



Stag Brewery, Mortlake

Health Impact Assessment

For Reselton Properties

February 2018

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1. Introduction

- 1.1 This Health Impact Assessment (HIA) has been prepared by Regeneris Consulting on behalf of Reselton Properties Limited ('the Applicant') in support of three linked planning applications for the comprehensive redevelopment of the former Stag Brewery Site in Mortlake ('the Site') within the London Borough of Richmond Upon Thames ('LBRuT').
- 1.2 The former Stag Brewery Site is bounded by Lower Richmond Road to the south, the river Thames and the Thames Bank to the north, Williams Lane to the east and Bulls Alley (off Mortlake High Street) to the west. The Site is bisected by Ship Lane. The Site currently comprises a mixture of large scale industrial brewing structures, large areas of hardstanding and playing fields.
- 1.3 The redevelopment will provide homes (including affordable homes), accommodation for an older population, complementary commercial uses, community facilities, a new secondary school alongside new open and green spaces throughout. Associated highway improvements are also proposed, which include works at Chalkers Corner junction.
- 1.4 The three planning applications are as follows:
 - Application A – hybrid planning application for comprehensive mixed-use redevelopment of the former Stag Brewery site consisting of:
 - i. Land to the east of Ship Lane applied for in detail (referred to as 'Development Area 1' throughout); and
 - ii. Land to the west of Ship Lane (excluding the school) applied for in outline detail (referred to as 'Development Area 2' throughout).
 - Application B – detailed planning application for the school (on land to the west of Ship Lane).
 - Application C – detailed planning application for highways and landscape works at Chalkers Corner.
- 1.5 Full details and scope of all three planning applications are described in the submitted Planning Statement, prepared by Gerald Eve LLP.
- 1.6 The remainder of this section includes a brief overview of the policy background, the assessment methodology and a review of the local context. Section 2 of this report comprises the assessment.



Policy Background

- 1.7 Policy at both the national, regional and local level indicates that an HIA is required to be submitted alongside the Application.
- 1.8 The 'National Planning Policy Framework' advocates for development to create 'strong, vibrant and healthy communities' which provide high quality environments with adequate housing supply and accessible local services that reflect community need (para 7).
- 1.9 To this end, NPPG states that Local planning authorities should ensure that health and wellbeing and healthcare infrastructure implications of any relevant proposed local development have been considered.
- 1.10 At the regional level, **London Plan 3.2: Improving health and addressing health inequalities**, indicates the Mayor will take account of the potential impact of development proposals on health and health inequalities within London and that '*the impacts of major development proposals on the health and wellbeing of communities should be considered, for example through the use of Health Impact Assessments (HIA)*'.
- 1.11 At the local level, LB Richmond upon Thames (LB RuT) **Local Plan Policy LP 30 Health and Wellbeing** states that a Health Impact Assessment (HIA) must be submitted with all major development proposals. According to the Plan, an HIA should assess the health impacts of a development, identifying mitigation measures for any potential negative impacts as well as measures for enhancing any potential positive impacts.

Assessment Methodology

- 1.12 The Council's 'Guidance on Health Impact Assessments, Planning, June 2017' suggests the level of detail required will be dependent on the scale of the development and/or type of development. It also indicates that the HIA should identify both potential harms to be mitigated as well as positive aspects of the development. The guidance refers to the London Healthy Urban Development Unit (HUDU) and the Rapid Health Impact Assessment Tool which has been designed to assess the likely health impacts of development plans and proposals.
- 1.13 The online National Planning Practice Guidance also refers to health impact assessment (HIA) as a useful tool to assess and address the impacts of development proposals (paragraph ref 53-004-20140306). The process looks at the positive and negative impacts of a development as well as assessing the indirect implications for the wider community.



- 1.14 Taking into account both local and national planning guidance, this assessment uses the HUDU’s Rapid HIA tool to assess the health impacts of the Proposed Development.
- 1.15 The HIA tool includes 11 different categories developed by HUDU which influence the health and well-being of an area. It does not identify all issues related to health and wellbeing, but focuses on the built environment and issues directly or indirectly influenced by planning decisions. The 11 categories are:
- Housing quality and design
 - Access to healthcare services and other social infrastructure
 - Access to open space and nature
 - 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
 - Climate change.
- 1.16 For each category, the rapid HIA tool has been completed drawing on documents such as the Environmental Statement, Landscape Design and Access Statement, Detailed Design and Access Statement, Transport Statement, Energy Strategy and Sustainability Statements, Open Space and Playing Pitches Assessment and community engagement responses. These documents provide the detailed information in terms of the method of assessing impacts for each of the specialist areas. Where appropriate we reference these documents.

Local Context

- 1.17 The Site is situated in within the Mortlake and Barnes Common ward (MBC ward), LBRuT. The Socio-Economics Chapter of the ES provides data and analysis on the profile of the local population within the MBC ward as well as the borough and London. This can be summarised as follows:
- According to the 2011 census, there were around 11,000 people living in the MBC ward having increased by around 10% since 2001. This was above the rate of growth



in population experience by LBRuT as a whole (8.5%) but below the London average (14%) for the same period.

- The profile of the population in MBC ward is similar to that of LBRuT as well as London. Around 68% of the population in the ward are of working age, which is slightly higher than that of LBRuT (66.7%) and slightly lower than London (69.1%).
- The most recently produced population projections (2014-based Sub-National Population Projections (SNPP)) are not yet available below local authority level, but indicate that for the LBRuT, the population is expected to increase by around +17% between 2016 and 2032, or 34,000 in absolute terms. The 65+ age group is expected to see the greatest percentage change with an increase of +47% compared to +13% for the working age population.
- According to data from the Annual Population Survey (APS) in 2015 economic activity rates for LBRuT stood at 82.8% compared to 77.7% for London. The unemployment rate measured by the APS data was 3.9%, lower than the London average of 6.1%.
- Skills levels in LBRuT are well above the London average with almost 70% of the working age population qualified to Level 4+ compared to around 50% for London. Furthermore, just over 72% of the population are employed in managerial and professional occupations compared to just under 53% for London.
- Up to date labour market information is not available for MBC ward as the APS does not provide data at a sub-District level. The last available data is from the Census 2011 which suggests the MBC ward performs slightly above the LBRuT average with higher skills levels and economic activity levels.

1.18 The Joint Strategic Needs Assessment (JSNA) for LBRuT describes the current and future health and wellbeing needs of the local population to inform services. The latest available JSNA (2016/17) suggests that LBRuT is in a relatively strong position compared to London:

- Life expectancy at birth is 81.9 (1.9 years higher than London) in LBRuT for men and 85.9 (1.87 years higher than London) for women;
- LBRuT is the safest borough in London for violent crime and 4th out of 32 boroughs for crime overall
- LBRuT has above average levels of green space per head of population and 2nd out of 33 boroughs for bike journeys per day
- Highest rate of volunteering in London



- Above average levels of education attainment and skills

1.19 Despite this positive relative performance, the JSNA identifies areas where improvements are required, these include:

- **Maximising prevention opportunities:** estimated numbers of people in LBRuT with unhealthy behaviours are substantial
- **Reducing health inequalities:** issues include lower levels of life expectancy for men, high levels of child poverty, variations in educational attainment with ethnicity and those on free school meals, high health costs of the homeless and the high number of unpaid carers in the community.
- **Minimising harms and threats to health:** issues include maternal health, vaccination coverage, family context, sexual health, well-being and mental health, cancer screening levels, air quality and noise pollution.
- **Planning for demographic change and promoting independence:** issues include the ageing population, prevalence of long term health conditions, growth in young people and associated demand for school places and preventable emergency hospital admissions.

1.20 In addition to the above issues, consultation with the Richmond NHS Clinical Commissioning Group and reference to the CCG Strategy and LBRuT Infrastructure Delivery Plan (IDP) has highlighted that a priority within the Borough is to expand care in the community.

1.21 The CCG are working towards increasing the number of community based health services, rather than hospitals, closer to where people live. LBRuT CCG are working with Hounslow & Richmond Community Health NHS Trust to establish multi-disciplinary hub teams which will work in the community to address future health care demands.



2. Assessment

Table 2.1: Housing Quality and Design

Assessment criteria	Relevant?	Details/ evidence	Potential health impact	Recommended mitigation or enhancement measures
Does the proposal seek to meet all 16 design criteria of the Lifetime Homes Standard or meet Building Regulation requirement M4 (2)?	Yes	The Detailed Design and Access Statement (D&A Statement) prepared by Squires and Partners which addresses Development Area 1 confirms that all apartments within Development Area 1 have been designed to comply with the Lifetime Homes Standards.	Neutral	Reserved matters application to confirm the proposed standards for Development Area 2.
Does the proposal address the housing needs of older people, ie assisted living, lifetime homes and wheelchair accessible homes?	Yes	As stated above, the D&A Statement confirms that apartments in Development Area 1 will comply with the Lifetime Home Standards. The Statement also indicates that 10% of the apartments are capable of being adapted for wheelchair accessibility. the proposals will meet the requirements of the Building Regulations and Code of Practice in relation to the needs of disabled people. The D&A Statement confirms that the lifetime accommodation needs of an ageing population, young families, children, minorities and the disabled have been addressed through the design of the Proposed Development's scale and community provisions, and in particular its access and connectivity. Development Area 2 includes provision of accommodation for the older population including a nursing home with up to 80 en-suite rooms and up to 150 assisted living units. This provision will help to meet an identified need within the Borough.	Positive	Reserved matters application to confirm the proposed standards for Development Area 2 Use Class C3 accommodation.



Does the proposal include homes that can be adapted to support independent living for older and disabled people?	Yes	The principle of providing flexible accommodation which meets the lifetime accommodation needs of older and disabled people have informed the evolution of the designs for the site to date, and will continue to do so. As already noted, the D&A Statement confirms that 10% of apartments in Development Area 1 will be adaptable for wheelchair accessibility.	Neutral	Reserved matters application to confirm the proposed standards for Development Area 2 Use Class C3 accommodation.
Does the proposal include a range of housing types and sizes, including affordable housing responding to local housing needs?	Yes	The Development includes provision of up to 667 dwellings ranging from 1 bedroom to 4 bedroom flats and 3 and 4 bedroom houses. Over 80% of the dwellings will have two or more bedrooms responding to Local Policy requirement for family sized housing. A proportion of the units will also be affordable ranging in size from 1 to 4 bedrooms.	Positive	Reserved matters application to confirm the unit mix as well as affordable housing provision within Development Area 2.
Does the proposal contain homes that are highly energy efficient (eg a high SAP rating)		The Sustainability Statement confirms the Development Area 1 is targeting a BREEAM 'Excellent' rating for residential refurbishment at the Maltings. Overall, the Proposed Development is anticipated to achieve a 20.0% reduction in regulated CO2 emissions beyond the requirements of the Building Regulations Part L (2013) 'baseline'	Neutral	No further mitigation measures required

Table 2.2: Access to Healthcare Services and Other Social Infrastructure

Assessment criteria	Relevant?	Details/evidence	Potential health impact	Recommended mitigation or enhancement measures
Does the proposal retain or re-provide existing social infrastructure?	Yes	Existing social infrastructure on the Site comprises solely of Watney's Sports ground playing fields which has been used as private access only and not open to the public. This will be lost as part of the Development. However, the playing fields will be re-provided via the proposed Secondary School on Site which	Positive	No additional mitigation measures are required



		includes 10,305 m2 of play space as a semi-enclosed informal play space at roof level, an indoor sports hall and activity studio, an external Multi Use Games Area (MUGA) to the west of the school building and a full sized artificial all weather playing pitch with spectator facilities to the south of the school building. A Community Use Agreement will enable local groups, teams, clubs, organisations and bodies the opportunity to use the external play pitch, indoor sports hall and MUGA of the school out of school hours.		
Does the proposal assess the impact on healthcare services?	Yes	The Socio-Economics Chapter of the Environmental Statement (ES) assesses the potential impact on GP primary healthcare services. It finds that the Proposed Development will increase pressure on local health services, however, there is some existing capacity in GP surgeries within 1 mile of the Development. In addition, the separate Culture and Community Assessment prepared by Regeneris assesses the capacity and impact on intermediate health care services and finds that pressure will also be increased on these services.	Negative	Community Infrastructure Fund generated by the Development may be required to offset pressure on existing providers.
Does the proposal include the provision, or replacement of a healthcare facility and does the facility meet NHS requirements?	No	N/A	N/A	N/A
Does the proposal assess the capacity, location and accessibility of other social infrastructure, eg schools, social care and community facilities?	Yes	The Socio Economics Chapter of the ES assesses the existing capacity and impact of the proposed Development on Early years, Primary and Secondary education providers. The Chapter finds the Development will yield additional early years, primary years and secondary years aged children of varying scales depending on which Development Scenario occurs (1a,1b, 2a,2b). The	Neutral/ Negative	Negotiations via S106 agreement may be required to improve the capacity of



		<p>provision of a 6FE secondary school on site will mitigate the demand arising for secondary school places across all Development scenarios. Whereas capacity for additional Primary and Early years places may be insufficient in the worst-case scenarios and additional mitigation measures may be required. The proposed Development also proposes a range of other social infrastructure such as open space, leisure (gym, cinema and retention of Public Houses onsite) and heritage (through preservation of existing listed building and assets.)</p> <p>The Socio Economics Chapter of the ES together with a separate Culture and Community Assessment prepared by Regeneris assesses the existing capacity and impact of the proposed Development on community facilities. Together they find that existing capacity is sufficient, and that onsite provision will help to offset any adverse effects generated by the scheme.</p>		local early years and primary school providers.
Does the proposal explore opportunities for shared community use and colocation of services?	Yes	A Community Use Agreement has been submitted with the application and will enable local groups, teams, clubs, organisations and bodies the opportunity to use the external play pitch, indoor sports hall and MUGA of the school out of school hours	Positive	No additional mitigation measures required

Table 2.3: Access to Open Space and Nature

Assessment criteria	Relevant?	Details/evidence	Potential health impact	Recommended mitigation or enhancement measures
Does the proposal retain and enhance existing open and natural spaces?	Yes	As described in the Socio-Economics chapter of the ES, the Site currently has no publicly accessible open space provision. The Development would result in the loss of 2.06 ha of private open space (Watney's Sports Ground playing fields) but would provide a total of 3.89 ha of publicly accessible open space,	Positive	No additional mitigation measures required



		<p>including 3.06ha of OOLTI qualifying space. Overall, the amenity space throughout the Site (for Applications A and B) amounts to 4.75ha i.e. 51% of the Site area.</p> <p>The Development also includes the upgrade of the existing towpath and the provision of a new flood wall, helping to enliven and activate the riverside space.</p>		
<p>In areas of deficiency, does the proposal provide new open or natural space, or improve access to existing spaces?</p>	<p>Yes</p>	<p>The Socio Economics Chapter of the ES found despite there being no publicly accessible open space on the Site the surrounding area is well served by open space of all forms. The Site is not within an area 'poorly provided with public open space' as identified on LBRuT's Proposals Map.</p> <p>3.89ha of publicly accessible open space would be provided throughout the Development. A new 'green link' would dissect the Stag Brewery component of the Site east of Ship Lane and provide a large public open space which would link Mortlake Green to the riverside.</p> <p>Large areas of public realm would be provided between buildings to the west of Ship Lane. A new public community park would be provided to the south of new school and north of the Lower Richmond Road within the Stag Brewery component of the Site west of Ship Lane.</p> <p>The Development will also include a series of paved access and circulation paths for pedestrians and cyclists, seating and play facilities distributed throughout the site, open grassed areas and planting and shade and feature trees. Pockets of open space within the streetscape layout, a community park and various public squares and plazas are interspersed within the masterplan, accentuating activity zones and opportunities for gathering,</p>	<p>Positive</p>	<p>No additional mitigation measures required</p>



		outdoor recreation and public activities focussed on major community use areas and retained heritage buildings.		
Does the proposal provide a range of play spaces for children and young people?	Yes	<p>The Development includes provision of up to 4,084m2 GEA of children’s play space with a further 10,305m2 GEA of play space provided as part of the 6FE Secondary School bringing total on-Site provision of up to 14,353m2. The Socio-Economics chapter of the ES confirms this more than sufficient to accommodate additional demand arising from the Development</p> <p>Play facilities for different age groups are positioned within residential courtyards, parks, plazas and open space areas throughout the Development, to achieve the required areas of play and the distribution related to residential units, as follows:</p> <ul style="list-style-type: none"> • Doorstep Play (0-4yrs) within 100 m of residential units; • Local Play space (5-11yrs) 400 m of residential units; • Neighbourhood Space (12+yrs) 800 m of residential units; and • Play on the way (all ages). <p>Play elements and facilities are provided in a range of forms within the public and private realms of the Development, including designated and fenced playgrounds, unfenced but contained play spaces with a range of play elements and carer seating, topographic variation and play opportunities in the landscape (within planting areas) and ‘play on the way’ elements within circulation spaces and public realm areas. This provision and distribution of play facilities within the Development has been</p>	Positive	No additional mitigation measures required



		developed in line with the GLA (Play and Informal Recreation SPG 2012) and the LBRuT (Planning Obligations SPD 2014).		
Does the proposal provide links between open and natural spaces and the public realm?	Yes	<p>In line with the aspirations of the Stag Brewery Planning Brief, a new 'green link' will dissect the eastern side of the site and provide a large open space which will link Mortlake Green to the riverside.</p> <p>The green link will culminate at the Maltings Plaza, a new large public square which has been designed to connect to the surrounding buildings, the green link and the riverside</p> <p>It is also proposed to provide a new riverside walk which would reach from Maltings Plaza to Bulls Alley. These works, along with the proposed works to upgrade the existing towpath and the provision of a new flood wall, will help to enliven and activate the riverside space.</p> <p>Through provision of a network of green open spaces and street tree planting across the site, the masterplan contributes to the green infrastructure of the local area and creates new linkages and extensions of tree planting and open space facilities within the area.</p> <p>A fundamental element of the masterplan is to provide additional links into and through the site to access the river and tow path.</p> <p>The new layout and built form integrates a number of 'street' links through the site from Lower Richmond Road and Mortlake High Street and public access is also provided through the building plots and residential courtyards between the buildings.</p>	Positive	No additional mitigation measures required
Are the open and natural spaces welcoming and safe and accessible for all?	Yes	The Landscape D&A Statement (Gillespies) confirms that pedestrian access within the site has been designed to meet the needs of disabled people, creating a barrier free environment. It	Positive	No mitigation measures required



		is also proposed that all pedestrian routes will comply with relevant standards including layout, lighting and signage.		
Does the proposal set out how new open space will be managed and maintained?	Yes	A Framework Estate Management Plan submitted with the Application sets out the suggested approach to site management, including the management and maintenance of open space. A final plan will be required as part of a Planning Condition or Section 106 Agreement.	Neutral	Detailed Estate Management Plan to be agreed and finalised as part of Planning Condition or Section 106 Agreements.

Table 2.4: Air Quality and Noise

Assessment criteria	Relevant?	Details/evidence	Potential health impact	Recommended mitigation or enhancement measures
Does the proposal minimise construction impacts such as dust, noise, vibration and odours?	Yes	<p>It is intended that contractors for the School (Application B) and the Masterplan (Application A) and Chalkers Corner (Application C) will comply with The Control of Dust and Emissions during Construction and Demolition SPG, and will also be required to identify potential sources of dust and other air pollution and ensure appropriate dust control measures are implemented.</p> <p>It is also intended that the main contractor will register under the Considerate Constructors Scheme and achieve a best practice score, in order to achieve the associated BREEAM credits.</p> <p>The Detailed D&A Statement confirms a number of measures will be taken during the construction period to mitigate noise, these include:</p> <ul style="list-style-type: none"> • Use of hoarding during construction period • Use of modern, quiet and well-maintained machinery • Exhaust silencers to be fitted to construction vehicles 	Negative/Neutral	Implementation of mitigation measures identified in Chapter 9 and 10 of the ES



- Works would be limited to the specified hours
- Liaison with the occupants of adjacent properties most likely to be affected by noise or vibration
- Positioning plant as far away from residential property as physically possible
- Appropriate plant noise emission limits have been set for building services and plant

Does the proposal minimise air pollution caused by traffic and energy facilities?	Yes	<p>The Sustainability Statement confirms the Proposed Development will be serviced through the provision of CHP engines with appropriate NOX abatement technologies located across three dedicated energy centres (2 for the Masterplan and 1 for the School), supported by additional gas boilers.</p> <p>The boilers will be selected with low NOx emissions to reduce the impact on local air quality.</p> <p>Chapter 10 of the ES confirms that Computer modelling has been undertaken to assess the impact of the Development on local air quality (from transport emissions and emissions from the proposed energy centre). An interim assessment was completed and the masterplan designed to ensure air quality conditions are suitable for future users. The results show with the Development in place, the effects to existing sensitive receptors would be insignificant. Specifically at Chalkers Corner:</p> <ul style="list-style-type: none"> • the realignment would improve air quality concentrations at properties at Lower Richmond Road but would worsen some properties at Chertsey Court. 	Neutral	Implementation of mitigation measures identified in Chapter 10 of the ES
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- Landscaping including a wall and new mature planting will improve the predicted air quality concentrations in Chertsey Court.
- a modelling scenario without the highways works but with the Stag Brewery element of the Development shows the realignment acts as mitigation from the impact of the Stag Brewery element of the Development.

Overall, the Development introduces measures that would benefit local air quality e.g. electric vehicle charging points; cycle routes and pedestrian ways ; new car club spaces; etc
 An Air Quality Assessment with further details of receptors, significance of effects and appropriate mitigation measures has been carried out in Chapter 10 of the ES.

Does the proposal minimise noise pollution caused by traffic and commercial uses?	Yes	<p>Noise attenuation measures will be incorporated on-site where required, to ensure that any noise generated by equipment or services will not generate a source of noise pollution or negatively impact the surrounding area. The Detailed D&A Statement confirms these include:</p> <ul style="list-style-type: none"> • Procurement of 'quiet' non-tonal plant • Locate plant and air vents away from sensitive receptors • Acoustic enclosures • In-duct attenuators • Acoustic louvres • Isolation of plant from building structures 	Negative	Implementation of mitigation measures identified in Chapter 9 of the ES
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- Managing deliveries and servicing requirements of retail, office and leisure tenants and managing hours of operation of the for any servicing areas and loading bays

The Site is located in an area with a high level of background noise. High efficiency mechanical ventilation will be available to provide ventilation to the spaces in addition to the option to use natural ventilation. This will aid noise attenuation as occupants will not be reliant on opening windows to maintain good indoor air quality and control internal temperatures.

A Noise Assessment with further details of receptors, significance of effects and appropriate mitigation measures has been carried out in Chapter 9 of the ES.

Table 2.5: Accessibility and Active Travel

Assessment criteria	Relevant?	Details/evidence	Potential health impact	Recommended mitigation or enhancement measures
Does the proposal prioritise and encourage walking (such as through shared spaces?)	Yes	The Transport Assessment (PBA) confirms the access strategy gives priority to both pedestrian and cycle movement. The proposals include the provision of a new 20 mph zone along the A3003 frontage and on Sheen Lane, to the north of the railway crossing together with new pedestrian crossing facilities over Mortlake High Street and Lower Richmond Road and enhanced provision at the Chalkers Corner junction to access the TfL Quiet Way scheme These measures are in accordance with the Planning Brief. Within the Site itself, priority for pedestrian and cycling movement is	Positive	Implementation, on-going monitoring and review of the Framework Travel Plan (PBA)



		achieved by limiting vehicular access and movement at ground level and by carefully managing the movement of service vehicles.		
Does the proposal prioritise and encourage cycling (for example by providing secure cycle parking, showers and cycle lanes)?	Yes	<p>As noted above, the Development prioritises both cycling and pedestrian movement both in accessing the Site and within the Site itself.</p> <p>The Transport Assessment confirms provision of high quality cycle parking has been accorded a high priority. The volume of cycle parking will at least meet the minimum standards required by the GLA and design will be in accordance with the principles set out in the London Cycling Design Standards.</p> <p>For the Detailed Application, cycle parking for residents, and long term parking for the non-residential uses will be provided within secure locations within the basement. This will include a cycle hub providing showers and changing facilities. Cycle access to the basement will be either via one of the two access ramps or via a bespoke cycle lift.</p> <p>For the Outline application the majority of parking will again be provided within the basement car parks but with short stay provision and provision for non-standard bikes at the ground level.</p> <p>Cycle parking for the school will be provided in accordance with the requirements for the number of pupils and staff. Further space has also been reserved should there be future demand for a cycle hire scheme within the site.</p>	Positive	Implementation, on-going monitoring and review of the Framework Travel Plan (PBA)
Does the proposal connect public realm and internal routes to local and strategic cycle and walking networks?	Yes	Access routes will be created throughout the Site, and will link the eastern part of the site to the western part of the site (and beyond), Mortlake Green and from Mortlake.	Positive	Implementation, on-going monitoring and review of the Framework Travel Plan (PBA)



		<p>Key features include the creation of a wide access route between Lower Richmond Road and the riverside which is then linked to Mortlake station through a relocated pedestrian crossing and new pedestrian route through Mortlake Green. The development would also provide a new “high street” to the east of Ship lane running parallel to Mortlake High Street which also act as part of a new east to west cycle route that will link Clifford Avenue in the west with Mortlake High Street at the eastern end of the Site and will provide direct access to the new secondary school.</p> <p>The Transport Strategy, prepared by PBA the Landscape D&A Statement, prepared by Gillespies demonstrate how the on-site proposals link into the wider networks serving the area.</p>		
Does the proposal include traffic management and calming measures to help reduce and minimise road injuries?	Yes	<p>The on-site access strategy is complemented by proposals to introduce a 20 mph zone along the Lower Richmond Road – Mortlake High Street frontage as well as onto the northern end of Sheen Lane (to be secured via S278).</p> <p>The Chalkers Corner Proposals aim to improve the capacity of the main highway access into Mortlake in order to help address concerns regarding traffic congestion at this location. The proposals also improve pedestrian and cycle access at this key location including provision of a wider pedestrian island within the lower Richmond arm of the junction.</p> <p>As part of the scheme TfL have requested the provision of a bus stop clearway on the westbound Lower Richmond Road approach to the junction to replace the existing simple flag stop. This will allow buses to pull into the kerb which currently they are not able to do and will provide a safer bus stop environment.</p> <p>Within the Site itself the access strategy gives priority to pedestrian and cycle movement. Priority for pedestrian / cycle</p>	Neutral	Implementation, on-going monitoring and review of the Framework Travel Plan (PBA)



		movement is achieved by limiting vehicular access and movement at ground level and by carefully managing the movement of service vehicles		
Is the proposal well connected to public transport, local services and facilities?	Yes	The Transport Assessment notes the Site currently has an overall PTAL rating of 1, however, it has been agreed with TfL that in reality the rating should be 2. The Transport Strategy demonstrates the wide variety of locations that can be easily accessed from the Site and the interchange facilities available which provide easy access to the wider strategic network serving London and the wider South East Region. The rail services from Mortlake provide for easy access to a very extensive area through interchange at Clapham Junction, Richmond, Victoria or Waterloo whilst the various bus services that serve the area provide links to a very extensive area of London and again provide access to a number of important strategic interchanges, including Hammersmith.	Neutral	Implementation, on-going monitoring and review of the Framework Travel Plan (PBA)
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	The Transport Strategy and Framework Travel Plan (PBA) considers that the amount of car parking should reflect an appropriate balance between providing adequate parking in this location and encouraging more sustainable modes of travel (cycling and public transport) This approach has been supported by TfL and in discussions with LBRuT officers and at Members briefings. Overall 696 spaces are proposed, which has been agreed as appropriate by TFL. As a minimum, the requirements of the London Plan will be met in terms of the provision of electric charging points. Alternative car club providers have been approached and they have confirmed that they are interested in providing a car club service at this development. The car club is	Neutral	Implementation, on-going monitoring and review of the Framework Travel Plan (PBA)



		proposed to be located on Ship Lane so as to be in a central location within the site to serve both the residential and non-residential uses		
Does the proposal allow people with mobility problems or a disability to access buildings and places?	Yes	<p>The D&A Statement confirms design will be developed to ensure that appropriate standards for accessibility are met to fulfil reasonable expectations for inclusive design and to ensure that the aims of the Disability Discrimination Act 1995 are met. According to the Detailed D&A Statement, the main entrances will have a 'level' threshold approach. Any slopes to the public realm areas are designed to a maximum of 1:22 or better for short distances. Where ramps are used to accommodate level changes these are always integrated in to the landscaping design in an inclusive way. The main entrances will be clearly highlighted using larger areas of glazing and signage and doors will be power assisted. All thresholds will be flush throughout. Entrance halls will be acoustically treated to reduce reverberation time and reception desks designed to be suitable for wheelchair users. In residential blocks, access to vertical circulation is directly from each block's entrance area and clearly visible from the entrance lobby. All routes are a minimum of 1500mm wide and all stairs a minimum of 1000mm wide and compliant with Part M. The lift doors will be colour contrasted and each lift designed to standards in BS8300-2009 in relation to size, hand rail, finishes and controls. Each level will be clearly identifiable via voice annunciation and LED display.</p> <p>The Transport Strategy confirms priority will be given to the mobility impaired in the allocation of parking spaces, accordingly 11% have been identified as disabled spaces.</p>	Positive	Implementation, on-going monitoring and review of the Framework Travel Plan (PBA)



Table 2.6: Crime Reduction and Community Safety

Assessment criteria	Relevant?	Details/evidence	Potential health impact	Recommended mitigation or enhancement measures
Does the proposal incorporate elements to help design out crime?	Yes	<p>The D&A statement confirms that consultation has been undertaken with the Metropolitan Police Secure By Design officers.</p> <p>The design has been formulated to comply with the general principles of Secured By Design (SBD). A number of measures to reduce or minimise crime will be (or have been) implemented, these include:</p> <ul style="list-style-type: none"> • Ground floor level private garden areas will be provided behind railings in order to clearly define private space and to provide a more secure threshold to ground floor level dwellings. • The publicly accessible landscaped areas will be designed to avoid areas that are hidden from view. • Main entrances to residential buildings will be from well lit main streets and or pedestrian routes through the site. • Basement level car parking will have a management strategy that limits access to the basement level during evening hours. • Further security measures include CCTV and access control. 	Neutral	No mitigation measures required
Does the proposal incorporate design techniques to help people feel secure and avoid creating 'gated communities'?	Yes	<p>The Development would animate and activate the Site and the mix of uses would mean there would be a new residential population as well as employees and visitors to the Site, in short, the whole site will be publicly open and accessible. The proposed mix and layout of land uses, high street and publicly accessible spaces would provide active frontages at ground floor level and</p>	Neutral	No mitigation measures required



encourage activity at all times throughout the day. This would maximise natural surveillance, thereby reducing the opportunity for crime and improving perceptions of safety.

Furthermore, the Development would include pedestrian routes through the Site which would open up the Site improving access and permeability in and around the Site. This would help to ensure a safe environment for pedestrians.

The D&A statement confirms a detailed Lighting Strategy has been developed and is covered in detail in the Lighting Concept section of this report. The overall strategy has been developed in conjunction with the landscape and public realm to allow extended use of amenity spaces and safety and security throughout the site.

Does the proposal include attractive, multi-use public spaces and buildings?	Yes	A wide variety of different types of open space, public amenity and recreational areas are proposed as part of the development, which will be fully accessible to the public and provide public spaces for community interaction.	Positive	No mitigation measures required
Has engagement and consultation been carried out with the local community?	Yes	The Statement of Community Involvement (February 2018) confirms that consultation has been carried out with the local community at all stages of the Masterplan Evolution in order to build awareness, initiate contact and engage with the wider community, obtain current opinions and address issues and concerns.	Positive	No further mitigation measures required

Table 2.7: Access to Healthy Food

Assessment criteria	Relevant?	Details/evidence	Potential health impact	Recommended mitigation or enhancement measures
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Does the proposal facilitate the supply of local food, ie allotments, community farms and farmers' markets?	Yes	The Site does not contain any existing spaces for growing food. Dwellings in Development Area 1 will be provided with rooftop gardens, terraces and balconies to allow the growth of food-related plant species if desired. To the south of the proposed Secondary School there is land which can be utilised for food growing.	Positive	Further consideration via Reserved Matters application of how amenity areas in Development Area 2 could also be used for food growing.
Is there a range of retail uses, including food stores and smaller affordable shops for social enterprises?	Yes	The Development includes provision of 4,664 sq m floorspace which is being applied for flexibly but will include a minimum provision of 1,255 sq m Use Class A1. Other uses are likely to include A2, A3 and A4 retail space as part of the flexible use floorspace element of the Development, along with B1 and D1 uses and a boathouse. Maximum caps are proposed for each Use Class to encourage a mix and range of uses. Each cap on floorspace use is not large and there will likely be a range of units of a relatively small size. This approach will allow flexibility and enable the scheme to better respond to local demand.	Neutral	No further mitigation measures required.
Does the proposal avoid contributing towards an overconcentration of hot food takeaways in the local area	No	No Use Class A5 floorspace is proposed as part of the Development	N/A	N/A

Table 2.8: Access to Work and Training

Assessment criteria	Relevant?	Details/evidence	Potential health impact	Recommended mitigation or enhancement measures
Does the proposal provide access to local employment and training opportunities,	Yes	The Socio Economics chapter of the ES finds that up to 1,110 FTE construction related jobs per annum will be created during the Works. A Local Area Agreement is required by the emerging	Positive	Measures to target local employment during Site preparation and construction



including temporary construction and permanent 'end-use' jobs?		Local Plan and would help to ensure local residents have access to these job opportunities. Between 499 (scenario 2a) and 649 (scenario 1b) FTE jobs are likely to be generated within LBRuT. These jobs will provide opportunities for local residents to access employment across a wide range of occupations and sectors.		to be secured through a Section 106 agreement.
Does the proposal provide childcare facilities?	No	The Development does not currently include provision of built in childcare facilities. The Socio Economics chapter of the ES found there to be adequate provision at present, but that in the future pressure on capacity will increase, the scale of which will depend on the Development scenario that occurs.	Neutral/Negative	Contributions may be required via planning conditions in order to improve the capacity of existing providers where necessary.
Does the proposal include managed and affordable workspace for local businesses?	Yes	The Development will include up to 2,424 sq m (GIA) of dedicated Use Class B1 business space, 10% of which will be affordable subject to viability. As part of the flexible floorspace element of the scheme, further Use Class B1 floorspace could be provided up to a maximum of 2,000 sq m.	Positive	Detailed design of flexible floorspace uses to be agreed controlled via planning condition. Provision of affordable workspace to be agreed subject to viability assessment via S106 agreement.
Does the proposal include opportunities for work for local people via local procurement arrangements?	Yes	In line with Policy LP29 of the Local Plan publication version, the Applicant intends to secure a Local Employment Agreement during the construction phase of the Development.	Positive	Local Employment Agreement to be secured as part of S106 agreement for the construction phase.

Table 2.9: Social Cohesion and Lifetime Neighbourhoods

Assessment criteria	Relevant?	Details/evidence	Potential health impact	Recommended mitigation or enhancement measures
Does the proposal connect with existing communities, ie	Yes	The network of open spaces and range of different community facilities throughout the site have been designed to encourage	Positive	No mitigation measures required.



layout and movement which avoids physical barriers and severance and land uses and spaces which encourage social interaction?		social interaction. This will be complemented by the proposed access points and network of walking and cycling routes which will link existing communities with new leisure and recreation facilities.		
Does the proposal include a mix of uses and a range of community facilities?	Yes	The Development includes a wide range of different uses including residential, commercial, leisure, and education and as well as a range of open space and play space facilities, including provision for children and young people. As part of the flexible use provision, there is potential for a maximum of 1,148 sq m of GIA of community space.	Positive	Detailed design of flexible use units to be agreed via planning condition.
Does the proposal provide opportunities for the voluntary and community sectors?	Yes	The Development includes up to a maximum 1,148 sq m GIA of community space as part of the flexible floorspace provision. The Development also includes 10,305 sq m of play space associated with the school and comprising a semi-enclosed informal play space at roof level, an indoor sports hall and activity studio, an external Multi Use Games Area and a full sized artificial all weather playing pitch with spectator facilities. A Community Use Agreement has been submitted with the application which will enable local groups, teams, clubs, organisations and bodies to use the external play pitch, indoor sports hall, activity studio and MUGA of the school out of school hours. In addition, the variety of open space provided as part of the Development will be accessible to all and could be used by local community groups with interests in nature, wildlife, exercise etc	Positive	Planning condition to control the type, amount and nature of community floorspace as part of the flexible floorspace designation.
Does the proposal address the principles of Lifetime Neighbourhoods?	Yes	The Development addresses the following principles of lifetime neighbourhoods: Access: multiple pedestrian and cycling routes will be provided throughout the site, which will enable residents to get out and	Positive	Planning Conditions (in relation to Development Area 1) and Reserved matters application (in relation to Development Area 2) to specify in more



about and connect with people and services in the immediate neighbourhood and beyond. Pedestrian access within the site has been designed to meet the needs of disabled people by creating a barrier free environment.

Services and amenities: The Development includes new retail and commercial floorspace which will provide local amenity and employment opportunities and complement the existing offer in Mortlake.

Built and natural environments: the proposals aspire to meet Secure By Design standards by providing safe and welcoming environments (although not yet certified). The proposals provide good access to a range of different types of open space which will promote social interaction and active lifestyles.

Social networks/well being: the proposals do not directly outline how opportunities for learning/training, social interaction and volunteering will be encouraged. However (as described above) the range of different uses and types of open space will provide an environment for these types of activities to take place.

Housing: the Development includes a mix of different house types and sizes, a proportion of which will be affordable housing as well accommodation for the elderly population and will be suitable to meet a diverse range of needs.

detail how it addresses the principles of lifetime neighbourhoods. Specifically, the application should:

- Demonstrate that the design is SBD certified
- Ensure there is safe and affordable access to key amenities including banks, shops, and key employment centres
- Specify the provision of affordable housing by tenure

Table 2.10: Minimising Use of Resources

Assessment criteria	Relevant?	Details/evidence	Potential health impact	Recommended mitigation or enhancement measures
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Does the proposal make best use of existing land?	Yes	<p>The Masterplan has been designed to respond to the context in which it sits and to bring back in to use a redundant industrial site to provide a new village heart for Mortlake. The D&S statement confirms the Masterplan responds to various environmental constraints to ensure development only takes place where it can be found acceptable.</p> <p>All new buildings will be on previously developed land and optimises the use of the land making efficient use of it.</p>	Positive	No additional mitigation measures required
Does the proposal encourage recycling (including building materials)?	Yes	<p>The D&S statement confirms that materials are selected for durability and functionality as well as appearance. Where feasible, materials will utilise recycled and recyclable materials and techniques and minimise energy and resource use throughout their lifecycle.</p> <p>A Resource Management Plan (RMP) will be produced that will outline how recycling of construction, demolition and excavation material can be maximised and reused on site.</p> <p>Recyclable waste storage will be provided for the occupants to manage their operational waste.</p>	Neutral	No mitigation measures required
Does the proposal incorporate sustainable design and construction techniques?	Yes	<p>The Sustainability Statement notes a number of sustainable design features. Building elements will be selected in accordance with the BRE Green Guide to Specification, with the aim of selecting elements in the range A+ to C to minimise environmental impact.</p> <p>All timber used at the Proposed Development will be FSC certified and where possible and practicable materials will be locally sourced.</p> <p>Buildings will be designed to achieve high levels of energy efficiency and will include a number of efficiency reduction measures. Measures to include renewable energy and low carbon</p>	Neutral	No mitigation measures required



technologies are confirmed in the Sustainability Strategy, including PV arrays.

Table 2.11: Climate Change

Assessment criteria	Relevant?	Details/evidence	Potential health impact	Recommended mitigation or enhancement measures
Does the proposal incorporate renewable energy?	Yes	<p>The Sustainability Statement confirms the inclusion of on-site renewable energy generation has been assessed.</p> <p>In respect of the Outline Application, it is anticipated that a PV array with a total area of 520m² would be provided on the roof area of the Proposed Development. Based on the solar irradiance data for London, an array of this size would generate approximately 57,200kWh of electricity per annum, reducing CO₂ emissions by 30tonnes per annum. This is equivalent to a reduction in regulated CO₂ emissions of 1.0% beyond the Building Regulations Part L (2013) 'baseline' for the anticipated emissions of the Proposed Development. Further opportunities to increase the area of the PV array will be provided in the reserved matters submission(s).</p> <p>A total solar PV system size in the region of 520m² array area will be included in Development Area 1 for Application A of the Proposed Development.</p> <p>Based on the solar irradiance data for London, an array of this size would generate approximately 57,200kWh of electricity per annum, reducing CO₂ emissions by 30.0 tonnes per annum. This is equivalent to a reduction in regulated CO₂ emissions of 2.6%</p>	Neutral	Reserved matters application to identify further opportunities to increase the area of the PV array in relation to Development Area 2.



		beyond the Building Regulations Part L (2013) 'baseline' on the CO2 emissions of Phase 1.		
Does the proposal ensure that buildings and public spaces are designed to respond to winter and summer temperatures, ie ventilation, shading and landscaping.	Yes	<p>The Sustainability Statement confirms the building will contribute to the adaption and mitigation of the effects of climate change, designed to enable sunlight access, and to minimise overshadowing and adverse wind conditions.</p> <p>The Detailed D&A statement indicates that Development Area 1 will aim to maximise sun light and day light via the following measures:</p> <ul style="list-style-type: none"> • Ground floor level units sit flush with outer face of upper level balconies to avoid overshadowing of fenestration • Living/ kitchen windows provided on outer face of buildings (at all levels) to avoid overshadowing of fenestration by projecting balconies • Play space has been distributed in landscaped areas that receive greater amounts of light <p>In addition, the Proposed Development has been designed in accordance with the cooling hierarchy to minimise cooling demand and limit the likelihood of high internal temperatures. Mitigation measures such as suitable glazing ratio and g-value, appropriate ventilation levels and minimisation of internal heat gains will be implemented. Through these measures, relevant areas of the Proposed Development will achieve compliance with Criterion 3 of the Building Regulations Part L (2013).</p>	Neutral	Reserved matters application to identify detailed design measures for Development Area 2.
Does the proposal maintain or enhance biodiversity?	Yes	The D&S statement confirms it is proposed to implement extensive green / brown roof systems on a number of the buildings with flat roofs, exploiting the ecological potential of upper levels and to provide biodiversity and energy benefits, as	Positive	No mitigation measures required



well as contributing to stormwater drainage and short-term attenuation storage.

Each roof will be seeded with plant species collected from the site or nearby, to boost local endemic habitat and foraging for local species. Certain features will be introduced to maximise potential for biodiversity and habitat for target species. These will include log piles, slabs or twigs gathered from the local area, combined with bird and bat boxes noted below. Where possible, the substrate depth will be varied to provide opportunities for small pools of water to collect on the roof

New planting will be incorporated close to the river edge, responding to the existing flora located in the community park to the south of the proposed School.

Does the proposal incorporate sustainable urban drainage techniques	Yes	<p>The D&A statement confirms surface treatments in the public and private realm are proposed as predominantly permeable, with soft landscape, turf and grasses, together with permeable pavements of gravel (self-binding or bonded) as a contrast to hard paving surfaces.</p> <p>Paved areas will be designed where feasible to drain into tree pits and planting areas, providing natural watering and assisting infiltration and storage of stormwater. A designed 'rain garden' forms a landscape feature within the central Green Linear Park, draining one side of the pavement directly into a planted storage 'trench' which ultimately connects to the stormwater attenuation system. This feature provides an effective sustainable drainage system while creating an obvious sustainable feature in the public realm, accentuating the visibility of sustainable measures taken in the development.</p>	Neutral	No mitigation measures required
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3. Summary/Conclusions

3.1 The HIA has been conducted where the findings can be used to inform the evolution of the design for the Detailed and Outline elements of the Applications as well as when the application as a whole progresses to the reserved matters stage.

3.2 At this stage, the findings suggest that the Development will lead to a number of positive health impacts. The key positive impacts are as follows:

- **Housing:** the Development will provide up to 667 residential units of varying size and tenure making a contribution to the borough's annual housing target as well as helping to meet local demand for family housing, affordable housing and housing for the older population.
- **Social Infrastructure:** the Development includes provision of education, leisure and community uses therefore improving the current provision of social infrastructure in the local area.
- **Improved access to open space and nature:** the Site currently has no publicly accessible open space provision. The Development would result in the loss of 2.07 ha of private open space but would provide a total of 3.89 ha of publicly accessible open space. Overall, the amenity space throughout the Site amounts to 4.57 ha i.e. 51% of the Site's area.
- **Pedestrian and Cycling Activity:** The Development prioritises pedestrian and cycling modes of travel, both in terms of accessing the Site and within the Site itself.
- **Access to work and training:** The construction phase of the Development will generate up to 1,110 FTEs per annum over an 8-year period. A local Employment Agreement will ensure that local residents have access to these employment opportunities. Once completed, the Development will generate long term employment opportunities of between 499 and 649 FTEs across a range of different occupations and sectors.
- **Best use of existing land:** The Masterplan has been designed to respond to the context in which it sits and to bring back in to use a redundant industrial site to provide a new village heart for Mortlake. The D&S statement confirms the Masterplan responds to various environmental constraints to ensure development only takes place where it can be found acceptable. All new buildings will be on



previously developed land and optimises the use of the land making efficient use of it.

3.3 The HIA has identified a number of mitigation or enhancement measures which should be considered during the determination period and controlled by agreed planning conditions and for within the reserved matters stage of Development Area 2. The key measures are:

- Further consideration and detail via planning condition (Development Area 1) and reserved matters (Development Area 2) on the quantum, mix and tenure of affordable housing provision
- Further consideration and detail via reserved matters (Development Area 2) on how the designs for housing will meet Lifetime Home Standards
- Planning conditions will be used to control the type and nature of the proposed flexible uses
- Provision of affordable workspace to be agreed subject to viability assessment via S106/CIL agreement.
- Development of a Travel Plan in line with the principles and timelines set out in the Transport Assessment which will promote sustainable modes of transport whilst providing adequate parking facilities.
- An application for SBD certification. The feedback received should influence the detailed design of the site and ensure that crime and anti-social behaviour is minimised and that local residents feel secure
- Further consideration and detail on the waste reduction techniques, recycling and renewable technologies which will be incorporated in to the designs for Development Area 2
- Detailed Estate Management Plan to be agreed and finalised as part of Planning Condition or Section 106 Agreements.
- Implementation of all embedded mitigation and mitigation measures proposed in the chapters of the ES





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