SUSTAINABILITY STATEMENT

UKCMRI

UK Centre for Medical
Research & Innovation

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EXECUTIVE SUMMARY

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ES 1.
Executive Summary
This Sustainability Statement has been prepared in support of a detailed planning application for the UK Centre for Medical Research and Innovation (UKCMRI) (herein referred to as the “Proposed Development”). The Proposed Development provides a biomedical research centre including laboratory and research space, lecturing and teaching space, exhibition space and a community facility; landscaped public open spaces; a new pedestrian route between Midland Road and Ossulston Street; and new vehicular access from Midland Road.

ES 2.
This has been structured around the requirements and sustainability objectives of the Greater London Authority (GLA) and the London Borough of Camden (LBC).

ES 3.
The vision for the Proposed Development is to be a state of the art sustainable development, with sustainability principles embedded into its design and operational concept.

ES 4.
The sustainability strategy for the Proposed Development includes a reduction of energy and water usage; optimal occupant well-being and comfort; waste minimisation; use of suitable materials; and promotion of sustainable means of transport. In order to achieve these targets the sustainability vision for UKCMRI is based on a holistic approach embedding all key sustainable principles, balancing social, economic and environmental factors and employing technically innovative sustainable design solutions which are at the same time financially feasible over the lifecycle of the building.

ES 5.
Given the dynamic nature of research, the Proposed Development will be versatile and adapt quickly to changes in research methodologies. As well as fixed elements of infrastructure, there will be elements that are readily reconfigurable by the user in response to changes in scientific processes, equipment and staffing.

ES 6.
The Proposed Development will meet its heating, cooling and electrical demands while at the same time reducing to realistic minima its energy consumption and associated CO_2 emissions to the atmosphere. In particular, UKCMRI is being designed to comply with Building Regulations Approved Document Part L 2010, which involves an aggregate 25% improvement in CO_2 emission over the current 2006 Building Regulations.

ES 7.
Specifically, CO_2 emissions will be reduced by specifying energy-efficient building services (including heat recovery to ventilation systems, low energy cooling to the data centre, and high efficiency lighting) and an on-site Combined Heat and Power (CHP) plant, with future-proofing to facilitate potential connection to any future Euston Road district heating scheme. The use of Combined Cooling Heat and Power (CCHP) in the Proposed Development has been assessed but found to be less feasible than the use of CHP. To further reduce CO_2 emissions an analysis of the use of renewable energy technologies for UKCMRI has been undertaken and photovoltaics have been identified as feasible. It is proposed to install these systems in the south facing roof of the building – a position which optimises their orientation. Photovoltaics will provide green energy and at the same time act as visual features, showcasing this renewable technology to the local community. The proposed energy strategy will allow UKCMRI to save circa 9,950 tonnes CO_2/year, corresponding to a reduction of approximately 31% of the total building load.

ES 8.
To ensure the energy efficient operation of the Proposed Development, a comprehensive commissioning strategy and energy management and targeting system will be implemented and all building users will be provided with information and guidance on how to use energy efficiently.

ES 9.
Water conservation will be promoted throughout the Proposed Development by specifying water efficient fittings and sanitary ware, and water-efficient landscaping. The major water consumption item is the blowdown from the steam boiler system. It is therefore proposed to provide water treatment through reverse osmosis technology, which allows significant reductions in water consumption (equivalent to approximately 100 tonnes CO_2/year).

ES 10.
The strategy for the specification and procurement of materials will recognise green procurement objectives and include requirements to minimise environmental impact, reduce waste and use products from sustainably managed supply chains.

ES 11.
Waste minimisation and recycling will be promoted. During the construction phase, the Proposed Development will aim to reduce the amount of waste generated and exported from the site. A Site Waste Management Plan (SWMP) has been developed to support the principles of the Waste and Resources Action Programme (WRAP) initiative and the requirements of the Considerate Constructor Scheme. During the operational phase, extensive recycling facilities (including dedicated space for compostable food waste) will be provided and building users will be educated on the waste strategy for the Proposed Development, including recycling targets.

ES 12.
High quality landscaped areas will be integrated into the building design, creating lively, animated spaces. The specification of ecological features is being developed in line with the recommendations of a specialist ecology team. Additionally, brown roofs will be specified to appropriate areas of the Proposed Development. These features will have the benefit of providing habitats for local wildlife.

ES 13.
UKCMRI will promote sustainable means of transport. The Proposed Development is located in a prime location, highly accessible by public transport and this will therefore allow staff and visitors to commute by public transport. No car parking provision will be included in the Proposed Development, apart from provision for blue badge disabled users. The Proposed Development will also support cycling by providing cycle parking and associated showering and changing facilities. Additionally, a Travel Plan has been produced and transport information and material will be provided to the building users and visitors to promote sustainable travel and ensure they are aware of the sustainable travel options available.

ES 14.
In terms of economic and social sustainability, UKCMRI will contribute to maintaining London's role as a national and international centre of scientific research and will attract leading scientists worldwide. While many of the scientists working at UKCMRI will be drawn from a labour pool that is international in nature, there will also be tangible economic and social benefits for the surrounding area. UKCMRI will implement an employment and training strategy to ensure that the opportunities are maximised for local residents and businesses. Active collaboration with local schools and communities will be supported in order to develop public understanding of and interest in science, and promote the study of science, building on existing programmes run by the partners (Cancer Research UK, University College London, the Medical Research Council and the Wellcome Trust). Additionally, the Proposed Development will contribute to urban regeneration by boosting demand for local services.

ES 15.
The environmental performance of the Proposed Development is also being assessed against the Building Research Establishment Environmental Assessment Methodology (BREEAM). Due to the unique nature of UKCMRI, a BREEAM Bespoke Protocol tailored to the Proposed Development has been developed. In line with the UKCMRI vision to provide highly sustainable research facilities, the Proposed Development intends to target all practicable credits to achieve the highest possible BREEAM rating, and is committed to achieving an ‘Excellent’ rating. The Proposed Development will be continuously re-assessed throughout its development (both at design and procurement stage and construction stage) to improve its BREEAM rating as much as feasible.

CHAPTER 1.0

INTRODUCTION

1.0 Introduction

1.1
Introduction
This statement has been prepared in support of a detailed planning application for the UK Centre for Medical Research and Innovation (UKCMRI) (herein referred to as the "Proposed Development"). The Proposed Development provides a biomedical research centre including laboratory and research space, lecturing and teaching space, exhibition space and a community facility; landscaped public open spaces; a new pedestrian route between Midland Road and Ossulston Street; and new vehicular access from Midland Road.

1.2
The Proposed Development includes high quality multidisciplinary research facilities. The proposed facilities will enable innovative research of the highest quality to be conducted by renowned scientists, provide training for the next generation of scientists and play a major national and international role supporting the biomedical research endeavour.

1.3
The UKCMRI team has engaged with the Greater London Authority (GLA) and the LBC through the pre-application process to ensure the Proposed Development's compliance with the planning requirements.

1.4
The feedback provided by the GLA and LBC has been considered and incorporated into the proposed sustainability strategy for the Proposed Development, as far as practicable.

1.5
In the context of this planning application, this statement presents the proposed sustainability strategy as required by the following planning policy and guidance documentation:

- The London Plan, Spatial Development Strategy for Greater London, Consolidated with Alterations since 2004, Greater London Authority, 2010;
- Sustainable Design and Construction, The London Plan Supplementary Planning Guidance, Greater London Authority, 2006;
- Integrating Renewables into New Developments: Toolkit for Developers, Planners and Consultants, London Energy Partnership, 2004;
- Guidance on Planning Energy Assessment, Greater London Authority Energy Team, 2009;
- Green Light to Clean Power: the Mayor's Energy Strategy, Greater London Authority, 2004;
- Connecting with London's Nature: The Mayor's Biodiversity Strategy, Greater London Authority, 2002;
- Rethinking Rubbish in London: The Mayor's Municipal Waste Management Strategy, Greater London Authority, 2003;
- Sounder City: The Mayor's Ambient Noise Strategy, Greater London Authority, 2004;
- Cleaning London's Air: The Mayor of London's Air Quality Strategy, Greater London Authority, 2002;
- Replacement Unitary Development Plan, London Borough of Camden, 2006;
- Camden Planning Guidance, London Borough of Camden, 2006; and
- Guide for Contractors Working in Camden, London Borough of Camden, 2008.

1.6
In line with the above policy and guidance, this statement demonstrates how the Proposed Development will take into account sustainable design issues, balancing technical, economic and environmental factors. This approach requires environmental performance to be tested against economic viability. Therefore, the measures that will be incorporated into the Proposed Development will be practical and achievable.

1.7
The remainder of this statement is structured as follows:

- Section 2 presents an overview of the Proposed Development;
- Section 3 outlines the policy context;
- Section 4 sets out the assessment methodology;
- Section 5 details the sustainability features of the Proposed Development;
- Section 6 presents the conclusions; and
- The Appendix includes the Preliminary Building Research Establishment Environmental Assessment Methodology (BREEAM) Bespoke Assessment for the Proposed Development.

CHAPTER 2.0

THE PROPOSED DEVELOPMENT

2.0 The Proposed Development

2.1
The Proposed Development
UKCMRI is seeking planning permission for a development providing a biomedical research centre including laboratory and research space, lecturing and teaching space, exhibition space and a community facility; landscaped public open spaces; a new pedestrian route between Midland Road and Ossulston Street; and new vehicular access from Midland Road.

2.2
The Proposed Development will be among the very best of the world's biomedical research institutes. It will carry out the highest quality multidisciplinary research and will serve a national and international role in supporting biomedical research.

2.3
The creation of UKCMRI has been made possible by an innovative partnership between the Medical Research Council (MRC), Cancer Research UK, the Wellcome Trust and University College London (UCL).

2.4
UKCMRI will house around 1,500 staff, making it one of Europe's largest centres of biomedical research. The UKCMRI project is not simply about bringing together different research institutes on a single site. It has provided an opportunity to build on the world class research currently being carried out by MRC, UCL and Cancer Research UK. It will consider from scratch how a world-leading national research institute should be organised and run. UKCMRI will be an entirely new institute with a distinctive vision of how biomedical research should be conducted.

2.5
The design will:

- Provide functional, effective research spaces that will promote creativity and original thinking;
- Create a quality built environment that will attract and retain the best researchers;
- Promote interaction and collaboration among scientists to reinforce the multidisciplinary nature of research;
- Provide opportunities for formal and informal interaction among researchers; and
- Given the dynamic nature of research and related technologies, provide space that is versatile and can adapt to changes in research methodologies, technology, equipment, and processes so as to facilitate flexibility and future growth.

2.6
The Proposed Development fulfils two distinct functions. It creates a unique platform for biomedical research, and contributes to the regeneration of a long neglected fragment of London's urban fabric. UKCMRI will work for science.

2.7
Internally, the Proposed Development will provide a biomedical research centre including laboratory and research space, lecturing and teaching space, exhibition space, a community facility, back of house functions and plant spaces. Externally, the development includes landscaped public open spaces; a new pedestrian route between Midland Road and Ossulston Street; and new vehicular access from Midland Road.

2.8
The building is distributed over 10 floors. Above the ground floor the building has 7 additional floors. There are 2 basements each with interstitial mezzanine levels. The plan provides two distinct types of research space; two basement spaces for highly serviced, internally focussed research, and four blocks of laboratory accommodation spread over several floors that benefit from natural light and visibility. The laboratories can be arranged in many different configurations fulfilling the requirement for adaptability.

Figure 2-1. View of the Proposed Development from Midland Road