framework for England 2013–2016</u>

Department of Health (2012) No health without mental health: implementation framework

<u>Spatial Planning and Health Group</u> (Formed in November 2010 to take forward the work of NICE's Spatial Planning and Health Programme Development Group.)

London Health Observatory (2012) Public Health Outcomes Framework Data Tool

National Heart Forum Healthy Places

The Lancet and University College London (2012) Shaping Cities for Health: Complexity and the Planning of Urban Environments in the 21st Century

<u>The King's Fund / London Healthy Urban Development Unit (2009) The health impacts of spatial planning decisions</u>

Town and Country Planning Association, Reuniting Health with Planning

<u>Town and Country Planning Association (2014), Planning Healthy Weight Environments – a TCPA reuniting health with planning project, A. Ross and M. Chang.</u>

World Health Organization Collaborating Centre for Healthy Urban Environments University of the West of England, Bristol. Working paper: Health inequalities and determinants in the physical urban environment: Evidence briefing (2012)

World Health Organization Regional Office for Europe (2012) Environmental health inequalities in Europe (2012)

Healthy Homes

BRE Trust (2010) The Real Cost of Poor Housing

<u>Department for Communities and Local Government (2008) Lifetime Homes, Lifetime Neighbourhoods: A National Strategy for Housing in an Ageing Society</u>

Department for Communities and Local Government - Housing Optional Technical Standards

<u>Department for Communities and Local Government (March 2015) Housing Standards</u>
<u>Review</u>

<u>Department for Communities and Local Government (2012) Investigation into overheating in homes: Literature review and Analysis of gaps and recommendations</u>

<u>Lifetime Homes Foundation, Lifetime Homes Standards</u>

London Assembly (2011) Crowded houses, Overcrowding in London's social rented housing

NHBC Foundation (2015), Tenure Integration in Housing Developments: A Literature Review

Marmot Review Team (2011) The Health Impacts of Cold Homes and Fuel Poverty

Policy Exchange (January 2013) Create Streets: Not just multi-storey estates

Royal Institute of British Architects (RIBA) (2013) Housing Survey by Ipsos MORI

<u>The City of New York (2010) Active Design Guidelines – Promoting physical activity and health in design</u>

World Health Organization (2011) Environmental burden of disease associated with inadequate housing

Active Travel

British Medical Association (July 2012) Healthy transport = Healthy lives

Chartered Institution of Highways and Transportation (2010) Manual for Streets 2

<u>Department of Transport and Department of Health, January 2011, Transport and Health</u>
<u>Resource: Delivering Healthy Local Transport Plans</u>

Department for Transport (2014) Guidance on Active Mode Appraisal (walking and cycling)

<u>Department for Transport Local Transport Note 1/11: Shared Space</u>

<u>Department for Transport (2012) Investigating the potential health benefits of increasing cycling in the Cycling City and Towns</u>

Mackett, RL & Brown B (2011) Transport, physical activity and health: present knowledge and the way ahead

Mayor of London (2012) Green Infrastructure and Open Environments: The All London Green Grid Supplementary Planning Guidance

Mayor of London (2014) Transport and Health in London: The Main Impacts of London Road Transport on Health

Mindell JS, Watkins SJ, Gohen JM (eds) (2011) Health on the Move 2: Policies for healthpromoting transport

NICE (November 2012) Public Health Guidance 41 Walking and cycling: local measures to promote walking and cycling as forms of travel or recreation (November, 2012)

National Obesity Observatory (2012) Standard evaluation framework for physical activity interventions

Sustainable Development Commission (2011) Fairness in a car dependent society

<u>The City of New York Active (2010) Design Guidelines – Promoting physical activity and health in design</u>

<u>Transport for London (2013) Transport planning for healthier lifestyles: A best practice guide</u>

<u>Transport for London (2012) Guidelines for Planning Bus Services</u>

World Health Organization (2011) Health Economic Assessment Tool for walking and cycling

Healthy Environment

Clean Air in London, 10 Steps for Clean Air in London

Committee on Climate Change (2017), UK Climate Change Risk Assessment

<u>Department for Environment Food and Rural Affairs (2011) Natural Environment White</u>
<u>Paper: Natural Choice securing the value of nature</u>

Environmental Protection UK (2010) Development Control: Planning for Air Quality

<u>European Centre for Environment & Human Health, University of Exeter (2013) Would You</u>
<u>Be Happier Living in a Greener Urban Area? A Fixed-Effects Analysis of Panel Data</u>

European Environment Agency (2010) Good practice guide on noise exposure and potential health effects, EEA Technical report No 11/2010

<u>Faculty of Public Health (2010) Great Outdoors: How Our Natural Health Service Uses Green</u> Space To Improve Wellbeing

Foresight Report (2007) Tackling Obesities: future choices

Health Protection Agency (2010) Environmental Noise and Health in the UK

King's College London, Environmental Research Group

Lancet (2009) Health benefits of tackling climate change: evidence

<u>London Air Quality Network - King's College London, Air Pollution Guide</u>

NICE (2008) Guidance on the promotion and creation of physical environments that support increased levels of physical activity (PH8)

Noise Abatement Society (2012) Noise manifesto

Sport England Active Design

Sustainable Development Commission (2008) Health, Place and Nature

<u>Sustain (2011) Good planning for good food - using planning policy for local and sustainable food</u>

<u>Trust for London, Policy Exchange and King's College London (2016), Up in the Air – How to Solve London's Air Quality Crisis</u>

UK National Ecosystem Assessment (2011)

Vibrant Neighbourhoods

Building Research Establishment Environmental Assessment Method (BREEAM)

<u>Department for Work and Pensions Cross-Government initiative 'Health, Work and Wellbeing'</u>

Department for Communities and Local Government (2011) Lifetime Neighbourhoods

<u>Department for Communities and Local Government (June 2012) Parades to be Proud of:</u>
<u>Strategies to support local shops</u>

<u>Environmental Audit Committee inquiry into Transport and the Accessibility of Public Services</u>

Institute of Public Health in Ireland (2008) Health Impacts of Education: a review

Housing LIN (June 2012) Breaking new ground: the quest for dementia friendly communities

Housing LIN Age-friendly communities and Lifetime Neighbourhoods

Leeds Metropolitan University (2010) Mental Health and Employment review

Mayor of London (2012) Takeaways Toolkit

Mayor of London (2015) Social Infrastructure Supplementary Planning Guidance

NHS London Healthy Urban Development Unit Planning Contributions Tool (the HUDU Model)

NHS London Healthy Urban Development Unit, London Thames Gateway Social Infrastructure Framework

<u>Planning and Housing Committee of the London Assembly (July 2010) Cornered shops:</u> <u>London's small shops and the planning system</u>

Secured by Design Interactive Guide

Sport England, Use Our School

Young Foundation (2010) Cohesive Communities

Glossary

Amenity (or residential amenity) – is physical external space which is part of the private home and enjoyed by occupiers of the dwelling. The level of enjoyment is also dependent on a number of factors, including daylight/sunlight, air quality, noise and light pollution and visual quality.

Biodiversity – refers to a diverse variety of life (species) in a habitat or ecosystem.

BREEAM - Building Research Establishment Environmental Assessment Methodology is a method of assessing, rating and certifying the sustainability of buildings developed by the Building Research Establishment.

Building Regulations – are standards that apply to most building work with approval required from Building Control Bodies - either the Local Authority or the private sector as an Approved Inspector.

Community Infrastructure Levy (CIL) – is a charge levied on development under the Planning Act 2008 by charging authorities (in London, the boroughs and the Mayor of London) to contribute towards a range of infrastructure, including physical, green and social infrastructure.

Car club - is a service that allows its members to hire a car for short-term use enabling members to have the option of using a car from time to time without having to own one.

Environmental protection - Unitary and district local authorities are responsible for inspections and enforcement duties under the Environmental Protection Act 1990 regarding pollution prevention and control, noise disturbance and contaminated land.

Gated developments - developments that are totally secured from non-residents through the use of controlled access gates.

Green roof or wall - a roof or wall that is intentionally covered with vegetation which can help reduce the causes and effects of climate change locally whilst promoting enhanced biodiversity.

Licensing - Unitary or district local authorities are responsible for a range of licensing regimes, including alcohol, entertainment and food premises under the Licensing Act 2003, gambling premises under the Gambling Act 2005 and houses in multiple occupation under the Housing Act 2004.

Lifetime Neighbourhoods – Lifetime neighbourhoods are places where people are able to live and work in safe, healthy, supportive and inclusive environments with which they are proud to identify. There are numerous design standards and checklists that cover elements of the lifetime neighbourhoods process, including WHO Age Friendly Cities checklist, BREEAM for Communities, and Building for Life.

Pedestrian - refers to a person walking on foot, but also includes those using wheelchairs and mobility scooters.

Planning Obligations (also known as 'Developer Contributions' or 'Section 106 Agreements') are private agreements made between local authorities and developers under section 106 of the Town and Country Planning Act 1990 (as amended). They can be attached to a planning permission to make development acceptable which would otherwise be unacceptable in planning terms. The land itself, rather than the person or organisation that develops the land, is bound by the agreement. Since the introduction of the Community Infrastructure Levy, agreements are focused on site-specific mitigation.

Public realm - the space between and within buildings that is publicly accessible, including streets, squares, forecourts, parks and open spaces.

Social exclusion/isolation - is a term to describe the effect whereby individuals or entire communities of people are excluded or disadvantaged from access to housing, employment, healthcare and civic engagement.

Sustainable Urban Drainage System (SUDS) - used to describe the various approaches that can be used to manage surface water drainage in a way that mimics the natural environment.

Tenure blind residential development - used to promote integration of different tenures in a single development by designing houses for sale and houses built for affordable or social rent so that they are similar in design and appearance so as to mask the tenures. The conviction is that tenure blind design helps social integration without affecting property prices.

Traffic calming - self-enforcing measures designed to encourage driving at speeds appropriate to local conditions, improve the environment and reduce accidents.

Traffic regulations and highway powers - Unitary and county authorities are responsible for traffic regulations regarding parking, speed limits and crossings under the Road Traffic Regulation Act 1984 and powers under the Highways Act 1980 to maintain and ensure safe public use of local highways. Developer contributions towards highway improvements can be secured under section 278 of the Highways Act.

Travel plan - a plan to manage travel to and from a development site or occupied building, to reduce transport impacts and deliver sustainable transport on an on-going basis.

NHS London Healthy Urban Development Unit

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