



# **Sustainability Statement**

## **Former MSD Facility, Breakspear Road, Ickenham**

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Rev.02



Revision History

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15.08.2022	00	Draft
31.08.2022	01	Update Following Civils Comments
29.09.2022	02	Planning submission

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## Executive Summary

### The Application

This Sustainability Statement has been prepared for the Former MSD site, Breakspear road, Ickenham development and responds specifically to the Mayor's London Plan 2021 and the policies of Hillingdon contained within the Local Plan. The development consists of Retention and demolition of existing buildings, construction of new buildings, all within Use Class B8 with ancillary uses, hardstanding, widening of vehicular access off Breakspear Road South, associated car and cycle parking, enhanced landscaping and ancillary works.

### Energy & Carbon Emission Reduction

The Development will reduce energy demand through passive design and energy efficiency measures such as best practice levels of insulation and low fabric air permeability.

The M&E systems will be designed and specified to be as efficient as possible. Space heating will be met by installing high performing air source heat pumps.

### Water

The Development will be fitted with water efficient fixtures and fittings in order to satisfy local planning policy and applicable assessment methods.

### Materials

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 where feasible. All timber used will aim to be FSC certified or similar and where possible materials will be locally sourced. Whole life carbon will also be considered. The team are working hard to achieve various innovative solutions such as the consideration of reused structural elements from demolition sites, saving significant energy and carbon.

### Waste

The contractor will be required to produce and adhere to a Resource Management Plan which sets out requirements to maximise diversion of demolition, construction and excavation waste from landfill.

The development will be provided with sufficient bin storage capacity for recyclable and non-recyclable waste streams for day to day operational waste. Full details can be found in the outline site waste management plan.

### Transport

Measures are included to improve low carbon transport options to the site such electric vehicle charging.

### Biodiversity

It is expected that construction will lead to a net gain in urban greening factor (and it is noted the site is located on previously developed land).

### Pollution

No combustion plant is being installed as part of the development for the provision of heating or hot water. Heating and hot water will be provided by air source heat pumps. External luminaires will direct lighting appropriately to minimise light pollution and loss of light to the sky. The main contractor will minimise the risk of pollution and will be registered with the Considerate Constructors Scheme or similar.

Overall, the sustainability performance will be monitored and measured using BREEAM. The development is aspiring to achieve a BREEAM Very Good rating as a minimum. See Appendix A for details of the BREEAM assessment.



Figure 1 – Proposed Development

## Policies and Drivers

### Current Policy Framework

The policies considered when preparing this statement are contained in the London Plan and the London borough of Hillingdon

### Building Regulations Part L 2013

The assessment of the Development against policy targets has been carried out using Part L 2013 benchmarks.

Criterion One of the Building Regulations Part L (2013) requires that the development is not anticipated to generate CO2 emissions in excess of that set by a Target Emission Rate (TER) calculated in accordance with the National Calculation Methodology (NCM).

Criterion Two places upper limits on the efficiency of controlled fittings and services for example, an upper limit to an external wall U-value of 0.35W/m<sup>2</sup>.K.

Criterion Three requires that spaces are not subject to excessive solar gains. This is demonstrated using the procedure given in the National Calculation Methodology.

For the purposes of this application calculations have been carried out against Part L 2021.

### London Borough of Hillingdon

Current policies relating to energy and sustainability are contained within the Hillingdon local plan and complement the London plan.

### Further documents considered

- The GLA Guidance on Preparing Energy Assessments (2022)
- The GLA Housing SPG (2016)
- GLA Sustainable Design and Construction SPG (2014)
- The New London Plan



Figure 2– Policy Documents

## Sustainability Statement

The following assessment has been carried out whilst referencing the Mayor of London's Supplementary Planning Guidance on Sustainable Design and Construction as per the requirement of The London Plan 2021. Reference is also made to the local policies of Hillingdon.

GLA SUSTAINABLE DESIGN & CONSTRUCTION SPG		POLICY REFERENCES		DEVELOPMENT RESPONSE
Priority	Best Practice	London Plan	Hillingdon Local Plan policies	
Resource Management				
Land				
<a href="#">Optimising the Use of Land</a> Through both their Local Plans and planning decisions, boroughs should aim for 100% of development to be delivered on previously developed land.	-	Chapter 2	-	<a href="#">Optimising the Use of Land</a> The Development will be on partially previously developed land.
<a href="#">Optimising the Use of Land</a> Developers should optimise the scale and density of their development, considering the local context, to make efficient use of London’s limited land.	-	Chapter 3	-	<a href="#">Optimising the Use of Land</a> The Development seeks to optimise the use of the existing site whilst respecting the local context surrounding the site. The Development will consist of a number of use types.
<a href="#">Basement and Lightwells</a> When planning a basement development, developers should consider the geological and hydrological conditions of the Site and surrounding area, proportionate to the local conditions, the size of the basement and lightwell and the sensitivity of adjoining buildings and uses, including green infrastructure.	-	Chapter 3	A1.35-A1.43	<a href="#">Basement and Lightwells</a> No basement areas to be provided
<a href="#">Basement and Lightwells</a> When planning and constructing a basement development, developers should consider the amenity of neighbours.	-	Chapter 3	A1.35-A1.43	<a href="#">Basement and Lightwells</a> No basement areas to be provided
<a href="#">Local Food Growing</a> To protect existing established food growing spaces.	-	Chapter 8	6.6	<a href="#">Local Food Growing</a> The Site does not contain any existing established spaces for growing food.

-	<b>Local Food Growing</b> To provide space for individual or communal food growing, where possible and appropriate.	Chapter 8	6.6	<b>Local Food Growing</b> The Development is not proposing areas for the growing of crops.
-	<b>Local Food Growing</b> To take advantage of existing spaces to grow food, including adapting temporary spaces for food growing.	Chapter 8	6.6	
Site Layout and Building Design				
	<b>Site Layout &amp; Building Design</b> Any existing buildings that can be practically refurbished, retrofitted, altered, or extended should be retained and reused.	Chapter 3	-	<b>Site Layout &amp; Building Design</b> Building one will be refurbished. The new buildings will be of high quality and contribute to the local setting. – refer to the Design and Access Statement for further information.
	<b>Site Layout &amp; Building Design</b> A mix of uses, where suitable should be included to provide a range of services commensurate to the public transport accessibility.	Chapter 3	-	<b>Site Layout &amp; Building Design</b> The Development will consist of a number of use types including warehouse and office space.  The Development has been assessed to have a Public Transport Accessibility Level (PTAL) rating of 0.
<b>Site Layout &amp; Building Design</b> The design of the Site and building layout, footprint, scale and height of buildings as well as the location of land users should consider:	-	Chapter 3	Various sections	
<b>Existing Features</b> The possible retention and reuse of existing buildings and structures; The retention of existing green infrastructure, including trees and other ecological features, and potential for its				<b>Existing Features</b> The new buildings will be of high quality and contribute to the local setting. – refer to the Design and Access Statement for further information. Existing green infrastructure will be retained where possible.



improvement and extension; and Access routes to public transport and other facilities that minimise the use of public transport				
<p><b>New Design of Development</b></p> <p>The existing landform</p> <p>The potential to take advantage of natural systems such as wind, sun and shading;</p> <p>The principles set out London Plan policies 7.1 and 7.6;</p> <p>The potential for adaption and reuse in the future;</p> <p>Potential for incorporating green infrastructure, including enhancing biodiversity;</p> <p>Potential for incorporating open space, recreation space and child play space;</p> <p>Energy demands and the ability to take advantage of natural systems and low and zero carbon energy sources;</p> <p>Site wide infrastructure;</p> <p>Access to low carbon transport modes;</p> <p>The promotion of low carbon transport modes, including walking and cycling;</p> <p>Potential to address any local air quality, noise disturbance, flooding and land contamination issues; and</p> <p>The potential effect on the micro-climate.</p>				<p><b>New Design of Development</b></p> <p>The Development will consist of a number of use types including warehouse and office space.</p> <p>The development has evolved throughout pre-application discussion with various stakeholders in Hillingdon borough council.</p> <p>Measure to enhance biodiversity will be implemented and green spaces will be maintained.</p> <p>Cycle parking spaces will be provided to promote low carbon transport modes</p> <p>Please refer to the Design and Access Statement accompanying the planning application for further information.</p>
<b>Energy and Carbon Dioxide Emissions</b>				
<p><b>Energy and CO2 Emissions</b></p> <p>The overall carbon dioxide emissions from a development should be minimised through the implementation of the energy hierarchy set out in London Plan Policy 5.2.</p>	-	Chapter 9	Reducing Carbon Emissions	<p><b>Energy and CO2 Emissions</b></p> <p>The Development has been assessed in accordance with requirements of LP Policy 5.2, the guidance within the GLA on preparing energy strategies (2022), Hillingdon Local Plan policies. The target CO<sub>2</sub> emissions reduction applicable to the Development is 35% on site and zero carbon when including carbon offsetting.</p> <p>Please refer to the Energy Strategy submitted in support of this application for further details.</p> <p>An anticipated CO<sub>2</sub> emissions reduction beyond the requirements of the Building Regulations Part L 2021 will be achieved through a combination of passive design, energy efficiency and air source heat pumps.</p>

-	<b>Energy and CO2 Emissions</b> Developments should contribute to ensuring resilient energy infrastructure and a reliable energy supply, including from local low and zero carbon sources.	Chapter 9	Reducing Carbon Emissions	<b>Energy and CO2 Emissions</b> Air source heat pumps are considered for low carbon heating to parts of the development. Refer to the Energy Strategy for further information. These measures are considered to work in tandem to provide resilient energy infrastructure.
-	<b>Energy and CO2 Emissions</b> Developers are encouraged to include innovative low and zero carbon technologies to minimise carbon dioxide emissions within developments and keep up to date with rapidly improving technologies.	Chapter 9	Reducing Carbon Emissions	<b>Energy and CO2 Emissions</b> As described above, the Development will incorporate a passive design with air source heat pumps for heating to office areas.
<b>Energy Demand Assessment</b> Development applications are to be accompanied by an energy demand assessment	-	Chapter 9	6.8	<b>Energy Demand Assessment</b> An energy demand assessment has been carried out for the Development. Please refer to the Energy Strategy for further details.
<b>Use Less Energy</b> The design of developments should prioritise passive measures.	<b>Use Less Energy</b> Developers should aim to achieve Part L 2013 Building Regulations requirements through design and energy efficiency alone, as far as is practical.	Chapter 9	Environmental Protection and Enhancement.	<b>Use Less Energy</b> The first step to reduce energy demand and CO <sub>2</sub> emissions has been to incorporate passive design and energy efficiency measures such as enhanced insulation levels and high efficiency plant. Please refer to the Energy Strategy for full details.
<b>Energy Efficient Supply</b> Developers should assess the potential for their developments to: Connect to an existing district heating or cooling network; Expand an existing district heating or cooling network, and connect to it; or Establish a Site wide network, and enable the connection of existing buildings in the vicinity of the developers.	-	Chapter 9	Decentralised Energy	<b>Energy Efficient Supply</b> The London Heat Map doesn't display any possible heat or cooling networks that the development can connect to. Communication has been received from Hillingdon to confirm that there is no potential to connect to a district heating network.



<b>Renewable Energy</b> Major developments should incorporate renewable energy technologies to minimise overall carbon dioxide emissions, where feasible.	-	Chapter 9	Environmental Protection and Enhancement.	<b>Renewable Energy</b> Heat pumps are providing heating to help minimise overall carbon dioxide emissions.
<b>Carbon Dioxide Offsetting</b>				
<b>Carbon Offsetting</b> Where developments do not achieve the Mayor's carbon dioxide reduction targets set out in London Plan Policy 5.2, the developer should make a contribution to the local borough carbon dioxide off-setting fund.	-	Chapter 9	Reducing Carbon Emissions	<b>Carbon Offsetting</b> It is anticipated that the Development will reduce CO <sub>2</sub> emissions beyond the requirements of the Building Regulations Part L 2021 including renewables.
<b>Retrofitting</b>				
<b>Retrofitting</b> Where works to existing developments are proposed developers should retrofit carbon dioxide and water saving measures.	-	Chapter 9	-	<b>Retrofitting</b> Building one (retrofit) will include passive measure as well as high efficiency air source heat pump plant to ensure the development complies with carbon saving measures.
<b>Monitoring Energy Use</b>				
-	<b>Monitoring Energy Use</b> Developers are encouraged to incorporate monitoring equipment, and systems where appropriate to enable occupiers to monitor and reduce their energy use.	Chapter 9	-	<b>Monitoring Energy Use</b> Systems will be enabled to connect to a Building Management System (BMS) that can record energy use.  During detailed design, consideration will be given to the provision of digital meters with connectivity to a central building management / billing system.
<b>Supporting a Resilient Energy Supply</b>				
-	<b>Monitoring Energy Use</b> Developers are encouraged to incorporate equipment that would enable their schemes to participate in demand side response opportunities.	Chapter 9	-	<b>Monitoring Energy Use</b> During the detailed design stages, consideration will be given to the installation of 'smart meters' which could enable demand side response opportunities in the future.
<b>Water Efficiency</b>				

<b>Water Efficiency</b> Developers should maximise the opportunities for water saving measures and appliances in all developments, including the reuse and using alternative sources of water.	-	Chapter 9	Water Management, Efficiency and Quality	<b>Water Efficiency</b> The Development will be provided with water efficient fixtures, fittings and appliances.
<b>Water Efficiency</b> Developers should design residential schemes to meet a water consumption rate of 105 litres per person per day.	-	Chapter 9	Water Management, Efficiency and Quality	<b>Water Efficiency</b> No residential units on site.
<b>Water Efficiency</b> New non-residential developments, including refurbishments, should aim to achieve the maximum number of water credits in a BREEAM assessment or the 'best practice' level of the AECB (Association of Environment Conscious Building) water standards.	-	Chapter 9	Water Management, Efficiency and Quality	<b>Water Efficiency</b> Water efficient fixtures and fittings will be installed. The design is aspiring to a BREEAM rating of Very Good. The opportunity to reduce water consumption will be therefore continue to be reviewed as design develops.
<b>Water Efficiency</b> Where a building is to be retained, water efficiency measures should be retrofitted.	-	Chapter 9	Water Management, Efficiency and Quality	<b>Water Efficiency</b> Water efficiency measures will be retrofitted into building one.
<b>Water Efficiency</b> All developments should be design to incorporate rainwater harvesting.	-	Chapter 9	Water Management, Efficiency and Quality	<b>Water Efficiency</b> The drainage strategy for the site has been considered and allows for sustainable urban drainage systems (SuDS) to be incorporated into the scheme. Permeable paving, attenuation ponds, swales, filter drains and below ground attenuation tanks are part of the SuDS Strategy
<b>Materials and Waste</b>			Protecting and managing our environment section	
<b>Design Phase</b> The design of development should prioritise materials that:  Have a low embodied energy, including those that can be re-used intact or recycled; At least three of the key elements of the building envelope (external walls,	-	Chapter 9	-	<b>Design Phase</b> 100% of the timber used at the Development will be FSC or PEFC certified, or similar. It is intended that all insulation materials will be in line with BREEAM requirements, i.e. an insulation index greater than 2.5 is targeted, based on achieving good Green Guide Ratings. Wherever feasible, selected materials will be in range of A+ to B as confirmed by the BRE Green Guide to Specification. Other LCA information will also be sought as required. Where specified by the developer, finishes and other materials will not contain or emit toxic substances. In accordance with BREEAM targets, materials will be specified that are durable and cater for their use.

<p>windows roof, upper floor slabs, internal walls, floor finishes / coverings) are to achieve a rating of A+ to D in the BRE's The Green Guide of specification;</p> <p>Can be sustainably sourced;</p> <p>At least 50% of timber and timber products should be sourced from accredited Forest Stewardship Council (FSC) or Programme for the Endorsement of forestry Certification (PEFC) source;</p> <p>Are durable to cater for their level of use and exposure; and</p> <p>Will not release toxins into the internal and external environment, including those that deplete stratospheric ozone.</p>				<p>The team are working hard to achieve various innovative solutions such as the consideration of reused structural elements from demolition sites, saving significant energy and carbon.</p>
<p><b>Construction Phase</b></p> <p>Developers should maximise the use of existing resources and materials and minimise waste generated during the demolition and construction process through the implementation of the waste hierarchy.</p>	-	Chapter 9	Re-use and Recycling of Aggregates	<p><b>Construction Phase</b></p> <p>The Development will minimise the waste sent to landfill during construction, by effective management and with regard to the waste management hierarchy.</p>
<p><b>Occupation Phase</b></p> <p>Developers should provide sufficient internal space for the storage of recyclable and compostable materials and waste in their schemes.</p> <p>The design of development should meet borough requirements for the size and location of recycling, composting and refuse storage, and its removal.</p>	-	Chapter 9	Design of waste storage facilities in new development	<p><b>Occupation Phase</b></p> <p>The Development will be provided with suitable internal and communal waste storage facilities for the segregation of recyclable materials, designed with consideration of BS5906 (Waste Management in Buildings) and Hillingdon policy and BREEAM targets.</p>

Nature Conservation and Biodiversity				
Nature & Biodiversity There is no net loss in the quality and quantity of biodiversity.	-	Chapter 9	Biodiversity Protection and Enhancement	Nature & Biodiversity The Development will result in a positive net gain in biodiversity. Please refer to the Design and Access Statement for further information.
Nature & Biodiversity Developers make a contribution to biodiversity on their development Site.	-	Chapter 9	Biodiversity Protection and Enhancement	
Climate Change Adaption				
Overheating  Developers should include measures, in the design of their schemes, in line with the cooling hierarchy set out in London Plan Policy 5.9 to prevent overheating over the scheme’s lifetime.	-	Chapter 3&9	-	Overheating  The Development has been designed in accordance with the cooling hierarchy as set out in LP Policy. It is expected that all spaces at the Development will be compliant with criterion 3 of the Building Regulations Part L, limiting the effects of heat gains in summer as well as TM52 compliance in office areas. Measures proposed to limit the risk of overheating from internal sources include: <ul style="list-style-type: none"><li>• Energy efficient lighting (such as LED or compact fluorescent) with low heat output</li><li>• Insulated heating and hot water pipework and minimisation of dead-legs to avoid standing heat loss</li></ul> Heat gains from external sources will be minimised by providing: <ul style="list-style-type: none"><li>• Suitable glazing ratios</li><li>• High performance solar coatings on glazed elements and including internal blinds</li><li>• High levels of insulation and low fabric air permeability which will retain cool air within the buildings in summer months</li><li>• Openable windows / openings with sufficient free area to provide adequate ventilation</li></ul>
-	Heat and Drought Resistant Planting  The design of developments should prioritise landscape planting that is drought resistant and has a low water demand for supplementary watering.	Chapter 9	-	Heat and Drought Resistant Planting  During detailed design stages, consideration will be given to the planting strategy, where applicable. The selection of heat and drought resistant species will be prioritised.
-	Resilient Foundations  Developers should consider any long term potential for extreme weather events to affect a building’s foundations and to ensure they are robust.	Chapter 9	-	Resilient Foundations  Long term extreme weather events are not expected to affect the building foundations.

Increased Green Cover				
<b>Urban Greening</b>  Developers should integrate green infrastructure into development schemes, including by creating links with wider green infrastructure network.	-	Chapter 9	Green Infrastructure	<b>Urban Greening</b>  Species selection of any potential greening will be carried out at detailed design and will look to maximise the ecological value of the site where applicable.  Please refer to the Design and Access Statement for further information.
<b>Urban Greening</b>  Major developments in the Central London Activity Area (CAZ) should be designed to contribute to the Mayor's target to increase green cover by 5% in this zone by 2030.	-	Chapter 9	Trees and Landscaping	<b>Urban Greening</b>  New specimen tree planting is proposed on the site
<b>Trees</b>				
<b>Trees</b>  Developments should contribute to the Mayor's target to increase tree cover across London by 5% by 2025.	-	Chapter 8	Trees and Landscaping	<b>Trees</b>  New specimen tree planting is proposed on the site.
<b>Trees</b>  Any loss of a trees resulting from development should be replaced with an appropriate tree or group of trees for the location, with the aim of providing the same canopy cover as that provided by the original trees.	-	Chapter 8	Trees and Landscaping	Trees on site will be retained throughout development where feasible
<b>Flooding-Surface Water / Sustainable Drainage</b>  Developers should maximise all opportunities to achieve greenfield runoff rates in their developments.  Major development must reduce surface water run-off by more than 50%	-	Chapter 9	Environmental Protection and Enhancement.	<b>Surface Water / Sustainable Drainage</b>  The drainage strategy for the site has been considered and allows for sustainable urban drainage systems (SuDS) to be incorporated into the scheme. Permeable paving, attenuation ponds, swales, filter drains and below ground attenuation tanks are part of the SuDS Strategy  It is proposed to utilise Sustainable Drainage Systems (SuDS) to manage surface water locally and reduce the risk of flooding onsite, upstream and downstream where possible. SuDS and onsite drainage will be designed so that there will be no flooding of any building on the Site or any off-Site flooding in a 1 in 100 year rainfall event plus an allowance for 40% climate change.

<b>Surface Water / Sustainable Drainage</b>  When designing their schemes developers should follow the drainage hierarchy set out in London Plan Policy 5.13.	-	Chapter 9	Environmental Protection and Enhancement.	The flood risk calculations undertaken for the Development and design of SuDs systems include an allowance for climate change up to and including the 100 year storm event In line with local and regional planning policy.  Please refer to the Flood Risk Assessment and Drainage Strategy for further information.
<b>Surface Water / Sustainable Drainage</b>  Developers should design Sustainable Drainage Systems (SuDS) into their schemes that incorporate attenuation for surface water runoff as well as habitat, water quality and amenity benefits.	-	Chapter 9	Environmental Protection and Enhancement.	
<b>Flood Resilience</b>  Development in areas at risk from any form of flooding should include flood resistance and resilience measures in line with industry best practice.	-	Chapter 9	Environmental Protection and Enhancement.	<b>Flood Resilience</b>  Please refer to the Flood Risk Assessment for further details.
<b>Flood Risk Management</b>  Developments incorporate the recommendation of the TE2100 plan for the future tidal flood risk management in the Thames estuary.	-	Chapter 9	Environmental Protection and Enhancement.	<b>Flood Risk Management</b>  The flood risk calculations undertaken for the Development and design of SuDs systems include for the potential increase in flood risk as a result of climate change.  Please refer to the Flood Risk Assessment for further details.
<b>Flood Risk Management</b>  Where development is permitted in a flood risk zone, appropriate residual risk management measures are to be incorporated into the design to ensure resilience and the safety of occupiers.	-	Chapter 9	Environmental Protection and Enhancement.	
<b>Other Flooding</b>  All sources of flooding need to be considered when designing and constructing developments.	-	Chapter 9	Environmental Protection and Enhancement.	<b>Other Flooding</b>  The drainage strategy for the Development has been prepared in consideration of flooding from all applicable sources.
<b>Pollution Management</b>				



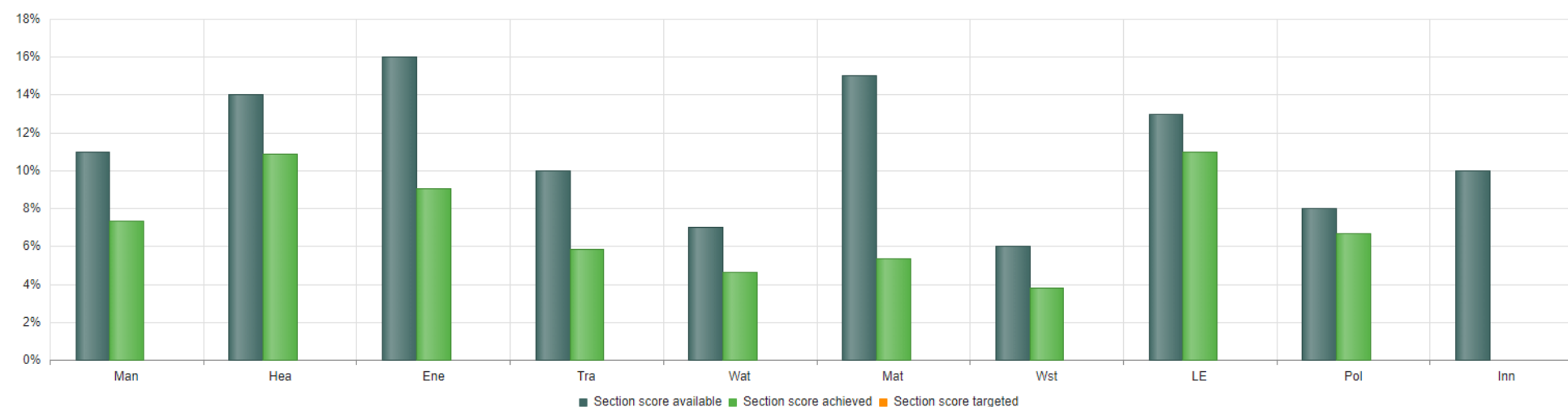
Land Contamination				
<p>Land Contamination</p> <p>Developers should set out how existing land contamination will be addressed prior to the commencement of their development.</p>	-	Chapter 2	Environmental Protection and Enhancement.	<p>Land Contamination</p> <p>Contamination will be remediated if required and a Contamination Assessment will be developed as necessary.</p>
<p>Land Contamination</p> <p>Potentially polluting uses are to incorporate suitable mitigation measures.</p>	-	Chapter 2	Environmental Protection and Enhancement.	<p>Land Contamination</p> <p>The Development is not proposing to include uses that would lead to land contamination.</p>
Air Quality				
<p>Air Quality</p> <p>Developers are to design their schemes so that they are at least 'air quality neutral'.</p>	-	Chapter 3	Environmental Protection and Enhancement.	<p>Air Quality</p> <p>Systems at the Development will be selected to avoid emissions of Nitrous Oxide (NOx) and other pollutants which can lead to adverse air quality impacts.</p>
<p>Air Quality</p> <p>Developments should be designed to minimise the generation of air pollution.</p>	-	Chapter 3	Environmental Protection and Enhancement.	
<p>Air Quality</p> <p>Developments should be designed to minimise and mitigate against increased exposure to poor air quality.</p>	-	Chapter 3	Environmental Protection and Enhancement.	<p>Air Quality</p> <p>All occupied areas will have mechanical ventilation where possible to reduce risk of being exposed to poor air quality.</p>
<p>Air Quality</p> <p>Developers should select plant that meets the standards for emissions from combined heat and power and biomass plants set out in Appendix 7.</p>	-	Chapter 3	Environmental Protection and Enhancement.	<p>Air Quality</p> <p>Air source heat pump (ASHP) plant is to be implemented on site. As such no combustion plant is expected to be included in the development for the day-to-day energy needs.</p>

<b>Air Quality</b> Developers and contractors should follow the guidance set out in the emerging The Control of Dust and Emissions during Construction and Demolition SPG when constructing their development.	-	Chapter 3	Environmental Protection and Enhancement.	<b>Air Quality</b> It is intended that contractors will comply with The Control of Dust and Emissions during Construction and Demolition SPG. Contractors will be required to identify potential sources of dust and other air pollution and appropriate dust control measures will be implemented. It is also intended that the main contractor shall register under the Considerate Constructors Scheme and achieve a best practice score.
<b>Noise</b>				
<b>Noise</b> Areas identified as having positive sound features or as being tranquil should be protected from noise.	-	Chapter 3	-	<b>Noise</b> The Site does not include areas identified as having positive sound features or as being tranquil.
<b>Noise</b> Noise should be reduced at source, and then designed out of a scheme to reduce the need for mitigation measures.	-	Chapter 3	-	<b>Noise</b> The external envelope of the building will be designed to achieve appropriate internal noise levels based upon industry guidance. Internal building elements (party walls and floors) will be designed to achieve an enhanced level of both airborne and impact sound insulation, above the minimum requirements of Building Regulations Part E. Noise from new noise generating equipment installed as part of the scheme will be controlled to achieve noise levels significantly below the existing background noise, in line with Hillingdon policy. This will be achieved by the selection of low noise equipment where possible, in combination with additional noise attenuation measures as necessary.
<b>Light Pollution</b>				
<b>Light Pollution</b> Developments and lighting schemes should be designed to minimise light pollution.	-	Chapter 3	-	<b>Light Pollution</b> All external lighting provided as part of the Development will be energy efficient. It is anticipated that suitable controls such as daylight detection and time-switches will be provided to minimise inappropriate use. Luminaires will be selected with suitable light output ratio and direction to ensure light is distributed appropriately and not directly into the sky.
<b>Water Pollution</b>				
<b>Surface Water Runoff</b> In their aim to achieve a greenfield runoff rate developers should incorporate sustainable urban drainage systems (SuDS) into their schemes which also provide benefits for water quality.	-	Chapter 9	Environmental Protection and Enhancement.	<b>Surface Water Runoff</b> The drainage strategy for the site has been considered and allows for sustainable urban drainage systems (SuDS) to be incorporated into the scheme. Permeable paving, attenuation ponds, swales, filter drains and below ground attenuation tanks are part of the SuDS Strategy  It is proposed to utilise sustainable drainage techniques to manage surface water and reduce the risk of flooding onsite, upstream and downstream where possible. Onsite drainage will be designed not to flood for 1 in 100 year flood event. The application of SuDS source control techniques in accordance with local policy will represent a significant reduction in the surface discharge from the site compared to existing.  Please refer to the Flood Risk Assessment and Drainage Strategy for further information.

-	<p><b>Surface Water Runoff</b></p> <p>Encourage good environmental practice to help reduce the risk from business activities on the London water environment.</p>	Chapter 9	Environmental Protection and Enhancement.	<p><b>Surface Water Runoff</b></p> <p>It is intended that occupants will be advised of good environmental practice to reduce risk on the London water environment.</p>
-	<p><b>Surface Water Runoff</b></p> <p>Encourage those working on demolition and construction –Sites to prevent pollution by incorporating prevention measures and following best practice.</p>	Chapter 9	Environmental Protection and Enhancement.	<p><b>Surface Water Runoff</b></p> <p>It is intended that the main contractor will be required to operate in an environmentally conscious manner to prevent pollution. It is also intended that the main contractor shall register under the Considerate Constructors Scheme and achieve a best practice score. Please refer to the Outline Construction Plan for further information.</p>
<b>Wastewater Treatment</b>				
<p><b>Wastewater Treatment</b></p> <p>Commercial developments discharging trade effluent should connect to the public foul sewer or combined sewer network where it is reasonable to do so subject to a trade effluent consent from the relevant sewerage undertaker.</p>	-	Chapter 9	Water and Wastewater infrastructure	<p><b>Wastewater Treatment</b></p> <p>All spaces at the Development will be provided with suitable connections to the sewer network.</p>
<p><b>Wastewater Treatment</b></p> <p>Developments should be properly connected and post construction checks should be made by developers to ensure that misconnections do not occur.</p>		Chapter 9	Water and Wastewater infrastructure	

## Appendix A- BREEAM Pre-Assessment Details

### Performance by environmental category



### BREEAM Rating

	Credits available	Credits achieved	Credits targeted	% Credits achieved	Weighting	Category score
Man	21.0	14.0	0.0	66.67%	11.00%	7.33%
Hea	18.0	14.0	0.0	77.78%	14.00%	10.88%
Ene	23.0	13.0	0.0	56.52%	16.00%	9.04%
Tra	12.0	7.0	0.0	58.33%	10.00%	5.83%
Wat	9.0	6.0	0.0	66.67%	7.00%	4.66%
Mat	14.0	5.0	0.0	35.71%	15.00%	5.35%
Wst	11.0	8.0	0.0	72.73%	6.00%	4.36%
LE	13.0	11.0	0.0	84.62%	13.00%	11.00%
Pol	12.0	10.0	0.0	83.33%	8.00%	6.66%
Inn	10.0	0.0	0.0	0.00%	10.00%	0.00%
<b>Total</b>	<b>143.0</b>	<b>88.0</b>	<b>0.0</b>	<b>61.54%</b>	<b>-</b>	<b>65.15%</b>
<b>Rating</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<div>★★★★☆</div> <b>Very Good</b>



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