



Wensley Road

Sustainability Statement

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Contents		Page
1.0	Executive Summary	3
2.0	Introduction	4
3.0	Context	5
4.0	Methodology	9
5.0	Sustainability Statement	10
6.0	Conclusion	15
7.0	References	16



Figure 1: Aerial photo of the site

1.0 Executive Summary

HTA Sustainable Futures have been appointed by Reading Borough Council to prepare a Sustainability Statement to support the submission of a planning application for the development at Wensley Road in Reading.

The description of Proposed Development for this planning application is set out below:

"Demolition of 29 garages, and development of 46 new dwelling units, including the provision of affordable homes, provided in a mixture of houses and apartments (1 bed/ 2 bed / 3 bed), in blocks of up to 2.5 and 4 storeys, and the provision of bicycle parking spaces and public realm works".

This report summarises the sustainability elements of the development and it includes an overview of the site and planning policies in accordance with the Reading Borough Local Plan.

Key elements of the Proposed Development which address resource efficiency and environmental protection can be summarised as follows:

- New homes of high sustainable standards are provided, which secure good daylighting, use of high quality materials and a healthy indoor environment.
- It is estimated that the proposed development will save 100% of carbon emissions compared to the Part L 2013 baseline. This will be achieved by using a combination of passive design measures, by supplying energy efficiently and by using renewable energy systems.
- Good access from Wensley Road to existing green and active travel networks is being promoted. A nature recovery network and connected green corridors will enhance nature at Wensley Road. A fun and stimulating natural play space will additionally be provided with activities for all ages.
- A transport statement has been developed and demonstrates that the development benefits from being well located to sustainable modes of travel, therefore providing future occupants the opportunity to travel sustainably. It is therefore considered that the impact generated by the proposed development will not be severe and the site presents an excellent

opportunity for a highly sustainable development.

- Enhanced external landscape and biodiversity value: The site will look to be a continuation of the surrounding biodiversity rich landscape and will aim to become a vital link in an expanded green network. This will be achieved through a range of habitat types which will be created within the site.
- The effective use of resources is optimised and their impact on the existing environment across all construction and operation processes is kept to a minimum. Noise, waste, water consumption and air pollution issues are addressed. They are incorporated into and mitigated by the design and management framework.

2.0 Introduction

This Sustainability Statement has been prepared by HTA Design LLP in support of the planning application of the proposed scheme of Wensley Road, Reading.

This report should be read in conjunction with other supporting documents submitted with the planning application including the Design and Access Statement prepared by HTA Architects, which explains the Proposed Development in more detail and relates it to the surrounding context and planning policy framework for the Site.

The Site

The site is located within the loop at the end of Wensley Road, within the Coley Park Estate. Currently three 15 storey tower blocks are located within the site itself. On the neighbouring site within the loop there are terrace and semi-detached houses.

There are three parking courts serving each of the three towers, each of which are accessed directly from Wensley Road. There are no vehicular routes across the loop.

There are existing open grass amenity spaces adjacent to each of the towers. They are fenced off from the loop road and are only accessible from within the site boundary.

Between the three tower blocks, there is a play space for 5-11yr olds, which is publicly accessible via pedestrian footpath. A further larger play space for the local neighborhood is within Courage Park.

Description of the proposed development

The submitted proposal consists of 46 new affordable homes, which includes 26 three bedroom terrace houses, two detached four bedroom houses and a single apartment building of 18 flats, containing 8 one-bedroom flats and 10 two-bedroom flats. All of the proposed dwellings are situated north of the site and have been designed as three coherent areas, Blocks A, B and C.

The site layout has been refined to ensure that both the existing and the proposed dwellings can be accessed, served and maintained in a safe and secure manner.

Structure and Purpose of this Report

This Sustainability Statement has been prepared to provide an assessment of sustainability considerations relevant to the Proposed Development with regards to the national, regional and local planning policy framework.

The Proposed Development is assessed taking into consideration the following:

- Development Plan Policies contained in:
 - Reading Borough Local Plan comprising:
 - Core Planning Strategy (Adopted November 2019);
 - Other main planning policy documents: Sustainability Appraisal Scoping Report (Revised September 2014);
 - Supplementary planning documents: Sustainable Design and Construction (Adopted July 2011)
- Materials considerations including:
 - National Planning Policy Framework (NPPF);
 - Planning Practice Guidance (PPG);
 - Reading's Climate Change Strategy (2013-2030);
 - Emerging planning policies and guidance.

The following sections of this report provide the following:

Chapter 1 - Executive Summary
 Chapter 2 - Introduction
 Chapter 3 - Context
 Chapter 4 - Methodology
 Chapter 5 - Sustainability Assessment
 Chapter 6 - Conclusion
 Appendices / References

Within this report:

- Where reference is made to Site, this relates to the area bound in red on the Site Location Plan (Figure 2).



Figure 2: Existing site plan

3.0 Context

Planning policy context

The government has recognised the need to ensure the long term sustainability of new developments and their communities, and as a policy response, has published the National Policy Framework (2012, with 2019 updates) to replace the suite of existing policies and guidance documents.

The development proposal will be assessed against the National Planning Policy Framework (NPPF) and policies contained within the Reading Borough Local Plan as outlined in the section below.

National regional local

National Planning Policy Framework (2019)

The National Planning Policy Framework states that there are three dimensions to sustainable development: economic, social and environmental.

The NPPF goes on to state that 'these objectives should be delivered through the preparation and implementation of plans and the application of the policies in this Framework'.

Planning Practice Guidance (2016 with 2019 updates)

Climate Change Planning Guidance (2014 with 2019 updates)

Addressing climate change is one of the core land use planning principles which the National Planning Policy Framework expects to underpin both plan-making and decision-taking. To be found sound, Local Plans will need to reflect this principle and enable the delivery of sustainable development in accordance with the policies in the National Planning Policy Framework.

This Planning Practice Guidance also recommends paying particular attention to integrated adaptation and mitigation approaches and looking for 'win-win' solutions that will support sustainable development.

Renewable and low carbon energy (2015)

The guidance assists local councils in developing policies for renewable energy in their local plans, and identifies the planning considerations for a range of renewable sources such as hydropower, active solar technology, solar farms and wind turbines.

Increasing the amount of energy from renewable and low

carbon technologies will help to make sure the UK has a secure supply, reduce greenhouse gas emissions to slow down climate change and stimulate investment in new jobs and businesses. Planning has an important role in the delivery of new renewable and low carbon energy infrastructure in locations where the local environmental impact is acceptable.

Local Policy

The following local policies and guidance apply to the development:

Reading Borough Local Plan (Adopted November 2019):

Policy CC2 - Sustainable design and construction

Proposals for new development, including the construction of new buildings and the redevelopment and refurbishment of existing building stock, will be acceptable where the design of buildings and site layouts use energy, water, minerals, materials and other natural resources appropriately, efficiently and with care and take account of the effects of climate change.

To meet these requirements:

- All major non-residential developments or conversions to residential are required to meet the most up-to-date BREEAM 'Excellent' standards, where possible.

Policy CC3 - Adaptation to climate change

All developments will demonstrate how they have been designed to incorporate measures to adapt to climate change. The following measures shall be incorporated into development:

- Wherever possible, new buildings shall be orientated to maximise the opportunities for both natural heating and ventilation and reducing exposure to wind and other elements;
- Proposals involving both new and existing buildings shall demonstrate how they have been designed to maximise resistance and resilience to climate change for example by including measures such as solar shading, thermal mass, heating and ventilation of the building and appropriately coloured materials in areas exposed to direct sunlight, green and brown roofs, green walls, etc;
- Use of trees and other planting, where appropriate

as part of a landscape scheme, to provide shading of amenity areas, buildings and streets and to help to connect habitat, designed with native plants that are carefully selected, managed and adaptable to meet the predicted changed climatic conditions; and

- All development shall minimise the impact of surface water runoff from the development in the design of the drainage system, and where possible incorporate mitigation and resilience measures for any increases in river flooding levels as a result of climate change.

Policy CC4 - Decentralised energy

In meeting the sustainability requirements of this plan, developments of the sizes set out below shall demonstrate how consideration has been given to securing energy for the development from a decentralised energy source. Any development of more than 20 dwellings and/ or non-residential development of over 1,000 sq m shall consider the inclusion of decentralised energy provision, within the site, unless it can be demonstrated that the scheme is not suitable, feasible or viable for this form of energy provision. Where there is existing decentralised energy provision present within the vicinity of an application site, further developments of 10 dwellings or more or non-residential development of 1,000 sq m or more will be expected to link into the existing decentralised energy network or demonstrate why this is not feasible.

Policy CC5 - Waste minimisation and storage

Development should demonstrate measures to minimise the generation of waste in the construction, use and life of buildings and promote more sustainable approaches to waste management, including the reuse and recycling of construction waste and the promotion of layouts and designs that provide adequate, well-designed space to facilitate waste storage, reuse, recycling and composting.

Policy EN9 - Provision of open space

All new development should make provision for appropriate open space based on the needs of the development. This can be achieved through on or off-site provision, contributions toward provision or improvement of existing leisure or recreational facilities.

On sites of 50 dwellings or more, or for developments where the availability and quality of existing open space has been identified as deficient, new provision will be sought. Development must ensure satisfactory provision

of children's play areas and neighbourhood parks.

A secure maintenance arrangement shall be demonstrated to ensure that any open space is properly maintained throughout the life of the development. In exceptional circumstances where the Council agrees to the adoption of the open space, a commuted sum for future maintenance will be required as part of any legal agreement.

On sites of less than 50 dwellings, or in areas not identified as deficient in the provision of open space, new open space provision, improvements or enhancements will be sought, including through appropriate contributions.

The provision of open space for all developments shall satisfy the most urgent need subject to considerations of particular deficiencies. The most up-to-date Open Spaces Strategy should guide provision type and size. New open space should:

- Be in useable parcels of land and not be fragmented;
- Be safely and easily accessible and not severed by any physical barrier, including a road;
- Be accessible to the general public and be designed so as to feel that it is part of the public and not private realm;
- Create a safe environment, appropriately considering lighting and layout to reduce the fear of crime;
- Provide some informal landscaping for aesthetic, wildlife and recreational purposes; and
- Link into the Green Network where possible.

Policy EN15 - Air Quality

Development should have regard to the need to improve air quality and reduce the effects of poor air quality.

i. Development that would detrimentally affect air quality will not be permitted unless the effect is to be mitigated.

The following criteria should be taken into account:

- Whether the proposal, including when combined with the cumulative effect of other developments already permitted, would worsen air quality;

- Whether the development is within, or accessed via, an Air Quality Management Area; and
- Whether it can be demonstrated that a local worsening in air quality that would not detrimentally affect human health or the environment would be offset by an overall improvement in air quality, for instance through reduction in the need to travel.

ii. Where a development would introduce sensitive uses (such as residential, schools and nurseries, hospitals, care facilities) into, or intensify such uses within, an Air Quality Management Area, detrimental effects on that use will be mitigated. Mitigation measures should be detailed in any planning application. If there are significant detrimental effects that cannot be mitigated, the application should be refused.

iii. Where required, planning obligations will be used to secure contributions to measures to tackle poor air quality or for air quality monitoring.

Policy EN18 - Flooding and Sustainable Drainage Systems

Development will be directed to areas at lowest risk of flooding in the first instance, following the Sequential and Exceptions Test set out in the NPPF, and taking into account the effects of climate change. It will consider flooding from all sources, including fluvial, surface water, groundwater and sewer flooding. Where development in areas at risk of flooding is necessary, it will not reduce the capacity of the flood plain to store floodwater, impede the flow of floodwater or in any way increase the risks to life and property arising from flooding. Wherever possible, development should be designed to reduce flood risk, both on- and off-site.

All major developments⁶³ must incorporate sustainable drainage systems (SuDS) as appropriate and in line with the Government's Technical Standards⁶⁴. Smaller schemes are encouraged to incorporate SuDS, where possible. Runoff rates should aim to reflect greenfield conditions and, in any case, must be no greater than the existing conditions of the site. Schemes should ensure that the movement of water through vertical infiltration as well as horizontal run-off does not worsen contamination effects. Wherever possible, SuDS provision should maximise ecological benefits, link into the existing Green Network, incorporate tree planting and landscaping and avoid damage to existing significant trees, including through changes to the site hydrology.

All new developments in areas of flood risk should give priority to SuDS.

Policy H5 - Standards for new housing

New build housing should be built to the following standards, unless it can be clearly demonstrated that this would render a development unviable:

- All new build housing outside the Central Area as defined on the Proposals Map will comply with the nationally-described space standard.
- All new build housing will be built to the higher water efficiency standard under Regulation 36(3) of the Building Regulations⁷⁹.
- All major new-build residential development should be designed to achieve zero carbon homes.
- All other new build housing will achieve at a minimum a 19% improvement in the dwelling emission rate over the target emission rate, as defined in the 2013 Building Regulations.
- All new build housing will be accessible and adaptable in line with M4(2) of the Building Regulations, unless it is built in line with M4(3) (see below).
- On developments of 20 or more new build dwellings, at least 5% of dwellings will be wheelchair user dwellings in line with M4(3) of the Building Regulations. Any market homes provided to meet this requirement will be 'wheelchair adaptable' as defined in part M, whilst homes where the Council is responsible for allocating or nominating an individual may be 'wheelchair accessible'.

Policy TR1 - Achieving the transport strategy

Proposed development should contribute appropriately to meeting the objectives of the most up-to-date Local Transport Plan or any successor document, including sub-strategies, specific projects identified and the local action plans.

Planning permission will not be granted for major development proposals unless there is a commitment to implement measures to promote and improve sustainable transport facilities, such as through provision to encourage walking, cycling and the use of public transport; and through agreed travel plans, safe routes to local facilities and services, including schools and parks, and similar

measures.

All development proposals should make appropriate provision for works and contributions to ensure an adequate level of accessibility and safety by all modes of transport from all parts of a development, particularly by public transport, walking and cycling, in accordance with any agreed transport assessment submitted as part of the application.

Reading's Climate Change Strategy (2013-2020)

The climate action network sets out the following strategic priorities organised by theme:

- Energy supply
- Low Carbon Development
- Natural Environment
- Water Supply and flooding
- Transport
- Purchasing, Supply and consumption
- Education, Communication and Influencing Behaviour
- Community

Sustainability Appraisal Scoping Report, Reading Borough (Revised September 2014)

The Sustainability Appraisal Framework (found in the 2014 Sustainability Appraisal Scoping Report, Appendix 3) sets out the sustainability objectives against which the effects of the plan will be assessed.

Sustainable Design and Construction SPD (Adopted December 2019)

This document is a Supplementary Planning Document (SPD). It provides supplementary information to support policies in the Reading Borough Local Plan, adopted in November 2019. It relates particularly to the sustainability policies of the Local Plan, specifically policies CC2, CC3, CC4, CC5, EN18 and H5. It replaces the previous Sustainable Design and Construction SPD, adopted in July 2011.

It provides practical advice on forms of sustainable design and construction, as well as waste minimisation that will meet these policy requirements. It also details how policies will be applied. This should assist applicants in ensuring that the relevant information is submitted at the appropriate stage of the application and development process.

This document also states that Reading Borough Council has declared a Climate Emergency, and set out its commitment to working to achieve a carbon neutral Reading by 2030. We also need to consider carefully how Reading adapts to a changing climate, the impact that its built space has on its own natural resources and habitats as well as pollution of its ground, water and air.

Client Sustainability Approach

Vision

Reading Borough Council have declared a climate emergency. The Wensley Road proposal is an opportunity for the Council to demonstrate the type of sustainable development that they would like to see delivered across Reading. The proposal has been designed to achieve Zero Carbon, based upon the new SAP 10 Carbon Factors, incorporating design features such as air source heat pumps, PV panels, highly efficient insulation, and triple glazed windows. Based on all the above, it should be noted that exemplary standards similar to PassivHaus principles are being aimed for.

4.0 Methodology

The Sustainability Statement has been prepared in compliance with the national, regional and local policies and objectives as described in Section 3.0.

This Statement should be read in conjunction with other supporting documents submitted with the planning application including the Design and Access Statement, prepared by HTA Design, which explain the proposed development in more detail and relate them to the surrounding context and planning policy framework for the site. For a complete list of reports used to inform this Sustainability Statement, please refer to the 'References' section at this end of this report.

In particular, the following topics have been considered for the assessment of the Proposed Development:

- Land site layout and building design;
- Energy, carbon dioxide emissions and renewable energy;
- Water efficiencies;
- Materials and waste;
- Nature conservation and biodiversity;
- Adapting to climate change and greening the city;
- Transport and movement;
- Health and social Wellbeing



5.0 Sustainability Statement

This part of the report aims to present how the development complies with sustainable development policies and objectives with particular regard to the Local Plan's policies.

Land site layout and building design

The site lies within a historically and archaeologically significant landscape, with evidence of activity being recovered dating from the prehistoric period to the present day.

The overall proposed development will consist of two phases. The first phase, which is part of this application, will comprise the construction of new homes, re-configuration of car parks and mews, improved central amenity space and the preservation and enhancement of landscape features. The second phase will include improvements to the existing three tower blocks, which forms a separate planning application to the phase one works.

The proposed development will comprise the construction of 46 new homes including a mixture of houses and flats, re-configure the parking courts and mews', improve the central amenity space, and preserve and enhance the landscape features. The new flats and houses will be 3 and 4-storeys high and will require significant foundations.

Good daylight is crucial for human health and life quality in a dwelling. Designing homes with high daylight factors enhances the architectural quality of space and contributes to the occupants' wellbeing. At the same time it is sustainable as it reduces the need for energy for lighting during daytime.

All new homes at Wensley Road will be designed taking into consideration the importance of daylight. The internal daylight results show that all houses and almost all flats achieve and exceed the BRE criteria for ADF and NSL tests. Since overheating issues have also been taken into account, all failures, mostly caused by balconies above windows, have been considered acceptable.

The scheme will have no adverse effects on access to daylight and sunlight of neighbouring properties as detailed in the Daylight and Sunlight Assessment submitted in support of this application.

Flood Risk Assessment

The Flood Risk Assessment carried out by WFBA Consulting Civil and Structural Engineers outlines that this design will incorporate the principles of Sustainable Drainage Systems (SuDS) as required by the National Planning Policy Framework as appropriate.

Surface Water Run-off

SuDS techniques for managing surface water within an urban environment, such as permeable paving and infiltration are preferred to the establishment of wetlands or detention basins which are more suited to a greenfield environment. To establish the feasibility of this, ground water monitoring and permeability testing will be required during the wetter months.

Further details on the incorporation of SUDs and flood resilience measures for this scheme can be found in the Flood Risk and SUDs strategy assessment submitted in support of the planning application.

Inclusive Design

The proposed development has been designed and developed with consideration and understanding of the principles of inclusive design with specific regard to residents of the development, visitors and people living within the site. The design access statement describes in detail all aspects which have been taken into account according to Building Regulations Part M.

Access

The layout of the site has been designed to ensure that it is accessible for all. Careful consideration has been given in particular to pedestrian routes through the site, including the journey of the residents to their homes. Also, existing local residents can access facilities within the site. The proposed bus stop has been located immediately adjacent to the central green space to improve access for members of the wider community.

Energy, carbon dioxide emissions and renewable energy

An energy assessment has been carried out for the Proposed Development by Hoare Lea. The energy strategy for the scheme is based upon the Energy Hierarchy advocated in Policy 5.2 of London Plan:

1. Be Lean: use less energy
2. Be Clean: supply energy efficiently
3. Be Green: use renewable energy

The scheme will incorporate a range of passive and active measures to reduce the energy demand and will install renewable energy technologies. The regulated CO₂ emission reduction will be reported using the SAP 10 Carbon Factors

to represent the grid decarbonisation. Based on Reading Borough Council's requirements, all major new-build residential developments should be designed to achieve zero carbon homes. Additionally, in meeting the sustainability requirements of this plan, developments shall demonstrate how consideration has been given to securing energy for the development from a decentralised energy source.

The energy strategy has considered passive design and

energy efficient solutions at the forefront of the design. ASHPs and PVs have additionally been identified as the most suitable renewable technology for the scheme.

Overall the new development achieves a regulated CO₂ saving of 100% beyond Part L 2013 baseline. Further details on the incorporation of renewable energy technologies in the proposed scheme can be found in the Energy Statement submitted in support of this application.

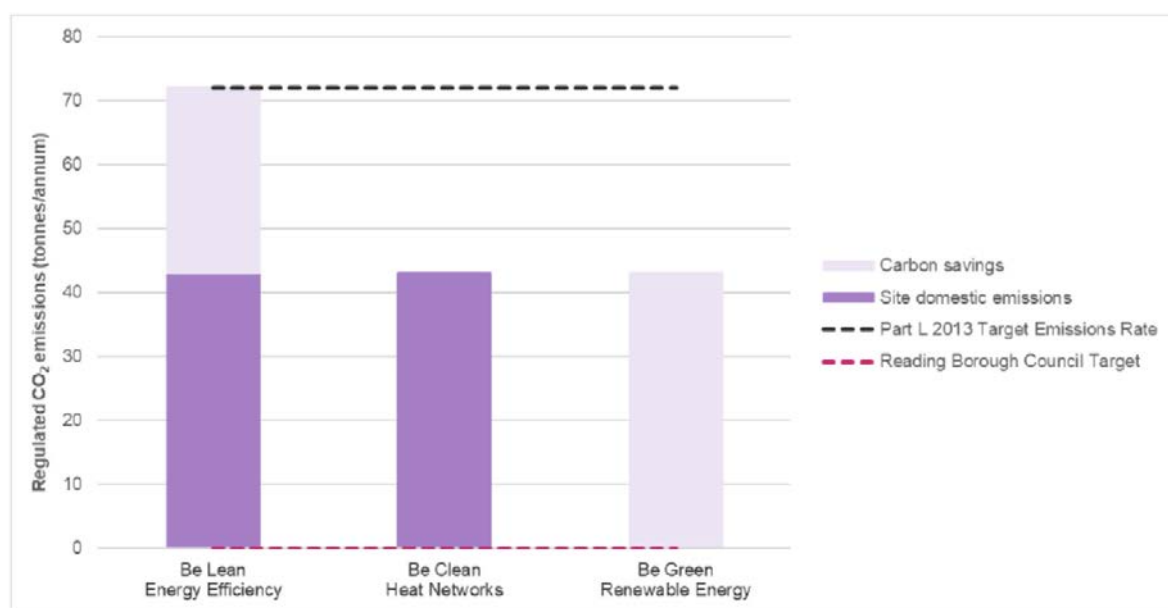


Figure 3: The Energy Hierarchy

Water efficiency

The new dwellings will reduce the use of potable water to below 105 litres/person/day using water efficient fittings. A downpipe is proposed to the rear of every house to provide the opportunity for rainwater collection for gardening purposes.

Materials and waste

Materials

All the materials specified for the proposed development will be durable and of high quality to minimise the need for maintenance or replacement. The use of materials and construction techniques that have smaller ecological and carbon footprints will be prioritised, as well as materials which help create good air quality. Where possible, materials will be sourced for local suppliers and manufacturers.

Re-use

Where possible, materials that arise through the removal of the existing car parks, such as excavated soil and hard core will be re-used. Existing play equipment that is still of good quality, has been incorporated into the landscape proposal.

Waste

Refuse & Recycling

It is hoped that by locating recycling facilities in convenient locations, will encourage recycling by residents. The front gardens of all the houses and the ground floor flats have been designed to incorporate an enclosure for a general waste and recycling bins and in the apartment building a shared refuse and recycling store is located immediately adjacent to main entrance.

Nature conservation and biodiversity

An Ecological Impact Assessment has been prepared by ECOSA Ltd.

The habitats of relatively greatest importance on the site are the mature scattered trees and the site offers suitability for tree roosting bats, foraging and commuting bats and nesting birds. Potential adverse impacts on these ecological features have been identified and suitable mitigation measures have been recommended including the implementation of a CEMP, use of tree protection barriers and a sensitive lighting scheme.

Further surveys are required of three trees with moderate suitability for roosting bats on site and further recommendations may be required on completion of these surveys.

The site can be enhanced through the provision of new native species planting, bat and bird boxes, resulting in an overall net gain for biodiversity.

As part of the planning conditions for the application, it is recommended that mitigation, compensation and enhancement measures are detailed within an EMEP document. If mitigation, compensation and enhancement measures are delivered (as outlined above), the proposals have the potential to accord with relevant national and local planning policy in relation to ecology including Policy CS36 of the Core Strategy and the NPPF.

Adapting to climate change and greening the city

The new buildings have been designed to adapt to and mitigate the effects of climate change. The potential risk of overheating will be mitigated by incorporating passive design measures in all dwellings.

An Overheating Assessment has been undertaken by Hoare Lea to mitigate overheating and reduce cooling demand in line with Policy CC3 of the Local Plan, Adaptation to Climate Change. The assessment is included in the Energy Statement prepared in support of this planning application.

Below are the steps of the cooling hierarchy and the proposals to demonstrate compliance:

1. Minimise internal heat generation through energy efficient design.

- Heat generation will be minimised through the specification of energy efficient ventilation systems,

insulation on pipework and low energy lighting.

2. Reduce the amount of heat entering a building in summer through orientation, shading, fenestration, albedo and insulation.

- The amount of heat entering the building will be reduced by:

- Energy efficient facades with appropriate proportions of glazing;
- A glazing shading coefficient carefully selected to minimise solar gain in the summer, but also to maximise solar gain in winter; and
- Light coloured blinds have been incorporated into the dwellings.

3. Manage the heat within the building through exposed internal thermal mass and high ceilings.

- Ceiling heights in the development have been maximised within the constraints of the overall building height and massing.

4. Passive Ventilation

- Passive ventilation (openable windows) will be incorporated throughout the development; and
- There will be a small amount of natural ventilation through infiltration.

5. Mechanical Ventilation

- Background ventilation will be provided by Mechanical Ventilation with Heat Recovery (MVHR). These units will incorporate a summer by-pass, which will allow the unit to supply fresh air without heat being transferred from the extract air into the supply air.

6. Active Cooling Systems

- The proposed strategy is that cooling will not be provided to any areas of the development.

Landscape design

The landscape masterplan envisions the Proposed Development as an attractive, safe and welcoming place with leafy tree-lined streets.

The planting strategy reflects the aims to create a biodiverse landscape through key plants. The plants chosen are those that partner naturally in oak woodlands. This planting strategy will promote a self regulating

system of low maintenance plants that blend well with the surrounding landscape to the south of the site.

A tree survey conducted by ACD Environmental has recommended trees of A (high quality) and B category (moderate quality) should be considered as constraints to development and every attempt should be made to incorporate them into any proposed development design. Trees of a C category (low quality) will not usually be retained where they would impose a significant constraint to development. U category trees are in such a condition that they will be lost within 10 years, and may be removed as good arboricultural practice.

The Design and Access Statement prepared by HTA Design in support of this application includes in detail the tree strategy which will be taken forward to the Planning Application.

Daylight, sunlight and overshadowing (DSO)

The sunlight and daylight analysis demonstrates that the proposed development will not provide any adverse impact on the surrounding buildings. Moreover, the overshadowing assessment shows that most of the communal spaces achieve and exceed the minimum criteria for sunlight provision and similar results are achieved for all the south-facing private gardens. North-facing gardens achieve lower values of sunlight as expected for their orientation. This is in line with the nature of such spaces.

A detailed DSO assessment has been carried out by HTA Design LLP in support of this application.

Green Spaces

Green spaces alongside with a natural play space will provide attractive, safe and comfortable microclimate conditions in the public realm. The green spaces will provide shade, air movement and cooling to the urban environment.

Further details regarding the green strategy adopted can be found in the Design and Access Statement.

Air Quality

Easily accessible recycling facilities are intended to encourage waste recycling, whilst enhanced tree planting and vegetation will help improve air quality, health and wellbeing.

Noise

The development has incorporated design and building fabric measures to mitigate potential noise levels from the scheme, and ensure that the impact of any external sources on internal ambient noise levels are within acceptable limits.

Pollution Management

Artificial light

The new dwellings will be designed to achieve good daylight and sunlight levels and the need to use artificial lighting will be reduced.

A combination of existing and proposed street lighting throughout the site will ensure a safe approach for all residents to their front door. A proposed external lighting plan has been included as part of the planning submission.

Water

Water pollution to underground water resources has been minimised. Contractors will be required to adopt best practice policies to mitigate water pollution from demolition and construction activities on site.

Transport and movement

A Transport Assessment has been produced by WYG Consultants.

Analysis has shown that the proposed development is well located and provides opportunities for future residents and site users to access key facilities and transport networks by foot, therefore reducing the reliance on vehicle travel.

All of Reading is within a 30-minute cycle from the development site. The nearest bus stops are located on Wensley Road adjacent to the site and additional bus stops are located north of the site on Berleley Avenue. Reading West Railway Station is located approximately 2.5km north of the site and 1.6km west of Reading town centre.

Evidence suggest that garages are rarely used for parking and serve only as storage units. Therefore, they have not been included as spaces within the calculations, although the spaces in front of each garage have been counted.

Overall, the development benefits from being well located to sustainable modes of travel.

Governance and management

A Statement of Community involvement has been prepared by HTA Design in support of this application. The document provides the objectives, methodology and consultation process adopted for the proposed outlined planning application.

Involving the community in the design process from the outset has allowed the design to be led by the issues and ideas of local residents. Regular consultation meetings with Council Members, Planning Officers and the Reading Design Review has also ensured that the proposal responds to the wider needs within Reading, as well as future aspirations for new housing for the town.

Health and Social Wellbeing

To promote an active lifestyle, cycle storage for the individual houses and the apartment building have been integrated into the design. In addition, pedestrian and cycle routes across the site have been enhanced, creating better connections to the wider Reading cycle network.

An outdoor gym has also been incorporated into to the design of central space with facilities that are suitable for a range of ages and with limited mobility. Proposed trees planting and vegetation throughout the proposed site plan is intended to improve the quality of the physical environment.



6.0 Conclusion

This report provides a sustainability assessment for the scheme at Wensley Road in Reading. The development has been assessed against the relevant sustainability standards to demonstrate how the development responds to them and how it will underpin a successful development.

The following features have been implemented:

- Improved sense of community to accommodate the needs of the residents;
- Providing new homes at higher sustainable standards and ensuring a healthy indoor environment;
- A saving of 100% of carbon emissions compared to the predicted baseline;
- Improved connectivity across the site with its surrounding built and natural environment;
- A more sustainable travel plan for residents where walking and cycling movements are prioritised;
- Enhanced external landscape and biodiversity values;
- Optimisation of the resources used and minimisation of their impact on the existing environment across all construction and operation stages.

The proposed measures summarised in this report are also the result of the consultations undertaken in the past months and account for comments and suggestions which came from the existing community.

7.0 References

- Archaeological Assessment, by Compass Archaeology
- Daylight / Sunlight Assessment, by HTA Architects
- Ecological Survey and Reports, by ECOSA
- External Lighting, by Hoare Lea M&E Consultants
- Energy Efficiency Statement, by Hoare Lea Consultants
- Flood Risk Assessment, by WFBA Structural & Civil Engineers
- Landscape Plan, by HTA Landscape
- Open Access Statement and Planning Statement, by HTA Architects
- Statement of Community Involvement, by HTA Architects
- SUDs (including FRA Assessment), by WFBA Consulting Civil & Structural Engineers
- Transport Assessment and Travel Plan, by WYG Environment Planning Transport Ltd
- Tree Survey / Arboricultural Impact Assessment, by ACD Environmental
- Utilities Survey and proposals, by Hoare Lea M&E Consultants
- Wind / Microclimate Assessment, by HTA Sustainability

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