

# Sustainability Statement

145 – 147 Camden Road, London, NW1 9HA

Iceni Projects Limited on behalf of  
Harry Motors Ltd

March 2016

16-S005-002v4



# CONTENTS

1. EXECUTIVE SUMMARY.....	4
2. INTRODUCTION.....	5
3. PLANNING CONTEXT.....	6
4. SITE CONTEXT APPRAISAL.....	12
5. SUSTAINABLE DEVELOPMENT STRATEGIC RESPONSE.....	16
6. SUMMARY.....	22

## APPENDICES

- A1. SITE PLAN
- A2. INDICATIVE BREEAM PRE-ASSESSMENT
- A3. GENERAL NOTES

# 1. EXECUTIVE SUMMARY

	<b>Economic</b>	<b>Social</b>	<b>Environmental</b>
1.1 This Statement presents the sustainable development achievements for a proposed office at 145-147 Camden Road.	The development would provide much needed new office floorspace in a sustainable location, therefore helping to promote the local area for regeneration and predicted improvements to established local conditions such as crime and lack of services.	New office space would be affordable and predicted to be primarily of use to small and medium enterprises.	The existing Site is entirely hardstanding with little or no biodiversity value. The proposals include a green roof & green wall to help enhance biodiversity.
1.2 The proposals include the re-development of the current car park to provide approximately 800sq.m of office floor space split across 4 storeys.	The new employees of the Site would serve to enhance the vitality and viability of the amenities & services of the local area.	Creation of pleasant, safe and comfortable working environments, with predicted low maintenance costs for tenants.	Water consumption will be significantly reduced by installing low flow fixtures and targeting the maximum number of credits in the BREEAM water category.
1.3 The scheme delivers effective balancing of the three pillars of sustainable development as defined in the NPPF and is sympathetic to local planning policy. These deliverables would include:	The proposal would be the most efficient use of land for a locality that has a demonstrable need for high quality office space. Short term employment during construction would also aid the area.	A sustainable workplace location within walking distance of a wide range of cultural, retail and commercial destinations in Camden and Greater London.  Cycle spaces for use of new employees on site to stimulate car-free travel, with the associated increased interaction between individuals this brings.	The London Plan carbon target of 35% below Building Regulations will be targeted through passive design, energy efficiency and installation of PV.  BREEAM "Excellent" will be targeted for all proposed spaces, therefore committing to sustainability achievements during construction.

## 2. INTRODUCTION

2.1 Icen Projects Ltd was commissioned by Harry Motors Ltd to produce a Sustainability Statement for a proposed office scheme at 145 – 147 Camden Road, London, NW1 9HA.

### Site & Surroundings

---

2.2 The Application Site currently comprises a car park used for the adjacent 'Auto Deutsche' car restoration workshop, with this building located to the south-east of the Site occupying the developable area directly above the railway. Camden Road borders the site to the south and south-east, and the Thameslink railway line is located directly west, with services from Bedford to St. Pancras International & London Blackfriars, with some services operating to Brighton.

2.3 To the north and east is Canteloves Gardens which is maintained by Camden Borough Council and operates as a children's play area, a skateboarding bowl, a free to use outdoor gym and a multi-games use area. This area is publically accessible up to 10pm each day.

2.4 The Site is situated in a predominantly residential area of Camden / Kentish Town, with some limited commercial uses along Camden Road. The topography of the Site is generally flat and level.

### The Proposed Development

---

2.5 Planning permission is to be sought for a proposed re-development of the existing car park to a new four-storey office of approximately 950sq.m of gross internal floorspace, with associated cycle storage, a bin store, lift access throughout and balcony space on each floor.

### Report Objective

---

2.6 The purpose of this Statement is to demonstrate that the applicant's development achieves the sustainable development requirements relevant to local, regional and national priorities. The report is structured to meet this as follows:

- Section 3 discusses the planning context and policies which are relevant to sustainable development;
- Section 4 provides a review of the site context in relation to the three pillars of sustainable development, and the established need for the proposed scheme;
- Section 5 discusses the development response to the policy drivers of sustainable development; and
- Section 6 summarises the development's design response and the social & economic incentives for this use.

### 3. PLANNING CONTEXT

- 3.1 Sustainable development is defined within the terms of resolution 24/187 of the United Nations General Assembly, which states:

*"Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs"*

- 3.2 The United Nations 2005 World Summit Outcome Document refers to the "interdependence and mutually reinforcing pillars" of sustainable development as economic development, social development and environmental protection.
- 3.3 In addition to the above, sustainable development approaches are incorporated within policy at all levels as set out below;

#### European

---

- 3.4 The 2009 Review of European Union (EU) Sustainable Development Strategy underlines that the EU has mainstreamed sustainable development into a broad range of its policies and includes:
- **Renewable Energy Directive (2009)** – the Directive on the promotion of the use of energy from renewable sources (2009/28/EC), The Renewable Energy Strategy (RES) Directive sets the objective of reaching 20% of the EU's energy consumption through renewable energy sources by 2020. The UK Renewable Energy Strategy in 2009 indicates that delivering 15% renewable energy by 2020 is feasible through domestic action.
  - **Energy Performance Buildings Directive (adopted 2002 and recast 2010)** – recast and adopted 19th May 2010, the Directive fixes 2020 as the deadline for all new homes to be "nearly zero energy" (2010/31/EU). This target is incorporated within the UK Building Regulations Part L: Conservation of fuel and power. The measure to determine a reduction in energy demand, the National Calculation Method (NCM), includes iSBEM, thermodynamic models and the Standard Assessment Procedure (SAP). These methods provide a rating through the reduction of carbon dioxide (CO<sub>2</sub>) emissions, and are the national standard.
  - **Construction Products Regulation (2011)** – The directive (305/2011 March 2011) lays down harmonised conditions for the marketing of construction products and replaces the Construction Products Directive (89/106/EEC). The Regulation came into force on 1 July 2013. The regulations harmonise the technical specifications across EU states and are incorporated within UK Building Regulations. Within the regulations are technical specifications which include point 7: sustainable use of natural resources.
  - **Water Framework Directive (2000)** – The Directive (2000/60/EC) firstly sets out authorities for water management (2003) then the economic and environmental characteristics of the areas (2004) and launched monitoring networks (2006). The implementation is through six-year recurring cycles, the first being 2009-2015. In 2010 the water pricing policies were introduced and provide incentives for sustainable water use through the "polluter pays" principle.
  - **Revised Water Framework Directive (2008)** – The framework Directive (2008/98/EC) entered into force on 12 December 2008. The revised directive provides a range of measures by means

of comitology procedure (e.g. end-of-waste criteria for specified waste streams). This directive is aimed at businesses and other organisations which take decisions on a day-to-day basis about whether something is or is not waste (e.g. where the substance or object has a value or a potential use or where the decision is about whether waste has been fully recovered or recycled and has therefore ceased to be waste).

- **Biodiversity Framework (2012)** – This new strategy lays down the framework for EU action over the next ten years in order to meet the 2020 biodiversity target. The target responds to habitat change, overexploitation of natural resources, the introduction and spread of alien species and climate change where the EU halts the loss of biodiversity and the degradation of ecosystem services.
- **2020 Strategy for smart, sustainable and inclusive growth (2011)** – This strategy replaces the Lisbon strategy (2010) and is the growth strategy for the next decade. It sets three main priorities: smart growth – developing an economy based on knowledge and innovation; sustainable growth – promoting a more resource-efficient, greener and more competitive economy; and inclusive growth – fostering a high-employment economy delivering social and territorial cohesion.

## National

---

### National Planning Policy Framework (NPPF)

3.5 The Department for Communities and Local Government determines national policies on different aspects of planning and the rules that govern the operation of the system. Accordingly the National Planning Policy Framework (NPPF), which came into force in March 2012, aims to strengthen local decision making.

3.6 As set out within Paragraph 14:

#### NPPF Paragraph 14 [extract]

At the heart of the National Planning Policy Framework (NPPF) is a “presumption in favour of sustainable development”, which should be seen as a golden thread running through both plan-making and decision-taking.

3.7 The 12 core principles set out in Paragraph 17 set out the means by which sustainable development will be achieved through the planning system with further details set out within Paragraphs 18 to 219. The NPPF requires the planning system to perform a number of roles:

### NPPF Paragraph 7 [extract]

- **An economic role** – contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure;
- **A social role** – supporting strong, vibrant and healthy communities, by providing the supply of housing to meet the needs of the present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community’s needs and supports its health, social and cultural well-being; and
- **An environmental role** – contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy.

### National Planning Practice Guidance (NPPG)

- **Climate Change** – advises how planning can identify suitable mitigation and adaptation measures in plan-making and the application process to address the potential for climate change.
- **Design** – design interacts on how people interact with places and can affect a range of economic, social and environmental objectives. The guidance states that planning policies and decisions should seek to ensure that the physical environment supports these objectives.
- **Natural Environment** – explains key issues in implementing policy to protect biodiversity, including local requirements.
- **Renewable and Low Carbon Energy** – the guidance is intended to assist local councils in developing policies for renewable energy in local plans, and identifies the planning considerations for a range of renewable sources.

3.8 On the 25 March 2015, a ministerial announcement withdrew the Code for Sustainable Homes as a standard within Local Planning Authority development plans as part of the Deregulation Bill 2015 (following Royal ascent), stating:

*“Local Planning Authorities ... should not set any additional local technical standards or requirements relating to the construction, internal layout or performance of new dwellings... the Government’s policy is that planning permission should not be granted requiring, or subject to conditions requiring, compliance with any technical housing standards other than for those areas where authorities have existing policies on access, internal space and water efficiency”*

### Regional

---

3.9 Within London, key sustainable development principles for economic, environmental and social development are set out below:



### The London Plan (March 2015)

3.10 The London Plan is the overall strategic plan for London and includes policies for sustainable development as follows:

- **Policy 5.3: Sustainable Design & Construction** – seeks to encourage the incorporation of design standards contained within the London Plan Sustainable Design & Construction Supplementary Planning Document (SPD), and introduces major sustainability priorities to be demonstrated within all development in London.
- **Policy 5.11: Green Roofs and Development Site Environs** – promotes the incorporation of planting on roofs and walls to help minimise the impact of flooding, overheating (through active cooling), and enhancement of biodiversity.
- **Policy 5.15: Water Use and Supplies** – encourages all development to minimise the use of mains water through the incorporation of water saving measures and equipment.

### Sustainable Design and Construction Supplementary Planning Guidance (April 2014)

3.11 This document provides guidance on the implementation of London Plan policy 5.3 as well as a range of policies relating to environmental sustainability. Best practice and priorities listed in this SPG that are of relevance are listed below:

- **2.6 Water Efficiency** – encourages all new non-residential developments to achieve the maximum number of water credits in a BREEAM assessment, or the ‘best practice’ level of the Association of Environment Conscious Building water standards. It also encourages all developments to be designed to incorporate rainwater harvesting.
- **2.7 Materials & Waste** – encourages at least three of the key elements of the building envelope to be rated A+ to D in the BRE’s *Green Guide to Specification*, and at least 50% of all timber used to be certified by FSC or PEFC.
- **4.3 Air Pollution** – contractors should follow the guidance set out in the London Plan ‘Minimising dust and emissions from construction and demolition’ SPG during construction.

### Local

---

3.12 In determining the local context, the London Borough of Camden policy & guidance is provided through the following documents:

- Camden Core Strategy 2010 – 2025, Parts 1 & 2;
- Camden Development Policies 2010 – 2025;
- Camden Planning Guidance – Design (July 2015); and
- Camden Planning Guidance – Sustainability (July 2015).

3.13 Both the guidance documents above have been adopted to support the Local Development Framework (LDF) and are therefore material considerations for determination of any proposals within the Borough.

- 3.14 The new Camden Local Plan is currently at public consultation stage, running until 4 April 2016; when implemented, it will replace the current Core Strategy & Development Policies documents. Although not formally adopted at present, the draft policies relevant to sustainable development have been considered within this statement.

#### **Core Strategy 2010 – 2025 (Parts 1 & 2)**

- 3.15 The Core Strategy sets out the key elements of the Council's vision for Camden and is the central document of the LDF. Policies of relevance to this statement are as follows:

- **Policy CS3: Other highly accessible areas** – promotes office use classes in the town centres of Camden Town & Kentish Town as this will encourage the users to use public transport.
- **Policy CS5: Managing the Impact of Growth and Development** – demands that consideration is given to providing sustainable buildings and spaces of high quality, and development that seeks to promote strong and successful communities.
- **Policy CS13: Tackling Climate Change through Promoting Higher Environmental Standards** – requires all development to take measures to minimise the effects of, and adapt to, climate change through the highest feasible environmental standards.
- **Policy CS14: Promoting High Quality Places and Conserving our Heritage** – requires all development to meet the highest standards of design including accessibility.

#### **Development Policies 2010 – 2025**

- 3.16 The development policies document sets out more detailed planning criteria for assessing proposals. Policies of relevance are as follows:

- **Policy DP22: Promoting Sustainable Design and Construction** – expects major non-residential development to achieve an 'excellent' rating in BREEAM assessments from 2016, and incorporate climate change adaptation measures such as green infrastructure to maximise passive cooling during summer months when overheating risk is highest.
- **Policy DP23: Water** – requires all development to incorporate water efficient features and where possible, greywater and rainwater recycling on-site.

#### **Camden Planning Guidance: Design (July 2015)**

- 3.17 Although primarily associated with architectural guidance for proposals within the Borough, this SPD does highlight the Council's priorities with regards to designing safer environments, waste management during operation, building services equipment, and landscaping.

#### **Camden Planning Guidance: Sustainability (July 2015)**

- 3.18 This SPD provides guidance on how to achieve the required carbon reductions of the borough and deliver more sustainable developments, and supports Policies CS13, DP22 & DP23 outlined above. The SPD is set out to cover all topics that constitute the national, regional and local vision of sustainable development within proposals such as energy & water, materials, green infrastructure and flooding. Relevant expectations noted in the SPD with regard to the various sustainability topics are as follows:

- **Materials** – All major developments should source 15-20% of the total value of materials used from recycled and reused sources.
- **BREEAM** – the SPD requires all major non-domestic proposals to include a BREEAM pre-assessment meeting the relevant targets of Policy DP22. This pre-assessment must be undertaken by a licenced BREEAM assessor.
- **Green Infrastructure** – an expectation for all development to incorporate brown roofs, green roofs and green walls unless it is demonstrated it is not possible.

#### **Draft Local Plan (Submission Version, 2016)**

3.19 Although not adopted presently, this document does provide an indication of the key policy objectives for the area over the coming decades, and gives the following with regard to sustainable development:

- **Draft Policy CP1: Health and Wellbeing** – requires all development to positively contribute to creating high quality, active, safe and accessible places
- **Draft Policy A1: Managing the Impact of Development** – proposals are encouraged to consider their negative effects on issues such as artificial lighting levels, noise, odour, fumes & dust, microclimate, and impact upon water infrastructure.
- **Draft Policy CC2: Adapting to Climate Change** – requires all proposals >500sq.m floorspace to provide a sustainability statement discussing design & construction measures such as application of green roofs and flooding mitigation. Requires all major non-domestic developments to achieve 'Excellent' in BREEAM assessments.

## 4. SITE CONTEXT APPRAISAL

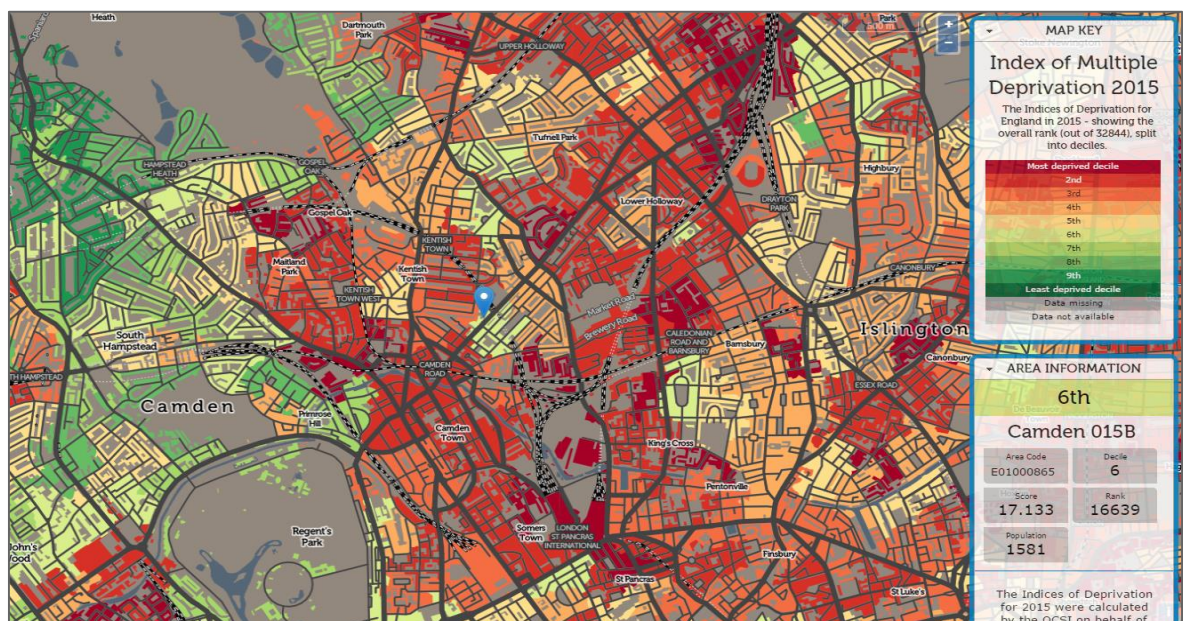
- 4.1 In line with the “three pillars” of sustainability, outlined above, the site context has been considered with regard to its economic, social and environmental conditions.

### Socio Economic Context

#### Indices of Multiple Deprivation

- 4.2 The English Indices of Deprivation use 38 separate indicators, organised across seven distinct domains of deprivation. The Indices of Multiple Deprivation data are then constructed by combining the seven transformed domain scores, using the following weights; income (22.5%); employment (22.5%); health and disability (13.5%); education, skills and training (13.5%); barriers to housing and services (9.3%); crime (9.3%); and living environment (9.3%).
- 4.3 The IMD can be used to rank every Lower Layer Super Output Area in England according to their relative level of deprivation. The data is not a measure of affluence; therefore the area ranked as the least deprived is not necessarily the most affluent. The IMD data comprise a numeric value in a scale of 1 to 32,844 (1=most deprived) and are represented in a coloured scale of deciles (1=most deprived – dark red; 10=least deprived – light yellow) in the respective map.
- 4.4 Government data (illustrated below) indicates that the Site lies within an area ranking 16,639, where 1 is the most deprived. The area is therefore considered to have a relatively low level of deprivation overall, however the domains bordering the Site to the south-west and south-east are amongst the most deprived in the country, ranking 4,491 and 2,286, respectively.

Figure 4.1 Department for Communities and Local Government IMD Data Map (2015)



**Table 4.1 IMD Domain Scores (Out of 32,844 and where 1 is most deprived)**

Domain	Camden 015B
Rank of Income	21,469
Rank of Employment	23,171
Rank of Health and Disability	21,749
Education Skills and Training	29,720
Rank of Barriers to Housing and Services Score	13,471
Rank of Crime Score	1,577
Rank of Living Environment Score	5,335
<b>Rank of IMD Score</b>	<b>16,639</b>

4.5 As shown above, the area in which the Application Site is located exhibits significantly higher deprivation rates for the 'Living Environment', 'Crime' and 'Barriers to Housing & Services' domains. The 'Living Environment' is measured on quality of housing and external factors such as air quality and road traffic accidents, whereas 'Barriers to Housing & Services' measures the physical and financial accessibility of housing and services.

4.6 This therefore indicates an area with significantly high levels of income, employment and skills of the population, contrasting with high levels of crime and a shortage of housing & services locally.

**Public Transport / Accessibility**

4.7 In the context of these proposals, access to sustainable transport options and local amenities has implications for all three pillars of sustainable development as this is likely to be the determining factor if employees choose to commute and travel around by car, which would increase local air pollution and greenhouse gas emissions, thereby contributing to climate change and societal health problems. It would also likely increase congestion and strain on road infrastructure, thereby reducing productivity of local road users and the employees themselves as more time is spent on the road. This would in turn, both through decreased efficiency of workforce and increased maintenance of the road network, divert funding from other potentially more pressing economic needs.

4.8 As is the case with much of the wider Camden and Kentish Town area, the Site benefits from being in close proximity to a range of public transport services and has a PTAL rating of 4. Public transport options include the following:

- Kentish Town underground station (Northern Line) & overground national rail station (Thameslink services) (950m, approx. 11 minutes walking time from Site) – approx. 1 train every 5 minutes during peak hours on the Northern Line to central London destinations, and approx. 4 Thameslink trains per hour during peak hours from major commuter towns such as St. Albans.

- Camden Road TfL overground station (600m, approx. 7 minutes walking time from Site) – approx. 8 trains per hour during peak hours from a wide range of Greater London town centres such as Hackney Central, Stratford, Richmond, and Clapham Junction.
- A range of bus stops on Camden Road (closest stop is opposite the Application Site (Sandall Road (Stop D)); 15m walking distance) – regular buses to Euston Station, Oxford Street, Holloway, and Finsbury Park.

4.9 Relevant amenities and services identified in the locality for the proposed offices use are as follows:

- Tesco Express with 24 hour publicly accessible ATM, Camden Road (50m walking distance)
- Adjacent to the public park of Canteloves Gardens, which can be used by employees as an area to congregate informally. This park also has a free-to-use outdoor gym.
- Kentish Town Sports Centre, Grafton Road; including a gym, studios, a 30m swimming pool, and is fully accessible to all potential users (1000m, approx. 12 minutes walking time)
- Post office, Brecknock Road (550m, approx. 7 minutes walking time)
- Pharmacy, York Way (500m, approx. 7 minutes walking time)
- Medical Centre, North Road (800m, approx. 11 minutes walking time)
- Nursery / pre-school, Camden Square (400m, approx. 5 minutes walking time)

#### **Economic Context**

4.10 Although the general economic climate of the local area has been covered above, it is also important to assess other indicators of the economy in the context of the proposed use of offices, and if the development can be considered to enhance economic sustainability of the area.

4.11 The Borough of Camden is one of the most successful employment areas in the country, with approximately 24,000 businesses contributing £20 billion into the economy and generating 275,000 jobs (almost 2.5 times the current resident workforce, demonstrating the large amount of commuters that travel to the area) (source: Camden Town Unlimited).

4.12 With a projected population increase in the area much greater than other London Boroughs and office-based industrial groups such as business administration and financial & insurance observing significant growth (17% & 7.7% growth between 2009 and 2012, respectively), the demand for office space is expected to be much greater than most other London boroughs over the coming century (URS Camden Employment Land Study, 2014). This therefore indicates that the proposed use can contribute to providing some of this demonstrable need for high-quality office space in an accessible location of the borough.

#### **Environmental Context**

---

4.13 The Site has been subject to a previous contaminated land report, albeit for a different proposal. This identified the presence of petrol storage vessels underground along with petroleum-contaminated

soil, as the Site was previously used as a petrol station. Measures are to be implemented to prevent exposure of potential users to this contaminant source and this is discussed in the proceeding section.

- 4.14 According to the Environment Agency Flood Map, the Site is not in an area designated at risk of flooding from rivers or sea.
- 4.15 An Ecological Appraisal has been completed for the Application Site by LUC which confirmed that the site is considered to be of negligible ecological value overall, and no buildings or habitats on site present likely nesting areas for bats or birds.
- 4.16 The Site is within a dense urban context and is completely occupied by hardstanding. The Site itself is therefore considered to be of low ecological value, with Canteloves Gardens adjacent representing a biodiversity asset for the local area. As discussed in subsequent sections, the proposed design has emphasised protection and improvements to biodiversity wherever possible.

## 5. SUSTAINABLE DEVELOPMENT STRATEGIC RESPONSE

5.1 This section presents an overview of the proposed sustainable design and construction features for the scheme which address the policy requirements of the NPPF, London Plan and Camden suite of development plan documents. The proceeding sub-sections are structured around the Camden 'CPG3: Sustainability' document which provides the Council's vision of sustainable development in the borough.

### **Energy & Carbon Dioxide Emissions**

---

5.2 Energy has been separately addressed within the accompanying Energy Statement produced by Icen Projects Ltd and fuller detail of the energy strategy can be found in this document.

5.3 The approach taken for the scheme is based upon the principles of the Energy Hierarchy and is consistent with the priorities of the planning policies. It is proposed that the development will reduce its carbon emissions principally by reducing energy demand and by using energy more efficiently.

5.4 The proposed energy strategy will target a 35% improvement on the Building Regulations Part L2A 2013 CO<sub>2</sub> emissions baseline, with a target of 20% of this reduction in emissions to be met by roof-mounted photovoltaics. This therefore exceeds the mandatory energy & carbon emissions requirements associated with targeting BREEAM 'Excellent'.

### **Water Efficiency**

---

5.5 Considering the predicted use of the offices, the most significant use of water will likely be within the toilets. Other uses are considered to be minimal and be limited to staff kitchenettes.

5.6 In line with Policy DP23 of the Camden Development Policies document and The London Plan Sustainable Design & Construction SPG, A combination of the following measures will be included to reduce the amount of water consumption for the building and target full credits in the BREEAM water category:

- Basin taps will have flow restrictors fitted to reduce the flow to ≤4 litres/minute
- All WCs will be dual flush – 4.5L full flush, 2L half flush
- Kitchen taps to be single lever with break-point, allowing a maximum flow rate of ≤6 litres/minute
- If installed, showers shall have a flow rate ≤6 litres/minute
- If installed, urinals will have automatic flushing installed and limited to 2 flushes per hour of ≤4.5 litres/bowl



## **Sustainable Use of Materials**

---

- 5.7 In line with the Sustainability SPD's 'five key measures' for minimising the use of resources, the following has been considered within the design:

### **Managing Existing Resources**

- 5.8 Since the current Site is entirely covered with an existing car park, this concrete slab will be re-used where practicable (either in crushed form to be used in the new sub-base, or in its current form) to reduce demolition waste sent to landfill. Additionally, emphasis shall be placed on the contractor at construction stage to source suitable building materials from recycled/secondary sources wherever possible.

### **Construction Waste**

- 5.9 A Site Waste Management Plan (SWMP) shall be produced to optimise materials resource efficiency in line with the Waste Hierarchy (Reduce, Reuse, Recycle). The SWMP will detail the design measures towards optimum use of materials, set specific targets for construction and demolition waste generation and appropriate mechanisms/protocols for segregating waste on-site and monitoring overall waste management.
- 5.10 The development will aim for more than 80% by tonnage of construction waste to be diverted from landfill as per minimum.

### **Sustainable Materials**

- 5.11 Materials for the development will be selected in consideration of the Green Guide to Specification. The Green Guide represents a review of an extensive list of building materials according to their lifecycle environmental impact, including embodied energy/carbon. Environmental performance is rated on a scale of A+ to E, where A+ represents the best performance. For the proposed scheme, it is intended that at least 75% of the main elements of the building achieve an A rating or higher, therefore being in compliance with the guidance given in the London Plan Sustainable Design & Construction SPG.
- 5.12 Timber will be selected and purchased in consideration of sustainability certification. It is intended that all structural timber elements and temporary timber (e.g. for scaffolding) will be sourced from certified sources under the FSC and/or PEFC.
- 5.13 In addition to the above, efforts will be made to source materials (including insulation) from suppliers that operate Environmental Management Systems (e.g. ISO14001) or products that are BES6001 certified on the basis that companies/products certified to these standards are likely to better manage their environmental impacts. Local suppliers and UK based manufacturers will be preferred.

## **Sustainability Assessment Tools**

---

- 5.14 In line with Policy DP22 of the Camden Development Policies document, it is proposed to assess the development using the BREEAM scheme with an “Excellent” rating targeted for the entire building. Additionally, 60% of credits in the Energy & Water BREEAM categories and 40% of credits in the Materials category are targeted.
- 5.15 This Sustainability Statement has been undertaken by a qualified and licenced BREEAM Assessor (name: Joseph Dean; licence number: ICENI-JD37) and the indicative BREEAM pre-assessment scoring per issue and category is included in Appendix A2.

## **Green Infrastructure & Biodiversity**

---

- 5.16 Due to the Site’s constrained area, the ability to influence biodiversity at ground level is limited. Therefore in order to enhance the biodiversity of the Site, it is proposed to incorporate a green roof which will also aid in increasing the efficiency of the solar panels proposed as part of the energy strategy (see Energy Statement, IcenI Projects Ltd). Various research conducted on the combined installation of both green roofs and photovoltaics on flat roofs confirms that the cooling effect provided by the green roof as the vegetation transpires can improve efficiency of the photovoltaics by up to 10% due to the temperature coefficient of the panels (source: Hui & Chan, 2011).
- 5.17 Additionally, a green wall is proposed for the north and north-east ground floor walls of the building facing onto Canteloves Gardens. This is to aid in mitigation of perceived amenity loss to users of the park, and also to further enhance the biodiversity of the Site and surrounding area following development.
- 5.18 Details on the type and extent of the green roof & green wall proposed will be made available as the design develops, subject to elements agreed by a suitably qualified ecologist during the construction phase.
- 5.19 Impacts to local biodiversity shall be minimised during operation through any proposed external lighting being designed in compliance with the Institution of Lighting Professionals (ILP) *Guidance notes for the reduction of obtrusive light* (2011), therefore decreasing unnecessary light pollution for fauna.

## **Flooding**

---

- 5.20 As the existing Site comprises entirely of hardstanding and the proposals include a permeable green roof, the impermeable area of the Site is expected to decrease following development, therefore likely reducing the risk of flooding and surface water runoff to neighbouring properties.

## **Adapting to Climate Change**

---

### **Minimising Overheating**

- 5.21 Details of thermal mass, orientation and natural ventilation for the proposed building are provided in the accompanying Energy Statement as part of the overall overheating mitigation strategy.
- 5.22 As indicated above, the inclusion of a green roof and green wall will aid in microclimatic cooling for the immediate area surrounding the Site. This and the immediate surroundings of Canteloves Gardens with its extensive trees and landscaping will aid in active cooling of the office building during summer months.

## **Pollution Prevention**

---

### **Air Pollution**

- 5.23 Best practice methods for minimising the formation of dust and emissions from construction activities shall be implemented, in line with the London Plan's *Control of Dust and Emissions During Construction and Demolition* SPG, as appropriate to the specific site and proposed activities. Control measures may include:
- Appropriate site layout;
  - Solid screens/barriers or other physical boundaries around dust/emission generating activities;
  - Good site maintenance and regular inspections for liquid spillages;
  - Sealed storage for cement, sand and fine aggregates.
- 5.24 The proposals will help stimulate the use of sustainable forms of transport that would help improve air quality in the local area; 12 cycle spaces are proposed and this is discussed in more detail in proceeding sections.

### **Noise Pollution**

- 5.25 No air conditioning units are currently proposed for the development, therefore reducing the potentially noise-emitting external plant associated with this technology and further demonstrating the perceived minimal impact to local amenity.

## **Sustainable Transport**

---

- 5.26 As discussed within the site context appraisal section, the Site benefits from being in close proximity (generally within 12 minutes walking distance) to a wide range of sustainable transport options, such as Kentish Town & Camden Town underground stations, and bus stops on the opposite side of the road from the development serving a wide range of commuter town destinations.

- 5.27 Additionally, it has been confirmed that all key amenities and services predicted to be required by the users of the offices are within a 12 minute walking distance of the Site, further reducing the need for car-based travel.
- 5.28 The proposals include a secure cycle store at ground floor level with access from Camden Road. This store will have space for approximately 12 cycles that can be locked to Sheffield stands within, and will be secured behind a lockable door to help reduce impact of the established high local crime levels on promotion of this sustainable form of transport. CCTV is also proposed for inside the cycle store to help reduce associated crime.
- 5.29 The current proposals are for the Site to be entirely car-free in order to encourage users of the new offices and the existing car restoration workshop to use sustainable transport options as any nearby available parking will be at street level and charged accordingly.

### **Health & Wellbeing**

---

- 5.30 As per the Camden draft Local Plan Policy CP1, the proposed new building has been designed with health & wellbeing of new occupants as a key consideration. Improved internal office environments have wide-ranging effects on all three pillars of sustainable development; for example, short term sick leave has been found to be 35% lower in offices ventilated with greater supply rates of outdoor air, and there is up to a 10% reduction in performance in offices that do not optimise thermal comfort (source: World Green Building Council). Therefore this impacts economic performance of companies and general societal wellbeing of employees, and combined with the need to use mechanical heating/cooling more often in poorly designed offices, an office environment can only be considered sustainable if these issues are mitigated through design.
- 5.31 All office spaces will be designed to control glare into the spaces whilst not inhibiting daylight and have Building Regulations Part F compliant rates of air flow through natural façade ventilator system to the inner skin of the dual skin façade (south west elevation, which is shown as fully glazed) and mechanical ventilation for all other main office areas. This will help minimise the need for artificial lighting and carbon-inefficient cooling, and further details / impacts of these measures on the overall CO<sub>2</sub> emissions of the building are provided in the Energy Statement (produced by Icen Projects Ltd) accompanying the application.
- 5.32 Thermal comfort will be considered in the context of designing the appropriate types of space heating and natural façade ventilators for each intended use, allowing occupants to control internal conditions according to preference. This will be investigated further during the detailed design stage.
- 5.33 As shown in the Planning Policy & Site Context Appraisal sections, crime is of concern in the local area. In order to minimise this perceived fear of crime, the design team will engage in consultation

with a Crime Prevention Design Advisor early in the design stages so that the Secured by Design principles are effectively incorporated in the development.

## 6. SUMMARY

- 6.1 This Sustainability Statement provides an overview as to how the proposed scheme contributes to sustainable development in the context of the siting, design and construction considerations.
- 6.2 A review of the London Borough of Camden's planning policy has identified a number of requirements relating to sustainable development. Of these, policies CS5 (*Managing the Impact of Growth and Development*) & CS13 (*Tackling Climate Change through Promoting Higher Environmental Standards*) of the Core Strategy, policy DP22 (*Promoting Sustainable Design and Construction*) of the Development Policies document and the Camden CGG: Sustainability, are considered of greatest pertinence.
- 6.3 The proposed scheme includes re-development of the existing car park to provide a new four-storey office of approximately 950sq.m of floorspace.
- 6.4 A review of local socio-economic conditions and trends identified a sustainable location for the proposed office use. There is an existing high demand in the borough for quality, affordable office space, especially for the growing industries of business administration and financial & insurance. The Site offers an excellent location in terms of public transport options, nearby amenities and services such as parks and day-care centres. The influx of building users will offer a stimulus to the local economy from which local business and the wider community will invariably benefit.
- 6.5 The development proposals encapsulate the ambitions of sustainable development through the following:
- Provides high-quality office floor space in a sustainable location with significant current demand and predicted growth in industries that require this;
  - Prioritises health & well-being of the building users through effective natural ventilation systems and a commitment to incorporate Secured by Design principles during construction;
  - Encourages sustainable transport options for both the new users and existing users of the adjacent car restoration workshop by providing a car-free development. A cycle store is also proposed for new users of the office building;
  - The biodiversity of the site and surrounding area is predicted to increase following development through the proposed green roof and green walls;
  - Water use during operation will be minimised by installation of low fittings throughout; and
  - The building will be subjected to a BREEAM assessment during construction with a target of "Excellent" rating.
- 6.6 Overall, the proposals for the scheme are in line with the overarching principles of sustainable development as well as the policy requirements of the planning authority.

## **A1. SITE PLAN**



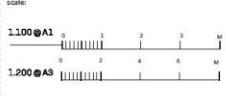
**copyright:**  
 The design and drawings remain the property of Paul McAneary Architects Ltd. The client for this project shall be deemed to own the design and drawings to the extent of any copyright payment of a contract fee. The firm is not responsible for the design and drawings that are not approved, or modified, or used without the permission of Paul McAneary Architects Ltd.

**disclaimer:**  
 This drawing has been prepared from a survey drawing that was based on rough survey measurements that were taken for OUTLINE DESIGN PURPOSES ONLY, which is NOT intended to be a professional full structural survey. All works on drawings will be the responsibility of the client. The drawing is not intended to be used for construction and shall not constitute an offer of any services. The drawing is not intended to be used for any other purpose. All dimensions are checked carefully before any work commences or any materials are ordered. If any discrepancies are noticed between the drawing and any other contract document then please contact Paul McAneary Architects Ltd immediately.

Paul McAneary Architects Ltd are designers registered as an RIBA Chartered Practice

**revision notes:**

no.	by	date	description	checked
1	PM	02/06/2013	Final issue drawing survey data as per drawing notes	
A				
B				
C				
D				
E				
F				
G				
H				
I				
J				
K				
L				



**project name:**  
 145-147 Camden Road

**postcodes:**  
 NW1 9HA

**issue:**  
 Pre-planning

**date:** Apr 2013 **drawn by:** FF **checked by:** PM

**drawing note:**  
 Not for construction

**drawing name:**  
 Existing Site Plan

**project number:** PMA168 **drawn no:** EX01 **revision:** /

6 Fitzroff Street  
 London W1C 2HJ  
 T +44 20 72 400 500  
 F +44 20 72 406 508  
 info@paulmcaneary.com  
 www.paulmcaneary.com



**Paul McAneary**  
 Architects Ltd



## A2. INDICATIVE BREEAM PRE-ASSESSMENT

### BREEAM Offices 2014

Indicative Pre-assessment Results for 145-147 Camden Road, London

Issue ID	Description	Aim	Issue Comment	Available Credits	Predicted Credits	Weighted Score (%)
<b>Management</b>						<b>12%</b>
Man 1	Project Brief and Design	To recognise and encourage an integrated design process that optimises building performance.	Requires provision of meeting minutes with the BREEAM assessor; and a section within the design & access statement confirming that the minimum BREEAM-specified consultation content has been met.	4	2	1.14
Man 2	Life Cycle Cost and Service Life Planning	To deliver whole life value from investment and promote economic sustainability by recognising and encouraging the use and sharing of life cycle costing and service life planning to improve design, specification and through-life maintenance and operation.	Requires an elemental life cycle cost analysis which gives a range of options based on multiple cash flow scenarios; a component level life cycle cost plan to be developed during the technical design stage, and the overall capital cost in £k/sqm is to be provided.	4	1	0.57
Man 3	Responsible Construction Practices	To recognise and encourage construction sites which are managed in an environmentally and socially considerate, responsible and accountable manner.	Requires a commitment by the site manager to only use timber (for all uses on site) from responsible sources, operate a third party certified Environmental Management System (EMS) during the construction operations, register the site against CCS, monitor transport to and from site and energy/water consumption.	6	5	2.86
Man 4	Commissioning and Handover	To encourage a properly planned handover and commissioning process that reflects the needs of the building occupants.	Requires a commitment to commission/test all installed building services, appoint specialist commissioning companies for the air conditioning systems and mechanical ventilation systems, appoint a thermographic survey, and produce a building user guide for occupants.	4	3	1.71
Man 5	Aftercare	To provide post-handover aftercare to the building owner/occupants during the first year of occupation to ensure the building operates and adapts, where relevant, in accordance with the design intent and operational demands.	Requires a meeting between the M&E team and the occupier during handover to introduce the building user guide and training content, and be on-site if required for the first 4 weeks following occupation. Requires the occupier to commit to monitoring energy & water consumption for at least 12 months following occupation. Seasonal commissioning of air conditioning and mechanical ventilation systems to be committed to for at least 12 months, and a post-occupancy evaluation exercise by a third party to be carried out.	3	2	1.14
				21		7.43
<b>Health &amp; Wellbeing (1/2)</b>						<b>15%</b>
Hea 1	Visual Comfort	To ensure daylighting, artificial lighting and occupant controls are considered at the design stage to ensure best practice in visual performance and comfort for building occupants.	Requires a daylight study to be completed and specific daylight factors to be achieved. Requires all office spaces to have compliant glare control systems installed, and for all office spaces to have an adequate view out. All artificial lighting must be in compliance with CIBSE & SLL standards, and must be appropriately zoned.	4	3	2.65
Hea 2	Indoor Air Quality	To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.	An indoor air quality plan must be produced, all office spaces must have the capacity to be entirely naturally ventilated, and all wall finishes must meet the VOC criteria.	5	2	1.76
Hea 4	Thermal Comfort	To ensure that appropriate thermal comfort levels are achieved through design, and controls are selected to maintain a thermally comfortable environment for occupants within the building.	Requires full dynamic thermal modelling to be carried out in accordance with CIBSE AM11, and office spaces to be designed in accordance with CIBSE Guide A Environmental Design, Table 1.5.	3	3	2.65

Health & Wellbeing (2/2)						
Hea 5	Acoustic Performance	To ensure the building's acoustic performance including sound insulation meet the appropriate standards for its purpose.	All occupied spaces achieve the indoor ambient noise levels and sound insulation levels given in Section 7 of BS 8233:2014.	3	1	0.88
Hea 6	Safety and Security	To recognise and encourage effective measures that promote safe and secure use and access to and from the building.	Requires inclusion of cycle lanes within external landscaping design and a CPDA or secured by design consultant to be contacted for recommendations.	2	2	1.76
				17		9.71

Energy						15%
Ene 1	Reduction of Energy Use and Carbon Emissions	To recognise and encourage buildings designed to minimise operational energy demand, primary energy consumption and CO2 emissions.	Requires consideration of the EPC rating.	12	7	4.57
Ene 2	Energy Monitoring	To recognise and encourage the installation of energy sub-metering that facilitates the monitoring of operational energy consumption.	Separate, accessible energy sub-meters, labelled with the end energy consuming use to be provided for all major energy consuming uses. Separate metering of each of the office floors.	2	2	1.30
Ene 3	External Lighting	To recognise and encourage the specification of energy-efficient light fittings for external areas of the development.	All external lighting to comply with performance requirements for luminous efficacy and control measures.	1	1	0.65
Ene 4	Low Carbon Design	To encourage the adoption of design measures, which reduce building energy consumption and associated carbon emissions and minimise reliance on active building services systems.	Passive design analysis is undertaken and included within the energy strategy (e.g. night time passive cooling), and a low carbon feasibility study is undertaken, with the proposed technology being installed and it resulting in total CO2 emissions for the development decreasing by at least 5%.	3	3	1.96
Ene 6	Energy Efficient Transportation Systems	To recognise and encourage the specification of energy efficient transportation systems.	Requires the lift installer to comparatively analyse the energy demand of the lift, with the most energy efficient lift being specified. The lift specified must have a standby mode, have energy efficient lighting within, have a variable drive controller, or use a regenerative drive. Three out of the four energy efficient features above must be specified.	3	3	1.96
Ene 8	Energy Efficient Equipment	To recognise and encourage procurement of energy efficient equipment to ensure optimum performance and energy savings in operation.	Requires a commitment from the building occupier to provide energy efficient office equipment and white goods.	2	2	1.30
				23		11.74

Transport (1/2)						9%
Tra 1	Public Transport Accessibility	To recognise and encourage development in proximity of good public transport networks, thereby helping to reduce transport-related pollution and congestion.	Considers access to public transport, as measured by the PTAL rating.	3	3	3.00
Tra 2	Proximity to Amenities	To encourage and reward a building that is located in proximity to local amenities, thereby reducing the need for extended travel or multiple trips.	Consideration of the proximity of grocery shops / food outlets, leisure centres and accessible cash machines.	1	1	1.00
Tra 3	Cyclist Facilities	To encourage building users to cycle by ensuring adequate provision of cyclist facilities.	Provision of compliant cycle storage space and facilities.	2	1	1.00

Transport (2/2)						
Tra 4	Maximum Car Parking Capacity	To encourage the use of alternative means of transport other than the private car to and from the building, thereby helping to reduce transport-related emissions and traffic congestion associated with the building's operation.	Encourages development to reduce the amount of car parking on site.	2	2	2.00
Tra 5	Travel Plan	To recognise the consideration given to accommodating a range of travel options for building users, thereby encouraging the reduction of user reliance on forms of travel that have the highest environmental impact.	A travel plan has been developed as part of the feasibility and design stages which considers all types of travel.	1	1	1.00
				9		8.00

Water						
						7%
Wat 1	Water Consumption	To reduce the consumption of potable water for sanitary use in new buildings from all sources through the use of water efficient components and water recycling systems.	Requires low flush WCs, and low flow taps, showers and urinals. Any dishwashers and washing machines specified must also be low water use.	5	5	3.89
Wat 2	Water Monitoring	To ensure water consumption can be monitored and managed, and therefore encourage reductions.	The specification of a water meter that has a pulsed output, capable of connection to a BMS.	1	1	0.78
Wat 3	Water Leak Detection	To reduce the impact of major water leaks that may otherwise go undetected.	Provision of a leak detection system capable of detecting major leaks on the water supply, along with flow control devices on all WC facilities.	2	2	1.56
Wat 4	Water Efficient Equipment	To reduce unregulated water consumption by encouraging specification of water efficient equipment.	Requires that either water-efficient irrigation systems are specified for planting, or no systems are specified.	1	1	0.78
				9		7.00

Materials						
						13.50%
Mat 1	Life Cycle Impacts	To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building.	Requires the consideration of green guide ratings for major building elements.	5	4	4.15
Mat 2	Hard Landscaping and Boundary Protection	To recognise and encourage the specification of materials for boundary protection and external hard surfaces that have a low environmental impact, taking into account of the full life cycle of materials used.	Requires that at least 80% of all external hard landscaping and boundary protection achieves at least an A rating in the Green Guide to Specification. This generally requires the specification of a recycled sub-base for all surfaces installed.	1	1	1.04
Mat 3	Responsible Sourcing of Materials	To recognise and encourage the specification and procurement of responsibly sourced materials for key building elements.	Consideration of materials that are from suppliers that demonstrate responsible sourcing certification, such as ISO14001 and BES6001.	4	1	1.04
Mat 4	Insulation	To recognise and encourage the use of thermal insulation which has a low embodied environmental impact relative to its thermal properties.	Requires the specification of insulation that has a good comparative thermal conductivity.	1	1	1.04
Mat 5	Designing for Durability and Resilience	To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation.	Requires the acknowledgement of areas of the building likely to be damaged by increased pedestrian & vehicular movement, and specification of durability measures to prevent damage and eventual replacement of materials.	1	1	1.04
Mat 6	Material Efficiency	To recognise and encourage measures to optimise material efficiency in order to minimise environmental impact of material use and waste.	Requires the inclusion of resource efficiency into design team meetings, and production of modelling/reports to demonstrate that the most efficient use of materials has been undertaken for the project.	1	0	0.00
				13		8.31

<b>Waste</b>						<b>8.50%</b>
Wst 1	Construction Waste Management	<i>To promote resource efficiency via the effective management and reduction of construction waste.</i>	Credits are awarded for implementation of an Site Waste Management Plan with targets for minimisation of waste generation, and diversion of this waste from landfill.	4	4	3.78
Wst 2	Recycled Aggregates	<i>To recognise and encourage the use of recycled and secondary aggregates in construction, thereby reducing the demand for virgin material and optimising material efficiency in construction.</i>	Requires the specification of materials with a high proportion of recycled or secondary aggregate.	1	0	0.00
Wst 3	Operational Waste	<i>To recognise the provision of dedicated storage facilities for a building's operational-related recyclable waste streams, so that such waste is diverted from landfill or incineration.</i>	Requires the provision of a refuse store with appropriate services for the sorting of recyclable materials generated during the operational stage of the building.	1	1	0.94
Wst 4	Speculative Floor and Ceiling Finishes	<i>To encourage the specification and fitting of floor and ceiling finishes selected by the building occupant and therefore avoid unnecessary waste of materials.</i>	Requires that all tenanted areas (prior to full fit-out) to have floor finishes installed in show areas only, and for specific occupants to select floor and ceiling finishes, to minimise potential waste.	1	0	0.00
Wst 5	Adaptation to Climate Change	<i>To recognise and encourage measures taken to mitigate the impact of extreme weather conditions arising from climate change over the lifespan of the building.</i>	Requires a climate change adaptation strategy appraisal for structural and fabric resilience to be produced.	1	0	0.00
Wst 6	Functional Adaptability	<i>To recognise and encourage measures taken to accommodate future changes of use of the building over its lifespan.</i>	Requires a functional adaptation strategy to be developed which covers the potential for major refurbishment of the new building, the ability to replace all major plant in the building, and options for multiple building uses in the future.	1	0	0.00
				9		4.72

<b>Land Use &amp; Ecology</b>						<b>10%</b>
Le 1	Site Selection	<i>To encourage the use of previously developed land and/or contaminated land and avoid land which has not been previously disturbed.</i>	Requires calculations to demonstrate that at least 75% of the development's footprint is on land which has previously been developed in the last 50 years. The second credit relies on a contaminated land report confirming that the site is significantly contaminated and that remediation will occur.	2	1	1.00
Le 2	Ecological Value of Site and Protection of Ecological Features	<i>To encourage development on land that already has limited value to wildlife and to protect existing ecological features from substantial damage during site preparation and completion of construction works.</i>	Requires an ecologist to visit the site and produce a report confirming that the existing site has no features of ecological value.	2	2	2.00
Le 3	Minimising Impact on Existing Site Ecology	<i>To minimise the impact of a building development on existing site ecology.</i>	Requires calculations within the ecologist's report to demonstrate that the change in ecological value is minimal following development.	2	2	2.00
Le 4	Enhancing Site Ecology	<i>To recognise and encourage actions taken to maintain and enhance the ecological value of the site as a result of development.</i>	Requires confirmation from the developer that all the ecologist's general recommendations will be included within the design.	2	2	2.00
Le 5	Long Term Impact on Biodiversity	<i>To minimise the long term impact of the development on the site's, and surrounding area's, biodiversity.</i>	Requires that all relevant UK and EU legislation relating to ecological protection is complied with during the construction phase, and if applicable, a landscape & habitat management plan is produced and appropriate measures are put in place to minimise disruption during the build.	2	2	2.00
				10		9.00

Pollution						10%
Pol 1	Impact of Refrigerants	To reduce the level of greenhouse gas emissions arising from the leakage of refrigerants from building systems.	Requires the specification of air conditioning systems with a global warming potential less than 5, and a refrigerant leak detection system. Alternatively, no refrigerant-using systems to be installed.	3	3	2.31
Pol 2	Nox Emissions	To contribute to a reduction in national Nox emission levels through the use of low emission heat sources in the building.	Requires the specification of space heating and domestic hot water systems that have a low level of nitrogen oxide emissions.	3	3	2.31
Pol 3	Surface Water Run-Off	To avoid, reduce and delay the discharge of rainfall to public sewers and watercourses, thereby minimising the risk and impact of localised flooding on and off-site, watercourse pollution and other environmental damage.	Requires the production of a flood risk assessment confirming that the site is at low risk of flooding from all sources. This must also assess the peak rate of run off of surface water from site compared to the pre-development value, or confirm that impermeable areas decrease following development.	5	2	1.54
Pol 4	Reduction of Night Time Pollution	To ensure that external lighting is concentrated in the appropriate areas and that upward lighting is minimised, reducing unnecessary light pollution, energy consumption and nuisance to neighbouring properties.	Requires the specification of external lighting that complies with the ILE Guidance notes and can be automatically switched off during night time hours to prevent light pollution.	1	1	0.77
Pol 5	Reduction of Noise Pollution	To reduce the likelihood of noise from the new development affecting nearby noise-sensitive buildings.	Requires the production of a noise impact assessment which demonstrates that through either attenuation measures or through the actual design, the noise produced by the proposed development does not exceed existing background noise levels.	1	0	0.00
				13		6.92

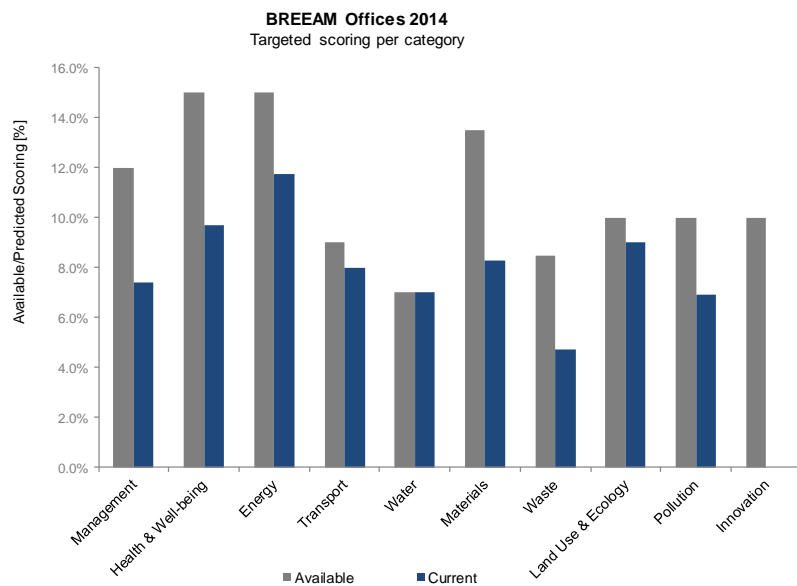
Innovation (1/2)						10%
Inn 1	(Man03) Responsible Construction Practices	To recognise and encourage construction sites which are managed in an environmentally and socially considerate, responsible and accountable manner.	Requires a considerable constructors scheme total score above 40 with at least a score of 7 in each of the sections.	1	0	0
	(Man05) Aftercare	To provide post-handover aftercare to the building owner/occupants during the first year of occupation to ensure the building operates and adapts, where relevant, in accordance with the design intent and operational demands.	Requires the tenant to commit to monitoring processes for at least the first three years following handover, along with provision of this data to BRE Global where requested.	1	0	0
	(Hea01) Visual Comfort	To ensure daylighting, artificial lighting and occupant controls are considered at the design stage to ensure best practice in visual performance and comfort for building occupants.	Requires that all relevant spaces in the building meet the daylighting values listed in Table 15 and 16 of the BREEAM 2014 manual. For example, 3% average daylight factor for all office rooms over 80% of the area.	1	0	0
	(Hea02) Indoor Air Quality	To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.	Requires that product finishes installed meet the exemplary level criteria for VOC emission levels listed in the BREEAM manual.	2	0	0
	(Ene01) Reduction of Energy Use and Carbon Emissions	To recognise and encourage buildings designed to minimise operational energy demand, primary energy consumption and CO2 emissions.	Requires the EPC rating for the building to demonstrate that the development is zero carbon or carbon negative in terms of its operational stage emissions.	5	0	0
	(Wat01) Water Consumption	To reduce the consumption of potable water for sanitary use in new buildings from all sources through the use of water efficient components and water recycling systems.	Where the specification of low flow water fittings and grey water/rainwater harvesting systems result in > 65% improvement over baseline in terms of water saving during operation.	1	0	0
	(Mat01) Life Cycle Impacts	To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building.	The building materials specified for the main building elements results in maximum credits being achieved in the Mat01 calculator.	3	0	0

Innovation (2/2)					
(Mat03) Responsible Sourcing of Materials	To recognise and encourage the specification and procurement of responsibly sourced materials for key building elements.	Provision of materials for main building elements results in 70% total materials being responsibly sourced.	1	0	0
(Wst01) Construction Waste Management	To promote resource efficiency via the effective management and reduction of construction waste.	Commitment in the site waste management plan to divert 90% by weight of construction waste from landfill, and maintain a construction waste efficiency of $\leq 1.6$ m3 or 1.9 tonnes per 100sqm new build.	1	0	0
(Wst02) Recycled Aggregates	To recognise and encourage the use of recycled and secondary aggregates, thereby reducing the demand for virgin material and optimising material efficiency in construction.	Requires the specification of materials with a high proportion of recycled or secondary aggregate (must be greater than the minimum % levels specified in the BREEAM manual) along with the total amount of recycled or secondary aggregate being greater than 35% of the total high grade aggregate specified for the project.	1	0	0
(Wst05) Adaptation to Climate Change	To recognise and encourage measures taken to mitigate the impact of extreme weather conditions arising from climate change over the lifespan of the building.	Requires a climate change adaptation strategy appraisal for structural and fabric resilience to be produced, along with dynamic thermal modelling and near-zero carbon levels in the EPC being achieved.	1	0	0
			10	0	0

FINAL SCORE			
	Available		Current
Management	12.00%		7.43%
Health & Wellbeing	15.00%		9.71%
Energy	15.00%		11.74%
Transport	9.00%		8.00%
Water	7.00%		7.00%
Materials	13.50%		8.31%
Waste	8.50%		4.72%
Land Use & Ecology	10.00%		9.00%
Pollution	10.00%		6.92%
<b>Sub-Total</b>	<b>100.00%</b>		<b>72.83%</b>
Innovation	10.00%		0.00%

Rating	% score
UNCLASSIFIED	<30
PASS	$\geq 30$
GOOD	$\geq 45$
V GOOD	$\geq 55$
EXCELLENT	$\geq 70$
OUTSTANDING	$\geq 85$

<b>Score</b>	<b>72.83%</b>
<b>Rating</b>	<b>'Excellent'</b>



### **A3. GENERAL NOTES**

- A3.1 The report is based on information available at the time of the writing and discussions with the client during any project meetings. Where any data supplied by the client or from other sources have been used it has been assumed that the information is correct. No responsibility can be accepted by Icen Projects Ltd for inaccuracies in the data supplied by any other party.
- A3.2 The review of planning policy and other requirements does not constitute a detailed review. Its purpose is as a guide to provide the context for the development and to determine the likely requirements of the Local Authority.
- A3.3 No site visits have been carried out, unless otherwise specified.
- A3.4 This report is prepared and written in the context of an agreed scope of work and should not be used in a different context. Furthermore, new information, improved practices and changes in guidance may necessitate a re-interpretation of the report in whole or in part after its original submission.
- A3.5 The copyright in the written materials shall remain the property of Icen Projects Ltd but with a royalty-free perpetual licence to the client deemed to be granted on payment in full to Icen Projects Ltd by the client of the outstanding amounts.
- A3.6 The report is provided for sole use by the Client and is confidential to them and their professional advisors. No responsibility whatsoever for the contents of the report will be accepted to any person other than the client, unless otherwise agreed.
- A3.7 These terms apply in addition to the Icen Projects Ltd "Standard Terms of Business" (or in addition to another written contract which may be in place instead thereof) unless specifically agreed in writing. (In the event of a conflict between these terms and the said Standard Terms of Business the said Standard Terms of Business shall prevail.). In the absence of such a written contract the Standard Terms of Business will apply.