7ABC Bayham Street, Camden

Sustainability Statement

Ensphere Group Ltd on behalf of
Camden Lifestyle (UK) Ltd

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Contents

1. Executive Summary

1.1 This Sustainability Statement presents the sustainability credentials for a proposed scheme at 7ABC Bayham Street, Camden.

1.2 Consideration has primarily been given to planning policy and other requirements prior to a review of sustainability in the context of the wider community, design and construction.

1.3 Development proposals include the *"Full Planning Application for the demolition of existing buildings (B1a Use Class) and erection of a part 3, part 4, part 5 storey building (with two basement levels), comprising co-working office floorspace (B1a Use Class), hotel accommodation (C1 Use Class) and an ancillary café/bar and fitness facilities; works to the existing access and associated works."*

1.4 At a strategic level, the development of commercial uses will provide employment for local people, improve the local economy, increase the wealth and lifestyle of employed individuals and contribute to local business rates. Furthermore, demand for hotel accommodation is likely to increase in line with the direction of historical trends. The development is considered to be beneficial to the local community and aligned with socio-economic requirements.

1.5 A number of sustainable design features are proposed and construction will be responsibly managed to ensure minimal impact on the environment and local community.

1.6 It is proposed to assess the scheme against BREEAM with a target rating of "Excellent" for both the hotel and offices.

1.7 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.

2. Introduction

2.1 Ensphere Group Ltd was commissioned by Camden Lifestyle (UK) Ltd to produce a Sustainability Statement for a proposed development at 7ABC Bayham Street, Camden.

Site & Surroundings

Site

2.2 The site is located in central London in the London Borough of Camden, to the southern end and western side of Bayham Street. Bayham Street is a wide one-way route which runs parallel to the east of Camden High Street (A400).

2.3 The site has a regular shape and currently comprises three existing buildings 7A, 7B and 7C and the lawful planning use of these buildings is Offices (Class B1a). The site is contained on three sides, with access only being achievable from Bayham Street.

Surroundings

2.4 The character of the area is mixed but is categorised as commercial by the Conservation Area Appraisal "Sub Area 1 ('Commercial')".

2.5 The site is approximately 100m northeast of Mornington Crescent underground station, 400m south of Camden underground station and 900m north of both Euston and King's Cross/St Pancras National Rail stations. In addition, nine high frequency bus routes operate in the area.

Proposed Development

2.6 Development proposals include the "*Full Planning Application for the demolition of existing buildings (B1a Use Class) and erection of a part 3, part 4, part 5 storey building (with two basement levels), comprising co-working office floorspace (B1a Use Class), hotel accommodation (C1 Use Class) and an ancillary café/bar and fitness facilities; works to the existing access and associated works.*"

Report Objective

2.7 The objective of the Sustainability Statement is to outline how sustainability and the principles of sustainable development have been incorporated into the development proposals.

3. Assessment Methodology

Sustainability & Sustainable Development

3.1 "Sustainability" is a broad concept generally used to describe the ability to perpetuate a particular state of being. It is widely used in the context of development and where there is potential for changing circumstances to cause an impediment to the perpetuation of a phenomenon.

3.2 The term is subjective and the understanding of the concept is influenced by perceptions and aspirations. "Sustainability" is therefore variably defined but normally encapsulates a wide range of issues, often characterised by their relationship with the economy, society and the environment (the "three pillars" of sustainability).

3.3 These issues are not necessarily mutually exclusive and whilst they are often presented as such, technically, the economy is a function of society; and society concerns the interrelationships and behaviours of one species within the wider environment. Nevertheless, the identification and characterisation of these issues enables a better understanding of the things that matter in decision making, which enable a balance to be struck when priorities compete.

3.4 The term "sustainable development" is often used interchangeable with "sustainability" but it is narrower in scope and seeks to promote the perpetuation of human advancement. The "Brundtland Report" (officially titled "Our Common Future" and written by the United Nations World Commission on Environment and Development, Chaired by Gro Harlem Bruntland in 1987), presents perhaps the most widely cited and understood interpretation of this concept:

> *"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs"*

3.5 The definition introduces the concept of "needs" and the generational timeframe for evaluating whether an action is sustainable or otherwise.

3.6 Whilst the Brundtland Report has contributed significantly to understanding the core principles of the subject, the definition has been advanced; and in the context of planning and development in England, the term "sustainable development" is defined very broadly within the National Planning Policy Framework (NPPF).

Analysis Methodology

3.7 Given the broad definitions associated with the terminology of "sustainability" and "sustainable development", understanding how these concepts have been interpreted and incorporated

into the local planning regime requires a review of the planning policy as well as the documents upon which the policy is based. The report therefore commences with an overview of the sustainable communities' strategy, planning policy and other considerations.

3.8 An appraisal of the sustainability credentials of the scheme then follows. Structure is important when assessing sustainability due to the breadth of issues being considered; and an approach has been created based upon the phases of the development cycle relevant to the planning decision making processes; with consideration given to the "three pillars" (discussed above) and requirements of policy.

Assessment Matrix

	Economic	Social	Environmental
Strategic	✓	✓	✓
Design	✓	✓	✓
Construction	✓	✓	✓

3.9 It is recognised that the scale and nature of the scheme will affect the relative importance of the matrix dimensions and entries. For example, a single residential unit is unlikely to be viewed as having a major societal impact on the basis of its scale relative to its context. However, the societal implications of an urban extension may be much more significant.

3.10 The emphasis is therefore case specific and the assessment sections of this report seek to highlight the relevant factors in a suitably balanced manner.

4. Sustainable Communities

4.1 The status quo should not necessarily be interpreted as representative of a sustainable community on the basis that it ignores a need (or desire) to evolve in the context of change and over the course of time.

4.2 The aspirations of and for an area are, perhaps, most clearly represented through the democratic process and whilst conflicts of interests can exist between local, national and international priorities, local considerations are considered of greatest pertinence in this instance and in the context of local decision making.

Our Camden Plan (2018)

4.3 This plan is a strategy document reflecting the vision for the council over the next four years, from 2018 to 2022. The following theme is most pertinent to this report:

Clean, vibrant and sustainable places

We will use all the resources at our disposal to play our part in improving air quality, one of London's biggest challenges.

We will do what we can to reduce carbon emissions in the borough, lowering emissions from our own estate and operations, and working with others to make a powerful alliance for carbon reduction.

We will decrease the amount of waste produced in the borough by providing the infrastructure, information and incentives for people and businesses to reduce their waste, and recycle as much as possible of the waste they do produce.

We will make sure that green spaces, streets, housing estates and other public spaces are clean, attractive and safe, a d that residents, visitors and businesses are actively involved in contributing to this.

We will make it easier for people to travel more by foot or by bike.

5. Planning Policy Context

5.1 National and local planning policy relevant to sustainable development is considered in detail below:

National Planning Policy Framework

5.2 The current 2012 National Planning Policy Framework (NPPF) defines "sustainable development" in the context of the planning system in England as comprising policies 18 to 219, taken as a whole, of the NPPF. A "presumption" is established in favour of sustainable development.

5.3 The "presumption in favour of sustainable development" remains at the heart of the draft revised 2018 NPPF.

London Planning Policy Framework

5.4 Key London Plan planning policy is detailed below:

The London Plan as Altered (2016)

5.5 The current London Plan is the overall strategic plan for London. Chapter five details *London's Response to Climate Change* and include a number of policies that set the overarching principles for reducing carbon emissions in the built environment, predominant of which is Policy 5.3 as follows:

Policy 5.3 – Sustainable Design & Construction

Strategic

A) The highest standards of sustainable design and construction should be achieved in London to improve the environmental performance of new developments and to adapt to the effects of climate change over their lifetime.

Planning Decisions

B) Development proposals should demonstrate that sustainable design standards are integral to the proposals, including its construction and operation, and ensure that they are considered at the beginning of the design process.

C) Major development proposals should meet the minimum standards outlined in the Mayor's supplementary planning guidance and this should be clearly demonstrated within a design and access statement. The standards include measures to achieve other policies in this Plan and the following sustainable design principles apply:

a) Minimising carbon dioxide emissions across the site, including the building and services (such as heating and cooling systems);

b) Avoiding internal overheating and contributing to the urban heat island effect;

c) Efficient use of natural resources (including water), including making the most of natural systems both within and around buildings;

d) Minimising pollution (including noise, air and urban run-off);

e) Minimising the generation of waste and maximising reuse or recycling;

f) Avoiding impacts from natural hazards (including flooding);

g) Ensuring developments are comfortable and secure for users, including avoiding the creation of adverse local climatic conditions;

h) Securing sustainable procurement of materials, using local supplies where feasible; and

i) Promoting and protecting biodiversity and green infrastructure.

D) Within LDFs boroughs should consider the need to develop more detailed policies and proposals based on the sustainable design principles outlined above and those which are outlined in the Mayor's supplementary planning guidance that are specific to their local circumstances.

5.6 Chapter 9 (*Sustainable Infrastructure*) of the draft new London Plan is most pertinent to this report and covers issues such as air quality, greenhouse gas emissions and waste. Policy SI5 (*Water infrastructure*) states than commercial developments should achieve at least the BREEAM "Excellent" standard.

Local Planning Policy Framework

Camden Local Plan (June 2017)

5.7 The Local Plan was adopted by Council on 3 July 2017 and has replaced the Core Strategy and Camden Development Policies documents as the basis for planning decisions and future development in the borough. Policies relevant to this report are presented below:

Policy G1 Delivery and Location of Growth [extract]

The Council will create the conditions for growth to deliver the homes, jobs, infrastructure and facilities to meet Camden's identified needs and harness the benefits for those who live and

work in the borough.

Delivery of Growth

The Council will deliver growth by securing high quality development and promoting the most efficient use of land and buildings in Camden by:

a. Supporting development that makes best use of its site, taking into account quality of design, its surroundings, sustainability, amenity, heritage, transport accessibility and any other considerations relevant to the site;

[…]

Policy D1 Design [extract]

The Council will seek to secure high quality design in development. The Council will require that development:

[…]

c. Is sustainable in design and construction, incorporating best practice in resource management and climate change mitigation and adaptation; is of sustainable and durable construction and adaptable to different activities and land uses;

[…]

Policy CC1 Climate Change Mitigation

The Council will require all development to minimise the effects of climate change and encourage all developments to meet the highest feasible environmental standards that are financially viable during construction and occupation.

We will:

a. Promote zero carbon development and require all development to reduce carbon dioxide emissions through following the steps in the energy hierarchy;

b. Require all major development to demonstrate how London Plan targets for carbon dioxide have been met;

c. Ensure that the location of the development and mix of land uses minimise the need to travel by car and help to support decentralised energy networks;

d. Support and encourage sensitive energy efficiency improvements to existing buildings;

e. Require all proposals that involve substantial demolition to demonstrate that it is not possible to retain and improve the existing building; and

f. Expect all developments to optimise resource efficiency.

For decentralised energy networks, we will promote decentralised energy by:

g. Working with local organisations and developers to implement decentralised energy networks in the parts of Camden most likely to support them;

h. Protecting existing decentralised energy networks (e.g. at Gower Street Bloomsbury, Kings Cross, Gospel Oak, and Somers Town) and safeguarding potential network routes; and

i. Requiring all major developments to assess the feasibility of connecting to an existing decentralised energy network, or where this is not possible establishing a new network.

To ensure that the Council can monitor the effectiveness of renewable and low carbon technologies, major developments will be required to install appropriate monitoring equipment.

Policy CC2 Adapting to Climate Change

The Council will require development to be resilient to climate change.

All development should adopt appropriate climate change adaptation measures such as:

a. The protection of existing green spaces and promoting new appropriate green infrastructure;

b. Not increasing, and wherever possible reducing, surface water run-off through increasing permeable surfaces and use of Sustainable Drainage Systems;

c. Incorporating bio-diverse roofs, combination green and blue roofs and green walls where appropriate; and

d. Measures to reduce the impact of urban and dwelling overheating, including application of the cooling hierarchy.

Any development involving 5 or more residential units of 500sqm or more of any additional floorspace is required to demonstrate the above in a Sustainability Statement.

Sustainable Design and Construction Measures

The Council will promote and measure sustainable design and construction by:

e. Ensuring development schemes demonstrate how adaptation measures and sustainable development principles have been incorporated into the design and proposed implementation;

f. Encourage new build residential development to use the Home Quality Mark and Passivhaus design standards;

g. Expecting developments (conversions / extensions) of 500sqm of residential floorspace or above or five or more dwellings to achieve "excellent" in BREEAM domestic refurbishment; and

h. Expecting non-domestic developments of 500sqm of floorspace or above to achieve "excellent" in BREEAM assessments and encouraging zero carbon in new developments from 2019.

Policy DM1 Delivery and Monitoring [extract]

The Council will deliver the vision, objectives and policies of the Local Plan by:

d. Using planning contributions where appropriate to:

   i. Support sustainable development;

6. Other Policy & Regulatory Considerations

6.1 This section comprises an overview of other considerations relevant to the Sustainability Statement.

National Planning Practice Guidance

Climate Change

6.2 Advises how planning can identify suitable mitigation and adaption measures in plan-making and the application process to address the potential for climate change.

Design

6.3 Design affects 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

6.4 Explains key issues in implementing policy to protect biodiversity, including local requirements.

Renewable and Low Carbon Energy

6.5 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.

London Planning Practice Guidance

Sustainable Design and Construction Supplementary Planning Guidance (April 2014)

6.6 The Mayor has published supplementary planning guidance on Sustainable Design and Construction. The document provides guidance on the implementation of London Plan policy 5.3 as well as a range of policies, primarily in Chapters 5 and 7 that deal with matters relating to environmental sustainability.

Local Planning Policy Guidance

Camden Planning Guidance – Sustainability (CPG3) (2015)

6.7 The guidance provides information on ways to achieve carbon reductions and more sustainable developments. It highlights the Council's requirements and guidelines in support of policies CS13, DP22 and DP23.

6.8 Includes requirements concerning credits under certain BREEAM categories (60% energy, 60% water and 40% materials).

Sustainability Standards

BREEAM

6.9 The Building Research Establishment's Environmental Assessment Method (BREEAM) is an environmental assessment for non-domestic buildings

6.10 BREEAM goes beyond Building Regulations requirements to encourage best practice in: Management; Health & Wellbeing; Energy; Transport; Water; Materials; Waste; Land Use & Ecology; and Pollution.

6.11 The standard measures sustainability by awarding "credits" against "issues" relevant to nine design categories. An additional Innovation category exists for the purpose of rewarding exemplar performance.

6.12 BREEAM uses a rating system to communicate the extent to which performance has been achieved. There are six levels with ratings ranging from "Unclassified" to "Outstanding" and certain issues require a mandatory level of performance depending upon the sought BREEAM rating.

7. Site Context & Strategic Appraisal

7.1 In line with the "three pillars" of sustainability discussed within the methodology section, the site context has been considered with regard to its economic, social and environmental context; acknowledging that interrelationships exist between many of these issues.

Socio Economic Context

Indices of Multiple Deprivation

7.2 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%).

7.3 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.

7.4 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 – dark blue) in the respective maps. Government data (illustrated below) indicates that the area ranks 8586 out of 32,844; where 1 is the most deprived. The area is therefore considered to have a modest level of deprivation overall. The table below provides the data for the individual domains:

Table 7.1 IMD Domain Scores

Domain	Score
Income Rank	3,883
Employment Rank	5,478
Education, Skills and Training Rank	11,494
Health Deprivation and Disability Rank	9,914
Crime Rank	1,076
Barriers to Housing and Services Rank	5,282
Living Environment Rank	4,695
Rank of IMD Score	**4,299**

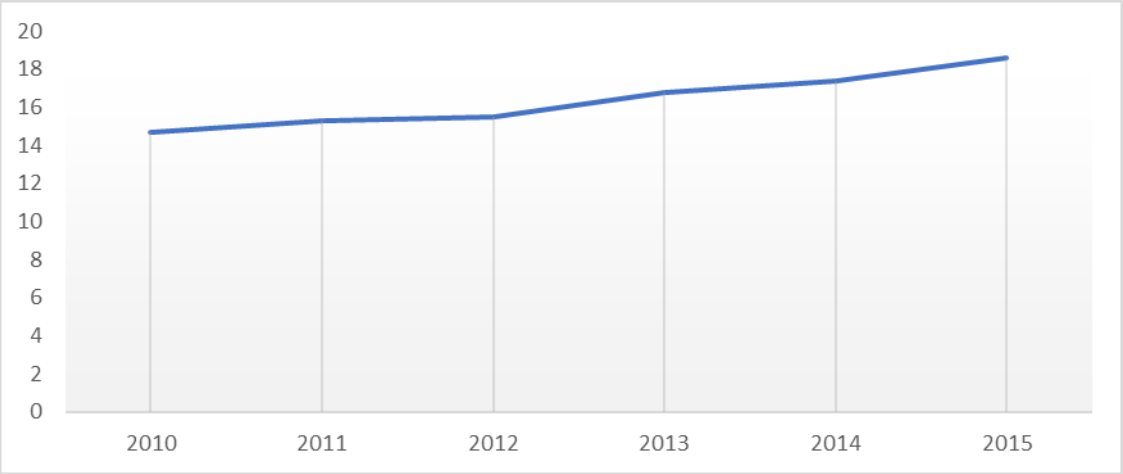
Note: Scores out of 32,844, where 1 is the most deprived.

Tourism

7.5 Data is available from London & Partners, a not-for-profit public-private partnership, funded by the Mayor of London and various commercial partners.

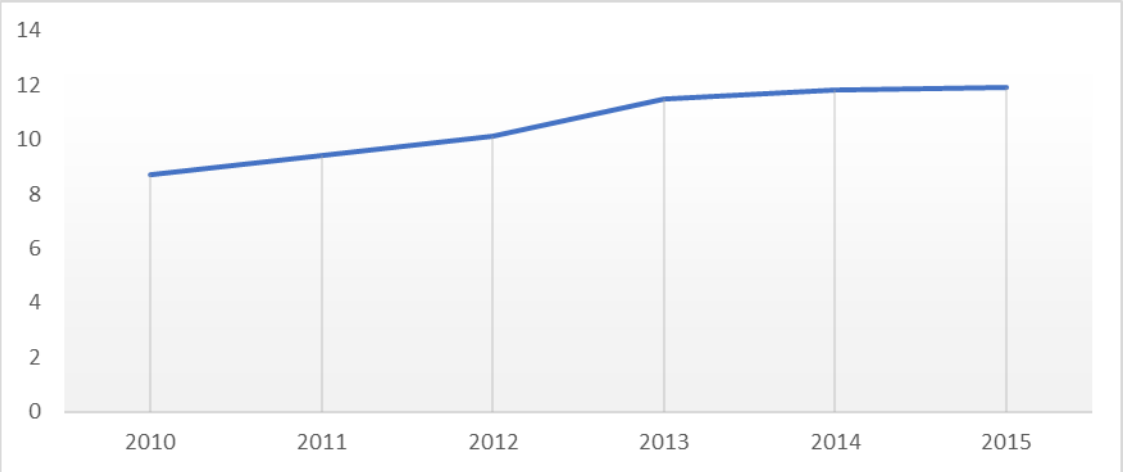
7.6 This indicates that the capital received a record number of international visitors in 2015 (at 18.6 million), which represents a 26% increase compared to 2010 levels. The city received 108.3 million overnight visits from overseas visitors which, while this remained steady against 2014, equates to a 20% increase from 2010. Overseas visitor expenditure also increased, by 36% between 2010 and 2015.

Figure 7.1 Overnight Visits in London from Overseas Visitors (millions)



Source: ONS Data

Figure 7.2 Expenditure Spend in London from Overseas Visitors (£ billion)



Source: ONS Data

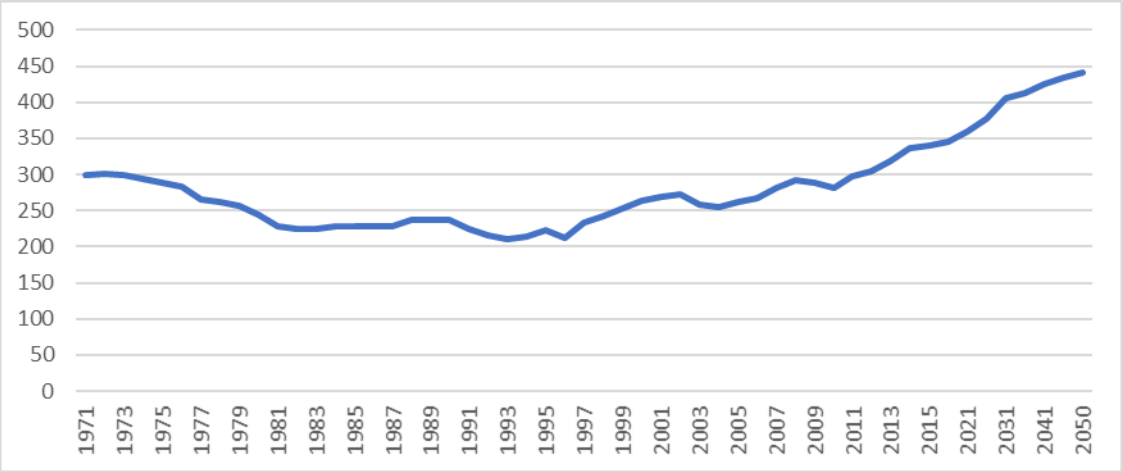
7.7 More recent data, as referenced in the Financial Feasibility Study, suggests that the above trends have continued. The latest ONS statistics indicate that London received 15.1 million international tourists during the first three quarters of 2017, representing a 7.5% increase compared to the same period in 2016. Additionally, overnight stays increased by 1.7% and total spend increased by 19.9% over the same period.

London Labour Market

7.8 Labour market data has been compiled by the Greater London Authority in the context of an analysis of the London's economy and the economic issues facing the capital.

7.9 Data is available on a borough by borough basis and the following presents the historic and projected employee jobs for the London Borough of Camden.

Figure 7.3 Historic and projected borough employee jobs (Camden), 1971-2050



Environmental Context

7.10 The environmental context is assessed in greater detail in the accompanying environmental reports. The following provides an overview of the pertinent matters:

Land Use

7.11 The site constitutes brownfield land, meaning that its development will reduce the pressure to develop elsewhere and on Greenfield.

Flooding / Groundwater

7.12 From review of the Environment Agency (EA) Indicative Flood Maps, the site is identified as being in Flood Zone 1 and having a low probability of flooding.

7.13 According to the Environment Agency (EA) data, the site is not located within a Groundwater Source Protection Zone.

Ecology

7.14 In the absence of any existing soft landscaping, the ecological value associated with the area proposed for development is considered to be low.

Public Transport

7.15 Many of the social and economic issues concern accessibility, which in its broadest sense is regarded as a combination of access to local shops, services, amenities, employment opportunities; as well as access to public and other transport facilities.

7.16 Therefore, the accessibility of the proposed scheme to local amenities is a relevant consideration in determining whether the site represents a sustainable location.

7.17 According to the Transport for London mapping resource, the site has excellent access to public transport and has a PTAL rating of 6b (Best).

Strategic Appraisal

Hotel Use

7.18 Tourism, both nationally and in London, has grown over recent years both in terms of number of visits, nights stayed and expenditure. Visits by overseas residents have accounted for the majority of these changes, with London consistently the prime market.

7.19 Locally, the indices of Multiple Deprivation suggest a higher than average level of deprivation overall - the individual indices highlights the score for Crime, Income, Employment and Living Environment are particularly poor.

7.20 A demand is considered to exist for hotel accommodation in central London on the basis of the tourism trends presented above.

7.21 The development proposals are therefore considered to be beneficial to the local community, aligned with the local socio-economic requirements and consistent with the principles of sustainable development.

Commercial Use

7.22 Data provided by the GLA demonstrates that Camden continues to perform strongly in terms of job provision and the projections are that this will continue to increase.

7.23 It is considered that the continuation of employment usage and enhancement through the provision of quality space, potentially gives rise to a higher value commercial activity; with associated higher pay for employees. The scale and flexibility of the proposed commercial uses is also in line with the anticipated local requirements.

7.24 From a broader socio-economic sustainability perspective, employment has a number of indirect impacts which will benefit the local community. It is expected that those employed at the site will spend much of their earnings in the vicinity, which will increase the circulation of money locally, benefitting other businesses and the size of the local economy.

7.25 Increased individual wealth can also improve quality of life through increase opportunities and potentially improved lifestyle (with the associated positive impacts that this can have on health).

7.26 Additional business in the local area will benefit the Council, and therefore local community, through the payment of business rates. This money can be used to further enhance local service provision.

7.27 The delivery of high quality development is a stated objective within the Council's planning policy.

7.28 A need is therefore considered to exist on the basis that the nature of the proposed development will satisfy an existing demand, provide positive benefits to the local community and economy and satisfy local objectives and priorities.

8. Sustainable Design Proposals & Appraisal

8.1 This section presents an overview of the proposed sustainable design features for the scheme and is considerate of Camden Planning Guidance CPG3 (*Sustainability*).

Environmental Standards

8.2 It is proposed to assess the scheme against BREEAM and, in line with planning policy requirements, target an "Excellent" rating for both the hotel and office developments. Furthermore, 60% of the credits will be targeted under the energy and water sections and 40% under materials in line with CPG3. Indicative assessments are presented in the appendices of this report.

Energy

8.3 Further detail on energy matters is presented in the Energy Statement accompanying the application.

Energy Efficiency

8.4 It is intended that the performance of the building fabric will incorporate relatively low U-Values to reduce the rate at which the building loses heat, preserving the heat within the space and reducing the requirement for mechanical heating.

Low Carbon & Renewable Technologies

8.5 Renewable and low carbon technologies have been considered as part of the design following the prioritisation of efficiency. The following is proposed:

- Combined Heat and Power (CHP) to provide the majority of hot water;
- Air Source Heat Pumps to provide space heating.

8.6 In line with the London Plan and Council policies, a carbon saving >35% against Part L 2013 baseline has been targeted for the development.

Water Conservation, Water Quality and Flooding

8.7 Water saving fittings and appliances shall be installed; the following form a basis of the proposals:

- Dual flush toilets of 6/3 litres;
- Water consumption levels not higher than 4.5 litres/minute in wash hand basins and 5 litres/minute in kitchenette taps;
- Showers (where present) with a maximum flow rate of 8 litres/minute at 3 bar pressure.

8.8 The existing site is entirely hardstanding impermeable ground and therefore the volume of water run-off over the development's lifecycle will be no greater than it would have been prior to development. Moreover, the planted roof terraces will reduce the run-off post-development.

Materials & Waste

8.9 The materials strategy for the development shall consider lifecycle environmental impacts, durability, responsible sourcing and pre-fabrication potential, with a view to optimising materials utilisation and safeguarding natural resources. Measures will include:

- The majority of major elements (walls, floors, roof) with an 'A' or 'A+' rating in the BRE's Green Guide to Specification;
- Use of all timber products that come from an accredited Forest Stewardship Council (FSC) source;
- Use of suppliers/products that operate Environmental Management Systems (e.g. ISO14001, EMS) as per minimum and BES 6001 certification for major applications; and
- Consideration of durability, pre-fabrication and dismantling potential in selecting main elements.

8.10 The operational waste strategy comprises provision of dedicated space of adequate size and in convenient locations for storage of general refuse, recyclables and food waste. Internal and external storage will be considerate of the Building Regulations and Council requirements.

Pollution

8.11 Where conventional backup gas-fired boilers are employed, these will be selected to achieve a NO_X rating of <40mgNO_X/kWh. Low emissions CHP engines shall be selected as appropriate.

8.12 Transport emissions shall be minimal, as the site offers excellent connections to public transport services and a wide range of amenities at walking distance; the development shall also promote cycling by providing secure cycle storage spaces.

8.13 Measures relating to building design, fabric design and landscaping shall be implemented as appropriate so that internal ambient noise levels are acceptable for the intended use and do not compromise the health & well-being of occupants.

8.14 The external lighting strategy shall be designed to minimise light spillage and night time light pollution in line with the ILP's Guidance notes for the reduction of obtrusive light; low illuminance levels, fittings and controls shall be employed accordingly.

8.15 Good internal air quality will be achieved through the creation of a building envelope with a low air permeability; meaning that the building fabric will reduce the infiltration of pollution from the external environment.

8.16 The developer will also endeavour to avoid the use of materials with a high VOC (volatile organic compound) content; therefore ensuring an improved air quality for the completed development.

Ecology

8.17 The ecological value of the proposed development will be greater than the existing development. A suitably qualified ecologist shall be appointed and all appropriate recommendations will be implemented.

Design Appraisal

8.18 Based upon the above, it is considered that the design accords with planning policy and goes significantly beyond standard practice. As a result, the building will have a low environmental impact and promote a healthy and safe place for building occupants, visitors and others.

9. Sustainable Construction Proposals & Appraisal

9.1 It is recognised that the construction industry has the potential to cause significant environmental impacts through resource use, waste generation and pollution. It is therefore proposed to manage the construction phase in a sustainable manner to ensure that these impacts are reduced.

Responsible Construction Practices

Impacts on Neighbours, Pedestrians, Road Users and Workforce

9.2 The main contractor will register with the Considerate Constructors Scheme to ensure that the contractor carries out the construction operations in a safe and considerate manner, with due regard to local residents, road users, the workforce and the environment. A target of achieving a score of at least 35 and with a minimum score of 7 in each of the five sections shall be set. This represents a high level of performance and a commitment to responsibly manage construction activities.

Environmental Management

9.3 It is expected that the principal contractor for the project shall also operate a third party certified Environmental Management System (EMS), demonstrating sound management and systematic control of environmental impacts.

Materials Optimisation and Waste

9.4 A pre-demolition audit shall be undertaken to establish the potential for reuse of materials for on-site applications or salvaging for reuse/recycling off-site.

9.5 The Site Waste Management Plan (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.

9.6 The development will aim for more than 95% by tonnage of demolition and construction waste to be diverted from landfill as per minimum.

Pollution Prevention

Pollution Prevention Guidelines

9.7 The Environment Agency's (EA) Pollution Prevention Guidelines (PPG) shall be followed as appropriate to minimise pollution risks from construction activities; works will also be in line with the Environment Agency's Building a better environment, A guide for developers (2006) guidance.

Air Pollution

9.8 Best practice methods for minimising the formation of dust and emissions from construction activities shall be implemented, 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; and
- Sealed storage for cement, sand and fine aggregates.

9.9 In addition to the above, the contractor shall comply with the BRE Code of Practice to control dust from construction and demolition activities.

Water Pollution

9.10 Appropriate measures shall be implemented to minimise risks of watercourse and underground water pollution, in line with EA's PPG 5 Works in, near or liable to affect watercourses and the Guide for developers Building a better environment, as stated above. Relevant guidance within the London Plan's SPGs shall also be followed as appropriate. Specific measures shall be outlined in the contractor's CEMP.

Construction Appraisal

9.11 Given that the development proposals are seeking to go significantly beyond standard practice; targeting best practice to mitigate many of the social and environmental impacts, the construction proposals are considered in accordance with sustainable development.

10. Summary

10.1 This Sustainability Statement provides an overview as to how the proposed scheme contributes to sustainable development in the context of the strategic, design and construction considerations.

10.2 Sustainability is a broad concept and covers a range of environmental, social and economic considerations. A review of Camden Council's planning policies has identified a number of requirements relating to sustainable development. Of these, Local Plan policies G1 (*Delivery and Location of Growth*), D1 (*Design*), CC1 (*Climate Change Mitigation*), CC2 (*Adapting to Climate Change*) and DM1 (*Delivery and Monitoring*) are considered most pertinent. Consideration has also been given to CPG3 (*Sustainability*) as well as to the National and London planning policy framework.

10.3 Development proposals include the *"Full Planning Application for the demolition of existing buildings (B1a Use Class) and erection of a part 3, part 4, part 5 storey building (with two basement levels), comprising co-working office floorspace (B1a Use Class), hotel accommodation (C1 Use Class) and an ancillary café/bar and fitness facilities; works to the existing access and associated works."*

10.4 At a strategic level, the development of commercial uses will provide employment for local people, improve the local economy, increase the wealth and lifestyle of employed individuals and contribute to local business rates. Furthermore, demand for hotel accommodation is likely to increase in line with the direction of historical trends. The development is considered to be beneficial to the local community and aligned with socio-economic requirements.

10.5 A range of sustainable design and construction features are proposed including:

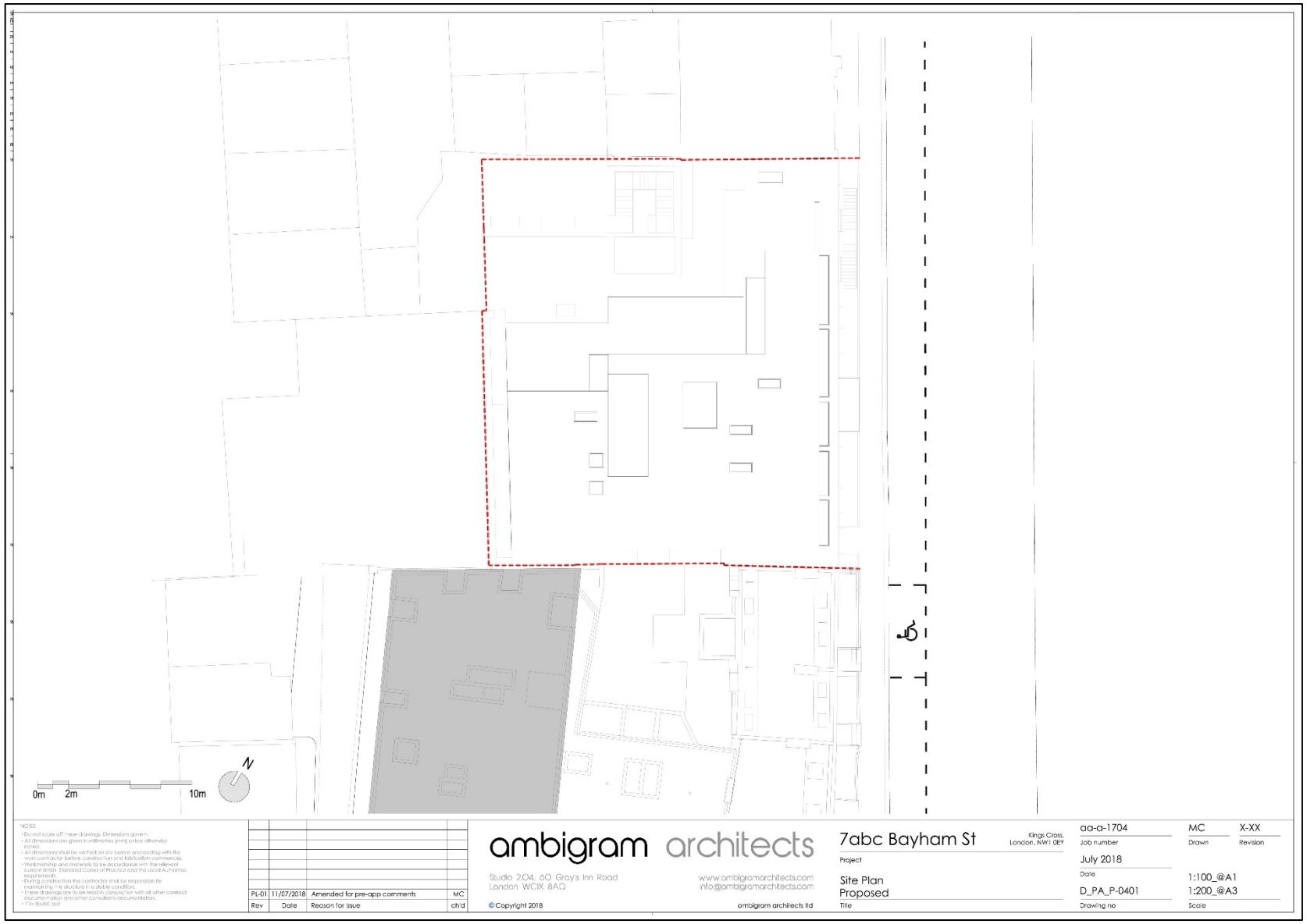
- Incorporation of Combined Heat and Power (CHP) and Air Source Heat Pumps (ASHPs);
- Water saving sanitary fittings and appliances to deliver a water efficient development;
- The use of materials with a low lifecycle environmental impact and embodied energy;
- Efficient construction and operational waste management;

10.6 It is proposed to assess the scheme against BREEAM with a target rating of "Excellent" for both the hotel and offices.

10.7 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.

Appendices

A. Site Plan



NOTES
- Do not scale off these drawings. Dimensions govern.
- All dimensions are given in millimetres (mm) unless otherwise noted.
- All dimensions shall be verified on site before proceeding with the work contractor before construction and fabrication commences.
- Workmanship and materials to be accordance with the relevant current British Standard Codes of Practice and the Local Authorities requirements.
- During construction the contractor shall be responsible for maintaining the structure in a stable condition.
- These drawings are to be read in conjunction with all other contract documentation and other consultants documentation.
- If in doubt, ask!

Rev	Date	Reason for issue	ch'd
PL-01	11/07/2018	Amended for pre-app comments	MC

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Project

Site Plan Proposed
Title

aa-a-1704	Job number
July 2018	Date
D_PA_P-0401	Drawing no
MC	Drawn
X-XX	Revision
1:100_@A1 1:200_@A3	Scale

B. BREEAM Pre-Assessments

BREEAM 2014 - Hotel

Issue ID	Description	Aim	Issue Part	Available Credits	Predicted Credits	Weighted Score (%)
Management						12%
Man 1	Project Brief and Design	*To recognise and encourage an intergrated design process that optimises building performance.*	Stakeholder Consultation (project delivery)	1	1	0.57
			Stakeholder Consultation (third party)	1	1	0.57
			Sustainability Champion (design)	1	1	0.57
			Sustainability Champion (monitoring progress)	1	1	0.57
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.*	Elemental Life Cycle Cost	2	2	1.14
			Component Level LCC Plan	1	1	0.57
			Capital Cost Reporting	1	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.*	Environmental Management	1	1	0.57
			Sustainability Champion	1	1	0.57
			Considerate Construction	2	2	1.14
			Monitoring of construction-site impacts:			
			Energy/Water	1	1	0.57
			Transport	1	1	0.57
Man 4	Commissioning and Handover	*Toi encourage a properly planned handover and commissioning process that reflects the needs of the building occupants.*	Commissioning/Testing Schedule & Responsibilities	1	1	0.57
			Commissioning Building Services	1	1	0.57
			Testing and Inspecting Building Fabric	1	0	0.00
			Handover	1	1	0.57
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.*	Aftercare Support	1	1	0.57
			Seasonal Commissioning	1	1	
			Post Occupancy Evaluation	1	1	
				21	20	11.43

Issue ID	Description	Aim	Issue Part	Available Credits	Predicted Credits	Weighted Score (%)
Health & Wellbeing						15%
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.*	Glare Control	1	1	0.83
			Daylighting	1	0	0.00
			View Out	1	1	0.83
			Internal & External Lighting	1	1	0.83
Hea 02	Indoor Air Quality	*To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.*	Minimising Sources of Air Pollution			
			IAQ Plan	1	1	0.83
			Ventilation	1	0	0.00
			VOC Products	1	0	0.00
			VOC Emissions Testing	1	0	0.00
			Adaptability	1	0	0.00
Hea 03	Safe Containment Laboratories					
Hea 04	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.*	Thermal Modelling	1	1	0.83
			Adaptability to a climate change scenario	1	1	0.83
			Thermal Modelling Controls	1	1	0.83
Hea 5	Acoustic Performance	*To ensure the building's acoustic performance including sound insulation meet the appropriate standards for its purpose.*	Sound Insulation	4	3	2.50
						0.00
						0.00
Hea 6	Safety and Security	*To recognise and encourage effective measures that promote safe and secure use and access to and from the building.*	Safe Access	1	1	0.83
			Security of the site & building	1	1	0.83
				18	11	9.32

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.*	N/A	12	8	5.45
Ene 2	Energy Monitoring	*To recognise and encourage the installation of energy sub-metering that facilitates the monitoring of operational energy consumption.*	Major Energy Uses	1	1	0.68
			High Energy Load/Tenancy Areas			
Ene 3	External Lighting	*To recognise and encourage the specification of energy-efficient light fittings for external areas of the development.*	N/A	1	1	0.68
Ene 4	Low Carbon Design	*To encourage the adoption of design measures, which reduce*	Passive Design			
			Passive Design Analysis	1	0	0.00
			Free Cooling	1	0	0.00
			LZC Technologies			
			LZC Feasibility Study	1	1	0.68

Issue ID	Description	Aim	Issue Part	Available Credits	Predicted Credits	Weighted Score (%)
Ene 5	Energy Efficient Cold Storage					
Ene 6	Energy Efficient Transportation Systems	*To recognise and encourage the specification of energy efficient transportation systems.*	Energy Consumption	1	1	1.67
			Energy Features	2	2	3.33
Ene 7	Energy Efficient Laboratory Systems					
Ene 8	Energy Efficient Equipment	*To recognise and encourage procurement of energy efficient equipment to ensure optimum performance and energy savings in operation.*	N/A	2	2	1.36
Ene 9	Drying Space			0	0	0.00
				22	16	13.86
Transport						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.*	N/A	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.*	N/A	1	1	1.00
Tra 3	Cyclist Facilities	*To encourage building users to cycle by ensuring adequate provision of cyclist facilities.*	N/A	2	1	1.00
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.*		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.*	N/A	1	1	1.00
				9	8	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.*	N/A	5	3	2.33
Wat 2	Water Monitoring	*To ensure water consumption can be monitored and managed, and therefore encourage reductions.*	N/A	1	1	0.78
Wat 3	Water Leak Detection	*To reduce the impact of major water leaks that may otherwise go undetected.*	Leak Detection System	1	1	0.78
			Flow Control Devices	1	1	0.78

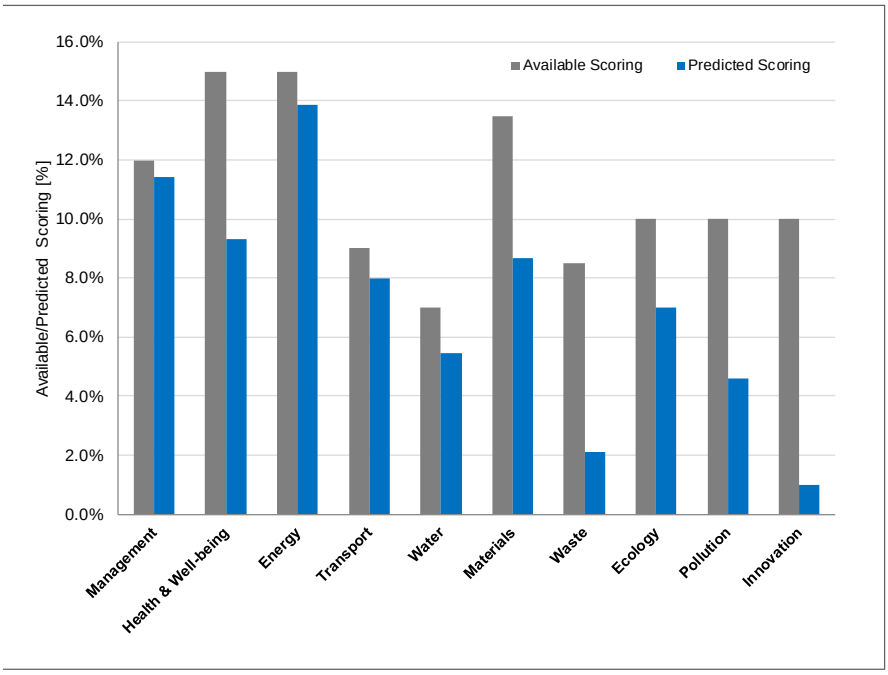
Issue ID	Description	Aim	Issue Part	Available Credits	Predicted Credits	Weighted Score (%)
Wat 4	Water Efficient Equipment	*To reduce unregulated water consumption by encouraging specification of water efficient equipment.*	N/A	1	1	0.78
				9	7	5.44
Materials						13.50%
Mat 1	Life Cycle Impacts	*To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building.*	N/A	6	4	3.86
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.*	N/A	1	1	0.96
Mat 3	Responsible Sourcing of Materials	*To recognise and encourage the specification and procurement of responsibly sourced materials for key building elements.*	Sustainable Procurement Plan	1	1	0.96
			Responsible Sourcing of Materials	3	1	0.96
Mat 4	Insulation	*To recognise and encourage the use of thermal insulation which has a low embodied environmental impact relative to its thermal properties.*	Embodied Impact	1	1	0.96
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.*	N/A	1	1	0.96
Mat 6	Material Efficiency	*To recognise and encourage measures to optimise material efficiency in order to minimise environmental impact of material use and waste.*	N/A	1	0	0.00
				14	9	8.68
Waste						8.50%
Wst 1	Construction Waste Management	*To promote resource efficiency via the effective management and reduction of construction waste.*	Construction Resource Efficiency	3	1	1.06
			Diversion of Resources from Landfill	1	1	
Wst 2	Recycled Aggregates	*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.*	N/A	1	0	0.00
Wst 3	Operational Waste	*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.*	N/A	1	1	1.06
Wst 4	Speculative Floor and Ceiling Finishes					

Issue ID	Description	Aim	Issue Part	Available Credits	Predicted Credits	Weighted Score (%)
Wst 5	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.*	Structural and Fabric Resilience	1	0	0.00
Wst 6	Functional Adaptability	*To recognise and encourage measures taken to accommodate future changes of use of the building over its lifespan.*	N/A	1	0	0.00
				8	3	2.13
Land Use & Ecology						10%
LE 1	Site Selection	*To encourage the use of previously developed land and/or contaminated land and avoid land which has not been previously disturbed.*	Previously Occupied Land	1	1	1.00
			Contaminated Land	1	0	
LE 2	Ecoloigcal Value of Site and Protection of Ecological Features	*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.*	Ecological Value of Site	1	1	1.00
			Protection of Ecological Features	1	1	
LE 3	Minimising Impact on Existing Site Ecology	*To minimise the impact of a building development on existing site ecology.*		2	2	2.00
LE 4	Enhancing Site Ecology	*To recognise and encourage actions taken to maintain and enhance the ecological value of the site as a result of development.*	Ecologist's Report & Recommendations	1	1	1.00
			Increase in Ecological Value	1	0	0.00
LE 5	Long Term Impact on Biodiversity	*To minimise the long term impact of the development on the site's, and surrounding area's, biodiversity.*	N/A	2	2	2.00
				10	8	7.00
Pollution						10%
Pol 1	Impact of Refrigerants	*To reduce the level of greenhouse gas emmissions arising from the leakage of refrigerants from building systems.*	N/A	3	0	0.00
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.*	N/A	3	0	0.00
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.*	Flood Risk	2	2	1.54
			Surface Water Run-Off	2	2	1.54
			Minimising Watercourse Pollution	1	0	0.00
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.*	N/A	1	1	0.77

Issue ID	Description	Aim	Issue Part	Available Credits	Predicted Credits	Weighted Score (%)
Pol 5	Reduction of Noise Pollution	*To reduce the likelihood of noise from the new development affecting nearby noise-sensitive buildings.*	N/A	1	1	0.77
				13	6	4.62
Innovation						10%
Inn 1	Man03 Responsible Construction Pratices			1	0	0
	Man05 Aftercare			1	1	1
	Hea01 Visual Comfort			1	0	0
	Hea02 Indoor Air Quality			2	0	0
	Ene01 Reduction of Energy Use and Carbon Emissions			5	0	0
	Wat01 Water Consumption			1	0	0
	Mat01 Life Cycle Impacts			3	0	0
	Mat03 Responsible Sourcing of Materials			1	0	0
	Wst01 Construction Waste Management			1	0	0
	Wst02 Recycled Aggregates			1	0	0
	Wst05 Adaptation to Climate Change			1	0	0
				10	10	1

BREEAM 2014 Hotel - Results Summary

Indicative Pre-assessment Results



Score 71.47%

Rating 'Excellent'

Rating Scale	% score
Unclassified	<30
Pass	≥30
Good	≥45
Very Good	≥55
Excellent	≥70
Outstanding	≥85

BREEAM 2014 - Offices

Issue ID	Description	Aim	Issue Part	Available Credits	Predicted Credits	Weighted Score (%)
Management						12%
Man 1	Project Brief and Design	*To recognise and encourage an intergrated design process that optimises building performance.*	Stakeholder Consultation (project delivery)	1	1	0.57
			Stakeholder Consultation (third party)	1	1	0.57
			Sustainability Champion (design)	1	1	0.57
			Sustainability Champion (monitoring progress)	1	1	0.57
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.*	Elemental Life Cycle Cost	2	2	1.14
			Component Level LCC Plan	1	1	0.57
			Capital Cost Reporting	1	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.*	Environmental Management	1	1	0.57
			Sustainability Champion	1	1	0.57
			Considerate Construction	2	2	1.14
			Monitoring of construction-site impacts:			
			Energy/Water	1	1	0.57
			Transport	1	1	0.57
Man 4	Commissioning and Handover	*Toi encourage a properly planned handover and commissioning process that reflects the needs of the building occupants.*	Commissioning/Testing Schedule & Responsibilities	1	1	0.57
			Commissioning Building Services	1	1	0.57
			Testing and Inspecting Building Fabric	1	0	0.00
			Handover	1	1	0.57
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.*	Aftercare Support	1	1	0.57
			Seasonal Commissioning	1	1	
			Post Occupancy Evaluation	1	1	
				21	20	11.43

Issue ID	Description	Aim	Issue Part	Available Credits	Predicted Credits	Weighted Score (%)
Health & Wellbeing						15%
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.*	Glare Control	1	1	0.83
			Daylighting	1	0	0.00
			View Out	1	1	0.83
			Internal & External Lighting	1	1	0.83
Hea 02	Indoor Air Quality	*To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.*	Minimising Sources of Air Pollution			
			IAQ Plan	1	1	0.83
			Ventilation	1	0	0.00
			VOC Products	1	0	0.00
			VOC Emissions Testing	1	0	0.00
			Adaptability	1	0	0.00
Hea 03	Safe Containment Laboratories					
Hea 04	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.*	Thermal Modelling	1	1	0.83
			Adaptability to a climate change scenario	1	1	0.83
			Thermal Modelling Controls	1	1	0.83
Hea 5	Acoustic Performance	*To ensure the building's acoustic performance including sound insulation meet the appropriate standards for its purpose.*	Sound Insulation	4	3	2.50
						0.00
						0.00
Hea 6	Safety and Security	*To recognise and encourage effective measures that promote safe and secure use and access to and from the building.*	Safe Access	1	1	0.83
			Security of the site & building	1	1	0.83
				18	11	9.32

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.*	N/A	12	8	5.00
Ene 2	Energy Monitoring	*To recognise and encourage the installation of energy sub-metering that facilitates the monitoring of operational energy consumption.*	Major Energy Uses	1	1	0.63
			High Energy Load/Tenancy Areas	1	0	
Ene 3	External Lighting	*To recognise and encourage the specification of energy-efficient light fittings for external areas of the development.*	N/A	1	1	0.63
Ene 4	Low Carbon Design	*To encourage the adoption of design measures, which reduce*	Passive Design			
			Passive Design Analysis	1	0	0.00
			Free Cooling	1	0	0.00
			LZC Technologies			
			LZC Feasibility Study	1	1	0.63

Issue ID	Description	Aim	Issue Part	Available Credits	Predicted Credits	Weighted Score (%)
Ene 5	Energy Efficient Cold Storage					
Ene 6	Energy Efficient Transportation Systems	*To recognise and encourage the specification of energy efficient transportation systems.*	Energy Consumption	1	1	1.88
			Energy Features	2	2	3.75
Ene 7	Energy Efficient Laboratory Systems					
Ene 8	Energy Efficient Equipment	*To recognise and encourage procurement of energy efficient equipment to ensure optimum performance and energy savings in operation.*	N/A	2	2	1.25
Ene 9	Drying Space			1	0	0.00
				24	16	13.75
Transport						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.*	N/A	3	3	3.38
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.*	N/A	1	1	1.13
Tra 3	Cyclist Facilities	*To encourage building users to cycle by ensuring adequate provision of cyclist facilities.*	N/A	1	1	1.13
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.*		2	2	2.25
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.*	N/A	1	1	1.13
				8	8	9.00
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.*	N/A	5	3	2.33
Wat 2	Water Monitoring	*To ensure water consumption can be monitored and managed, and therefore encourage reductions.*	N/A	1	1	0.78
Wat 3	Water Leak Detection	*To reduce the impact of major water leaks that may otherwise go undetected.*	Leak Detection System	1	1	0.78
			Flow Control Devices	1	1	0.78

Issue ID	Description	Aim	Issue Part	Available Credits	Predicted Credits	Weighted Score (%)
Wat 4	Water Efficient Equipment	*To reduce unregulated water consumption by encouraging specification of water efficient equipment.*	N/A	1	1	0.78
				9	7	5.44
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.*	N/A	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.*	N/A	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.*	Sustainable Procurement Plan	1	1	1.04
			Responsible Sourcing of Materials	3	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.*	Embodied Impact	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.*	N/A	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.*	N/A	1	0	0.00
				13	9	9.35
Waste						8.50%
Wst 1	Construction Waste Management	*To promote resource efficiency via the effective management and reduction of construction waste.*	Construction Resource Efficiency	3	1	1.06
			Diversion of Resources from Landfill	1	1	
Wst 2	Recycled Aggregates	*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.*	N/A	1	0	0.00
Wst 3	Operational Waste	*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.*	N/A	1	1	1.06
Wst 4	Speculative Floor and Ceiling Finishes					

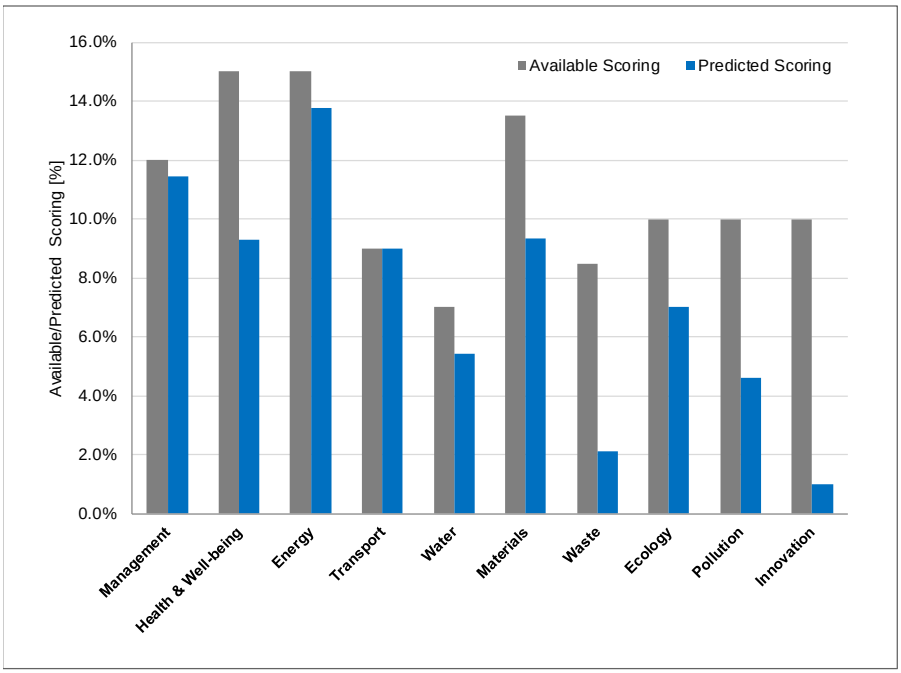
Issue ID	Description	Aim	Issue Part	Available Credits	Predicted Credits	Weighted Score (%)
Wst 5	Adaptation to Climate Change	*To recognise and encourage measures taken to mitigate the impact of extreme weather conditions arising from climate change over the lifespan of the building.*	Structural and Fabric Resilience	1	0	0.00
Wst 6	Functional Adaptability	*To recognise and encourage measures taken to accommodate future changes of use of the building over its lifespan.*	N/A	1	0	0.00
				8	3	2.13
Land Use & Ecology						10%
LE 1	Site Selection	*To encourage the use of previously developed land and/or contaminated land and avoid land which has not been previously disturbed.*	Previously Occupied Land	1	1	1.00
			Contaminated Land	1	0	
LE 2	Ecoloigcal Value of Site and Protection of Ecological Features	*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.*	Ecological Value of Site	1	1	1.00
			Protection of Ecological Features	1	1	
LE 3	Minimising Impact on Existing Site Ecology	*To minimise the impact of a building development on existing site ecology.*		2	2	2.00
LE 4	Enhancing Site Ecology	*To recognise and encourage actions taken to maintain and enhance the ecological value of the site as a result of development.*	Ecologist's Report & Recommendations	1	1	1.00
			Increase in Ecological Value	1	0	0.00
LE 5	Long Term Impact on Biodiversity	*To minimise the long term impact of the development on the site's, and surrounding area's, biodiversity.*	N/A	2	2	2.00
				10	8	7.00
Pollution						10%
Pol 1	Impact of Refrigerants	*To reduce the level of greenhouse gas emmissions arising from the leakage of refrigerants from building systems.*	N/A	3	0	0.00
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.*	N/A	3	0	0.00
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.*	Flood Risk	2	2	1.54
			Surface Water Run-Off	2	2	1.54
			Minimising Watercourse Pollution	1	0	0.00
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.*	N/A	1	1	0.77

Issue ID	Description	Aim	Issue Part	Available Credits	Predicted Credits	Weighted Score (%)
Pol 5	Reduction of Noise Pollution	*To reduce the likelihood of noise from the new development affecting nearby noise-sensitive buildings.*	N/A	1	1	0.77
				13	6	4.62

Innovation				
				10%
Inn 1	Man03 Responsible Construction Pratices	1	0	0
	Man05 Aftercare	1	1	1
	Hea01 Visual Comfort	1	0	0
	Hea02 Indoor Air Quality	2	0	0
	Ene01 Reduction of Energy Use and Carbon Emissions	5	0	0
	Wat01 Water Consumption	1	0	0
	Mat01 Life Cycle Impacts	3	0	0
	Mat03 Responsible Sourcing of Materials	1	0	0
	Wst01 Construction Waste Management	1	0	0
	Wst02 Recycled Aggregates	1	0	0
	Wst05 Adaptation to Climate Change	1	0	0
		10	10	1

BREEAM 2014 Offices - Results Summary

Indicative Pre-assessment Results



Score 73.03%
Rating 'Excellent'

Rating Scale	% score
Unclassified	<30
Pass	≥30
Good	≥45
Very Good	≥55
Excellent	≥70
Outstanding	≥85

C. General Notes

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 Ensphere Group Ltd for inaccuracies in the data supplied by any other party.

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.

No site visits have been carried out, unless otherwise specified.

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.

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