



# **Lodge Hill**

Outline Planning Application on behalf of Defence  
Infrastructure Organisation

Sustainability Report

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Prepared by Hyder Consulting (UK) Ltd

October 2011

This document forms part of a suite of documents which comprise the Lodge Hill Outline Planning Application.

**Hyder Consulting (UK) Limited**

2212959  
HCL House  
Fortran Road  
St Mellons Business Park  
St Mellons  
Cardiff CF3 0EY  
United Kingdom  
Tel: +44 (0)29 2092 6700  
Fax: +44 (0)29 20  
www.hyderconsulting.com



## Lodge Hill

# Outline Planning Application – Sustainability Report

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A handwritten signature in blue ink that reads "Dominic O'Loghlen".

**Author**                      Dominic O'Loghlen

**Checker**                      Patricia Joyce / Philip Harker

A handwritten signature in blue ink that reads "Patricia Joyce".

A handwritten signature in blue ink that reads "Philip Harker".

**Approver**                      David Mythen

A handwritten signature in blue ink that reads "David Mythen".

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# 1 SUMMARY

This report has been prepared in support of the Outline Planning Application for the proposed development at Lodge Hill. It summarises the core sustainability elements suggested for the proposed development, relative to how the scheme will attain a BREEAM for Communities Stage 2 “Excellent” rating, whilst also addressing the policy requirements of the adopted Local Plan and emerging Core Strategy.

The use of BREEAM Communities, which has been specifically designed to assess developments at the outline and detailed planning stages, ensures that not only environmental issues are considered and addressed, but also social and economic issues.

Each of the BREEAM for Communities Stage 2 categories have been addressed in the proposed development and at least one “best practice” score is expected to be achieved in each. This clearly demonstrates that the proposed development has high sustainability credentials with a well balanced approach adopted throughout.

Further, this report, when reviewed with the indicative masterplan identifies several areas in which the development not only addresses current policy requirements, but is expected to exceed them. Again, this further consolidates the aspiration for the development to be highly sustainable in many aspects.

In summary, the development is proposing to attain a BREEAM for Communities Stage 2 “Excellent” rating.

## 2 INTRODUCTION

This Sustainability Report has been prepared by Hyder Consulting on behalf of Defence Infrastructure Organisation (DIO), and is submitted as a supporting document to the outline planning application. It focuses on how the proposed development at Lodge Hill addresses policies relating to sustainability contained within Medway Council's emerging Core Strategy and adopted Local Plan. The sustainability Report should be read in conjunction with the comprehensive suite of documents comprised within the outline planning application.

This document has been prepared to identify sustainability objectives as part of the redevelopment of the Site. Sustainability has been an underlying theme for the Site and this is reflected within the proposed development and indicative masterplan.

Lodge Hill is a major mixed use development site that will form a strategic allocation in Medway's emerging Local Development Framework. Development of a site of this magnitude provides an opportunity to achieve sustainable living that would affect not only the Site, but also improve that of surrounding communities and infrastructure, for example, by way of sustainable transport links, local economy benefits and improved green spaces.

Following a series of meetings and discussions with Medway Council it was agreed that the BREEAM for Communities Stage 2 assessment tool should be used as the "framework" for this report, since it covers a broad range of sustainability themes addressing not only environmental issues, but also social and economic too.

An overall BREEAM for Communities Stage 2 rating of "Excellent" was deemed suitably aspirational for this type of development, but that, at the outline planning application stage that a formal assessment and subsequent "interim" certificate would not be required. A formal assessment will however be required and it is anticipated that this will be conditioned at the outline stages of planning.

This report sets out the sustainability objectives of the Site, through use of the BREEAM for Communities Stage 2 sustainability tool kit. It is proposed that this document will be provided to the lead developer and each plot developer to ensure that the objectives set are achieved. This report also seeks to provide an indication of what elements of the development fall within the responsibility of the infrastructure developer and which fall within the responsibility of the individual plot developers.

It is expected that conditions will be applied at the outline planning consent stage which will require particular strategies, measures and features to be adopted in the reserved matters / detailed planning to ensure that on an holistic level, the development as a whole achieves the BREEAM for Communities Stage 2 "Excellent" rating. This approach and the resulting level of detail which will be provided is considered to be appropriate at the outline stage of the planning process and will also ensure continuity in delivery of the objectives and achievement of the "Excellent" BREEAM for Communities Stage 2 rating.

It is proposed that Lodge Hill will aim to provide housing which meets code Level 4 specifications as a minimum.

## 3 POLICY AND LEGISLATION

### 3.1 UK Government Legislation

#### 3.1.1 Energy White Paper (2007)

Building on policy developments outlined in the governments, The Energy Challenge (2006) document and the findings from the Energy Review, the Department for Communities and Local Government (DCLG), the Department for the Environment, Food and Rural Affairs (DEFRA), the Department for Trade and Industry (now Department for Business, Innovation and Skills (BIS)) and the Department for Transport (DfT) jointly published a White Paper in May 2007 – “Planning for a Sustainable Future”<sup>1</sup>. This includes proposals to:

*“Streamline further the process in the town and country planning system, improve the ability of local authorities to shape their local communities, and ensure that there is a stronger approach to supporting sustainable economic development alongside work to tackle climate change in a way that is integrated with the delivery of other sustainable development objectives.”*

The Energy White Paper 2007 - Meeting the Energy Challenge<sup>2</sup> sets out the Government’s strategy to address the long term energy challenges faced by the UK. There are four key policy goals:

- To tackle climate change by reducing CO2 emissions;
- Maintain reliable energy supplies;
- Promote competitive markets; and
- Ensure that every home is adequately and affordably heated.

In November 2008 the Climate Change Act became law with a binding target of an 80% reduction in carbon dioxide emissions by 2050 compared to 1990 levels. In support of this target the Government wants new buildings to be zero carbon as soon as practically possible and has aspirations for homes and new schools to be so from 2016 with new public buildings and new non-domestic buildings from 2018 and 2019 respectively. It also wants to significantly improve the energy efficiency of all existing buildings.

#### 3.1.2 Renewable Energy Directive

The Renewable Energy Directive sets out how the EU will increase the use of renewable energy sources in order to meet the overall target of 20% renewables by 2020. Under this Directive, the UK will be required to ensure that at least 15% of its final energy consumption comes from

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<sup>1</sup> *Planning for a Sustainable Future: White Paper*, May 2007; Department for Communities and Local Government (DCLG), the Department for the Environment, Food and Rural Affairs (DEFRA), the Department for Trade and Industry (now Department for Business, Innovation and Skills (BIS)) and the Department for Transport (DfT)

<sup>2</sup> *Meeting the Energy Challenge: A White Paper on Energy*; May 2007; the Department for Trade and Industry (now Department for Business, Innovation and Skills (BIS))

renewable sources by 2020. The Directive sets the UK's interim targets at 4% for 2011/2012, 5.4% for 2013/2014, 7.5% for 2015/2016 and 10.2% for 2017/2018.

### 3.1.3 Climate Change Act 2008

The Climate Change Act 2008 sets targets for green house gas emission reductions of at least 80% compared to 1992 levels by 2050, and reductions in CO2 emissions of at least 26% by 2020 against a 1990 baseline. As part of the package of measures to achieve this, Government has set a target to generate 20% of the UK's energy demand from renewable sources by 2020. The Climate Change Act, November 2008, and PPS 22 set out the Government's policies and targets on carbon emissions and renewable energy.

## 3.2 National Planning Policy & Guidance

### 3.2.1 Planning Policy Statement 1: Delivering Sustainable Development

Planning Policy Statement - Delivering Sustainable Development<sup>3</sup> (PPS1) published in 2005, sets out latest Government policy on this issue. In delivering sustainable development, it expects the following objectives to be achieved:

- Promoting regional, sub-regional and local economies;
- Promoting communities which are inclusive, healthy, safe and crime free;
- Bringing forward sufficient land of a suitable quality in the right locations;
- Giving high priority to ensuring access for all to jobs, health, education, shops, leisure and community facilities;
- Focusing developments that attract a large number of people, especially retail development, in existing centres;
- Recognising the need to enhance as well as protect biodiversity and the need to address the causes and impacts of climate change, pollution and waste and resource management impacts;
- Promoting the more efficient use of land;
- Reducing the need to travel.

This position has been clarified in relation to climate change by the publication of a supplement to PPS1, 'Planning and Climate Change' (December 2007)<sup>4</sup>. The supplement sets out the policies to be reflected in the preparation of regional and local planning documents, to include:

- Make a full contribution to delivering the Government's Climate Change Programme and energy policies, and in doing so contribute to global sustainability;
- Providing for the homes, jobs, services and infrastructure needed by communities, and in renewing and shaping the places where they live and work, secure the highest viable resource and energy efficiency and reduction in emissions;

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<sup>3</sup> *Planning Policy Statement 1: Delivering Sustainable Development*; February 2005; Office of the Deputy Prime Minister (now Department for Communities and Local Government)

<sup>4</sup> *Planning Policy Statement 1: Planning and Climate Change – Supplement to PPS1*, December 2007; Department for Communities and Local Government

- Deliver patterns of urban growth and sustainable rural developments that help secure the fullest possible use of sustainable transport for moving freight, public transport, cycling and walking; and, which overall, reduce the need to travel, especially by car;
- Secure new development and shape places that minimise vulnerability, and provide resilience, to climate change; and in ways that are consistent with social cohesion and inclusion;
- Conserve and enhance biodiversity, recognising that the distribution of habitats and species will be affected by climate change;
- Reflect the development needs and interests of communities and enable them to contribute effectively to tackling climate change; and
- Respond to the concerns of business and encourage competitiveness and technological innovation in mitigating and adapting to climate change.

### 3.2.2 Planning Policy Statement 22: Renewable Energy

Current policies and objectives for energy use and renewable energy consumption are explained in PPS 22: Renewable Energy<sup>5</sup>. The latter states that:

*“Local planning authorities may include policies in local development documents that require a percentage of the energy to be used in new residential, commercial or industrial developments to come from on-site renewable energy developments.”*

Local authorities are increasingly including these provisions in their new local development documents. This is supported by the Planning and Energy Act 2008 which enables local authorities to set requirements for energy use and efficiency in local plans.

### 3.2.3 Draft National Planning Policy Framework

The National Planning Policy Framework (NPPF) was published on 25 July and is currently undergoing a three month consultation processes. The document sets out the governments vision for development, indicating the `direction of travel' planning policy is set to take. After review, the Planning Inspectorate issued a guidance note specifying that the NPPF is `capable of being material consideration', and must therefore be considered alongside the Lodge Hill development.

The NPPF is designed to consolidate all policy statements, circulars and guidance documents into a single, simpler National Planning Policy Framework, making the planning system more user friendly and transparent. The frameworks primary objective is sustainable development, therefore focussing on the 3 pillars of sustainability. The frameworks is split into three sections; planning for prosperity (Economic), panning for people (Social) and planning for places (Environmental), each of which outline guidance to tackle issues such as housing, transport infrastructure, business and economic development, climate change, etc.

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<sup>5</sup> Planning Policy Statement 22 (PPS22): Renewable Energy, August 2004; Office of the Deputy Prime Minister (now Department for Communities and Local Government)

## 3.3 Regional Policy

### 3.3.1 South East Plan

The development falls within the South East of England and so the relevant documents to be considered are the South East Plan<sup>6</sup> and the Regional Sustainability Framework<sup>7</sup>.

The South East Plan sets out a vision for the future of the South East region to 2026, outlining the need to respond to challenges facing the region such as housing, the economy, transport and protecting the environment. Some of the crosscutting issues of the South East Plan are to require sustainable development, adopt and maintain a specific climate change implementation plan and support sustainable construction by adopting efficient standards and technologies.

There is strong support in the plan for the preparation of local development documents that seek high standards of energy efficiency and which promote the inclusion of renewable energy in all development. Local planning authorities in Kent are expected to respond accordingly as they prepare local development frameworks and supplementary planning documents. Medway had adhered to this guidance, as the Local Development Framework currently being drafted has a strong emphasis on climate change. The notion of climate change is practically addressed in the emerging Core Strategy, which sets out policy guidance promoting the use of renewable energy sources, sustainable design and construction techniques, environmental preservation and other sustainable development strategies.

The key “sustainability” regional policies are summarised below:

**Policy NRM11** - in advance of local targets being set, those of 10 dwellings or 1000m<sup>2</sup> of non-residential floorspace should secure at least 10% of their energy from renewable or low-carbon sources.

**Policy NRM12** - encourages the integration of combined heat and power (CHP), including mini and micro-CHP, in all developments and district heating infrastructure in large scale developments in mixed use.

**Policy NRM16** – reinforces the support for renewable energy, and includes criteria for consideration including the contributions a development would make to local renewable energy targets and carbon dioxide savings, and the appropriateness of biomass combustion plant in terms of the proximity of fuel source and the adequacy of the local transport network.

**Policy CC4** - discusses a number of ways in which developments can be designed and constructed so that they are more sustainable, contributing to a reduction in ecological footprint.

### 3.3.2 South East Plan – Kent Thames Gateway Sub-regional Policy

The South East Plan includes a sub-regional policy for Kent Thames Gateway that applies to Medway. It highlights the need for investment in new infrastructure, the setting of high standards for sustainability and design of any new development. The key issues are the creation of:

- A flourishing local economy;

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<sup>6</sup> *The South East Plan: Regional Spatial Strategy for the South East of England*, May 2009; Department for Communities and Local Government

<sup>7</sup> *The South East Regional Sustainability : Towards a better quality of life*, June 2008; South East England Regional Assembly

- Effective engagement and participation of local people;
- A safe and healthy environment with well designed public and green space;
- Sufficient size and scale and density to support basic amenities;
- Good public and other transport, both locally and linking to other centres;
- A well integrated mix of decent homes;
- Good quality services including education, training and health;
- A 'sense of place'; and
- The right links with the wider regional, national and international community

### 3.3.3 Sustainable Communities Plan: Building for the Future: South East

This regional programme of action sets out proposals for maintaining and creating sustainable communities in the South East. As stated in the Sustainable Communities Plan for the South East<sup>8</sup>

*We need to create sustainable communities in which people want to live which:*

- *Are economically prosperous;*
- *Have decent homes at a price people can afford;*
- *Safeguard the countryside;*
- *Enjoy a well-designed, accessible and pleasant living and working environment;*
- *Are effectively and fairly governed with a strong sense of community.*

The programme of action does not attempt to cover all the issues of importance to communities. It highlights actions to address issues including working to improve living standards in deprived areas, providing affordable housing and developing better facilities for young people in parks and green spaces.

### 3.3.4 Regional Sustainability Framework

The Regional Sustainability Framework (RGF) aims to fulfil the sustainable development objective.

Objective 17 of the RSF seeks to address the causes of climate change through reducing emissions of greenhouse gases and ensuring that the South East is prepared for the impacts of climate change. The target is to reduce the region's carbon dioxide emissions by at least 20% below 1990 levels by 2010 and by at least 25% below 1990 levels by 2015 (aligned with the South East Plan targets). The RSF also expresses an interest in reducing greenhouse gas emissions from activities within the region by 60% by 2050.

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<sup>8</sup> *Sustainable Communities Plan: Building for the Future: South East*, February 2003; Office of the Deputy Prime Minister (now Department for Communities and Local Government)

Objective 24 of the RSF aims to increase energy efficiency looking at both energy use per capita and the proportion of energy generated from renewable sources in the region. The target is to install the following:

- 620 MW of renewable energy (5.5% of the generation capacity) by 2010;
- 895MW of renewable energy (8% of generation capacity) by 2016; and
- 1,750MW of renewable energy (16% of generation capacity) by 2026.

## 3.4 Local Policy

### 3.4.1 Medway Local Plan, Adopted, May 2003

The Medway Local Plan was adopted in 2003 and is the document which informs and guides all development proposals in the Medway region. The plan identifies Medway's need for more housing; improved infrastructure; the need for greater variety in services and facilities; improving economic and employment opportunities and the preservation of the regions natural assets.

### 3.4.2 Emerging Core Strategy

Medway's core strategy is a key part of the Local Development Framework (LDF). It is a "spatial vision" for Medway until 2028. The 'State of Medway (SOM)' reports demonstrate the local areas current position in relation to a number of key development topics, one of which addresses climate change and energy.

The SOM report identifies the potential impacts of climate change that could affect the region. It also looks at the policy context relating to climate change, renewable energy and other sustainability issues, and the resources that Medway may be able to exploit in addressing these issues.

This sustainability report identifies how the development at Lodge Hill addresses the policies contained within the emerging Core Strategy.

### 3.4.3 Medway Initial Sustainability Appraisal

The Sustainability Appraisal assesses the implications of various options raised in the separate 'Issues and Options' report, which will inform the preparation of the Local Development Framework Core Strategy for Medway. It has been prepared in accordance with the relevant guidance, including Planning Policy Statement 12.

## 4 SUSTAINABILITY ASSESSMENT TOOLS

To achieve the high sustainability levels proposed for the Site, the development team are using a benchmarking tool that can be applied to assess individual building and site-wide performance. The BREEAM for Communities Stage 2 tool kit has been used to inform the design and assess the sustainable credentials of the entire Masterplan, evaluating how the scheme performs in relation to recognised sustainability criteria.

The following section provide a summary of the BREEAM for Communities Stage 2 assessment framework, and explain why this framework is proposed for the Site.

### 4.1 BREEAM

#### 4.1.1 What is BREEAM?

BREEAM (Building Research Establishment's Environmental Assessment Method) is considered to be the world's leading and most widely used environmental assessment method for buildings, with over 115,000 buildings certified and nearly 700,000 registered. It was developed by the Building Research Establishment to set the standard for best practice in sustainable design and has become the nationally accepted measure used to describe environmental performance.

A BREEAM assessment uses nationally recognised measures of performance, which are set against well established benchmarks, to evaluate environmental specification, design, construction and use. The measures used cover a broad range of categories and criteria from energy to ecology.

A Certificated BREEAM assessment is undertaken by a licensed organisation, using assessors trained under a UKAS accredited competent person scheme, at various stages in the design and construction life cycle. This provides clients, developers, designers and others with:

- market recognition for buildings having a low environmental impact,
- confidence that established environmental practice is incorporated in the building,
- a means to find innovative solutions that minimise the environmental impact,
- a benchmark that exceeds current regulatory minimum,
- a system to help raise awareness of the benefits of low environmental impact buildings,
- a standard that demonstrates progress towards corporate and organisational environmental objectives.

BREEAM addresses wide-ranging environmental and sustainability issues, whilst allowing developers, designers and building managers to demonstrate the environmental credentials of their buildings. BREEAM:

- uses a straightforward scoring system that is transparent, flexible, easy to understand and supported by established evidence-based science and research,

- can provide a positive influence on the design, construction and management of buildings,
- defines a robust technical standard with rigorous quality assurance and certification.

### 4.1.2 Aims and Objectives of BREEAM

The primary aim of BREEAM is to reduce and mitigate the impacts developments have on the built and natural environment, through ensuring that best environmental practice is incorporated into developments, surpassing those required by statutory regulations and legislation. This continued advancement challenges the market to provide innovative solutions that minimise the environmental impact of developments, helping to push the boundaries of sustainable development. In addition to these more apparent environmental benefits, there are a number of wider aims of the framework. Attaining BREEAM certification is a globally recognised sustainability framework. This therefore means that buildings / developments can be recognised according to their environmental benefits, providing a creditable environmental label which establishes their sustainable proficiency.

In addition to the environmental benefits that attaining BREEAM certification brings, it is important to note the economic advantages associated with the tool kit. The BREEAM framework can provide cost benefits, as a building / development sustainable credentials are considered at the earliest stages of design, thus the most economically appropriate sustainable measures can be implemented, reducing supplementary outlay.

The environmental label attributed to BREEAM assessed buildings / developments can also be economically advantageous, helping to stimulate demand, providing market recognition for low environmental impact buildings.

### 4.1.3 BREEAM Communities

BREEAM for Communities Stage 2 is a sub-framework of BREEAM and has been developed in accordance with the same sustainability model. BREEAM for Communities Stage 2 is a toolkit which is intended to be used at the planning stage of developments, before detailed design has commenced. It focuses on all sustainability aspects of a development, including economic and social issues and has therefore been chosen as the preferred framework for the Lodge Hill Development at outline and detailed planning stages. The use of BREEAM for Communities Stage 2 as a framework for the Sustainability Strategy and the assessment tool as a measure of the sustainability credentials of the indicative masterplan for Lodge Hill has been agreed in principle with Medway Council and Bio Regional.

In much the same way as the other BREEAM frameworks, BREEAM for Communities Stage 2 assesses the overall sustainability of a development project, evaluating the scheme at the planning stage of the development process. This process facilitates developments that have sustainable principals at the core of their design, enabling developers and local authorities to introduce schemes which meet agreed sustainability levels efficiently. This holistic approach allows developers to address the environmental, social and economic dynamics of a development, applying an evenly weighted site-wide level approach if desired. This in turn encourages developers and local authorities to collaboratively deliver development schemes that benefit an areas existing and future community members alike.

BREEAM for Communities Stage 2 assesses the development against criteria in eight categories, as indicated below:-

- Climate and Energy
- Resources

- Place Shaping
- Transport and Movement
- Community
- Ecology and Biodiversity
- Business and Economy
- Buildings

Each criteria can achieve a credit score of between 0 and 3, as follows:-

- 0 credits are achieved where the development does not address the issue represented by the criteria, or fails to achieve the statutory minimum requirement.
- 1 credit is achieved where the development achieves the statutory minimum requirement.
- 2 credits are achieved where the development demonstrates current good practice in the area being assessed.
- 3 credits are achieved where the development demonstrates current “best practice” in the area being assessed.

Additionally, BREEAM for Communities Stage 2 has a number of mandatory credits which all developments must obtain in order to achieve a “pass” rating or higher. Once these minimum requirements have been achieved, there is flexibility in how the remaining credits are achieved to obtain the desired rating.

The credits in each category are then weighted against the corresponding regional weighting, which reflects the issues which are considered more or less important depending on the region.

The combined weighted score of the credits achieved in each of the eight categories is then totalled, and rated against a benchmark to determine what certification level the prescribed scheme receives as indicated in Table 1 below.

<b>BREEAM for Communities Stage 2 Rating</b>	<b>% Score</b>
Unclassified	<25
Pass	>25
Good	>40
Very Good	>55
Excellent	>70
Outstanding*	>85

**Table 1 – BREEAM for Communities Stage 2 rating benchmarks**

BREEAM for Communities Stage 2 has recently been relabelled, replacing the previous BREEAM for Communities Guidance. The new guidance has been refined, as additional stages have been added to the guidance, whilst it is expected that more changes will be developed over the coming year. The guidance has improved on the existing manual, creating a more complete sustainability assessment toolkit and is therefore now considered to be best practice guidance in the industry.

#### 4.1.4 Why use BREEAM Communities

The emerging Localism Bill has put further emphasis on the need for community planning, producing built environments where people can work, shop, learn and play near their homes, reducing the need to travel to access these community amenities and employment opportunities. Producing these integrated developments is recognised by the Government, planning authorities and developers alike to be imperative, however in practice achieving these schemes can often be difficult.

BREEAM for Communities Stage 2 acts as a toolkit for developers and local authorities, informing Masterplanning approaches to produce community developments which are integrated and sustainable. The toolkit is not however a one size fits all approach, as BRE have adapted Regional Sustainability Checklists, using the eight categories identified earlier to produce weightings which, when applied to the credits in each category, are tailored to reflect regional characteristics and the local priorities.

There are numerous benefits attributed to BREEAM Communities, in addition to the obvious environmental values already documented in this report. The cost-effective nature of the framework is significant, as developers can produce schemes which have sustainability at their core, thus avoiding supplementary add-on costs. This is achieved as BREEAM for Communities Stage 2 is utilised from the pre-application stages of Masterplanning, thus preventing expensive reworking of design plans at later stages.

The localised relevance of the toolkit is also a significant benefit, as local priorities and principals are considered, thus informing development proposals to produce bespoke schemes. The adaptable nature of BREEAM for Communities Stage 2 is inherently linked with the toolkits flexibility.

In much the same way as the CfSH, all BREEAM Community developments must attain a number of mandatory credits before implementing additional strategies to achieve the desired

rating; thus ensuring a holistic approach to sustainability. Once the mandatory credits have been achieved, further credits can be obtained by developing certain principles and strategies which most suit the development site. This form of scoring helps developers and local authorities to develop sustainable schemes which not only meet local policy and legislation, but which may also limit the need for additional costs which occur where sustainability is not considered at the outset.

Using BREEAM for Communities Stage 2 ensures impartial independent assessment of the development scheme. Most importantly, pre-assessments using the toolkit framework enable the development strengths and weaknesses to be identified and appropriate design considerations to be incorporated to ensure that the agreed rating is achieved. When the development scheme is formally assessed, the certification clearly identifies the development's parameters and can be used as an effective monitoring tool to ensure delivery of all sustainability measures proposed. .

# 5 LODGE HILL - BREEAM FOR COMMUNITIES STAGE 2 ASSESSMENT

As previously identified, BREEAM for Communities Stage 2 was selected as it helps planners and developers to improve, measure and independently certify the sustainability of project proposals at the planning stage of the development process.

It has been agreed with Medway Council that the BREEAM for Communities Stage 2 toolkit will be used as the framework at the Outline Planning Application stage. The toolkit has been used to inform the indicative masterplan, illustrating how the scheme proposes to meet the precise details outlined in BREEAM for Communities Stage 2 guidance. It has been agreed with the council that there is no requirement for a formal assessment to be undertaken at this stage; however a formal assessment will be required at some point. It is anticipated that this will be conditioned at the outline stages of planning consent.

This chapter evaluates the eight BREEAM for Communities Stage 2 categories, looking at the individual sub-criteria which comprise the framework, and identifying the methods forming part of the proposed development to address the credits to create a sustainable development that has a strong focus on community living and achieves, as a minimum, an “excellent” rating.

This report therefore represents an assessment, in broad narrative form, of how the proposed development performs against the BREEAM for Communities Stage 2 criteria. Formal BREEAM Communities assessments will be undertaken at the appropriate stages as the details are progressed through Reserved Matters, in accordance with the broad Sustainability Framework. The Sustainability Framework and how it will be implemented to ensure delivery of the BREEAM for Communities Stage 2 “Excellent” rating, is further detailed in chapter 6 of this report.

## 5.1 CLIMATE CHANGE AND ENERGY

The Climate Change and Energy (CE) category is split into nine sub-categories; each of which aim to mitigate the impacts of development on the environment, enable buildings to be recognised according to their environmental benefits, to provide credible, environmental standards for individual buildings and to stimulate demand for sustainable buildings.

### CE1 – Flood Risk Assessment

Credit ref	Title	Description	Mandatory	credits available
CE1	Flood risk assessment	Sited and designed to PPS25	Y	3

The aim of the category is to ensure that sites and developments take due account of flood risk, and where it is present take appropriate measures to reduce the risk of flooding.

**Lodge Hill Response** – Over 99% of the Site is identified in the Environment Agency floodmaps as located in flood zone 1, however, due to the size of the development (being greater than 1 hectare) a flood risk assessment is required to accompany the planning application. Consequently a Flood Risk Assessment has been undertaken for the development site and a number of mitigation measures are proposed to limit and reduce the risk of flooding, including the incorporation of wet and dry ponds, swales, etc, which ties in with the second sub-category, Surface water runoff.

The area of the site which falls within Flood Zone 2 or 3 covers less than 0.5% of the total site and no buildings are proposed to be located within this area.

Policy CS5 of the draft core strategy specifies that significant developments in flood zone 1 (over 1 hectare) or developments that fall within flood zones 2 and 3 must be accompanied by a flood risk assessment. Clearly this has been addressed through the provision of the Flood Risk Assessment and associated mitigation measures proposed for the development.

#### **CE2 - Surface Water runoff**

<b>Credit ref</b>	<b>Title</b>	<b>Description</b>	<b>Mandatory</b>	<b>credits available</b>
<b>CE2</b>	Surface Water runoff	Measures to reduce flash flooding	Y	3

The aim of CE2 is to reduce the risk of flooding on proposed development sites and adjacent areas of land. The credit is a mandatory requirement, thus the site must demonstrate how it will contain a 1:100 year plus climate change rainfall event.

**Lodge Hill Response** - It is proposed that the SUDs treatment train will be utilised, focussing on source control. Further, existing ditches present on site will be utilised to direct water flows into areas of existing groundcover and natural water features. Attenuation measures incorporating dry and wet ponds will also be used to accommodate excess water flows. These ponds will predominantly be positioned to the North and East of the site, as the assessment identified the areas as the most appropriate locations.

#### **CE3 – Rainwater SUDS**

<b>Credit ref</b>	<b>Title</b>	<b>Description</b>	<b>Mandatory</b>	<b>credits available</b>
<b>CE3</b>	Rainwater SUDS	% roof area green roof or rainwater harvesting	N	3

In addition to CE1 and CE2, CE3 also seeks to manage water levels, using roof spaces productively to minimise water demand to minimise run off.

**Lodge Hill Response** - Lodge Hill proposed green roofs and rainwater harvesting over some of the buildings in the proposed development.

#### **CE4 – Heat Island**

<b>Credit ref</b>	<b>Title</b>	<b>Description</b>	<b>Mandatory</b>	<b>credits available</b>
<b>CE4</b>	Heat Island	Designed to reduce heat gain in buildings and public spaces	N	3

The aim of credit CE4 is to reduce heat absorption within the development thus reducing the incidence of overheating and the need for powered cooling.

**Lodge Hill Response** - Lodge Hill has been designed to reduce the amount of heat gain, as the fabric of the scheme has a number of mitigation measures in place. Tree cover will be used to provide shading and absorb CO<sub>2</sub> emissions, reducing the localised effect of green house gases. Further, SUDS measures mentioned above combined with landscaping will also assist in providing a heat sink for the development.

Further, individual buildings will be designed to maximise passive design measures to reduce the potential to create heat island effect. Additionally, buildings will be designed to optimise daylighting opportunities and utilise natural ventilation wherever possible.

These alleviation measures demonstrate that commitment inherent within the proposed development to reducing the impact of heat island effect.

Medway's adopted Local Plan does not have any specific policy relating to Heat Island effect and the need to reduce heat absorption. In spite of this however, the plans overall emphasis on sustainable development and encouragement of green lungs and the preservation of the area's natural environment means all proposed developments will implement mitigation measures to reduce heat absorption. Lodge Hill specific mitigation measures already outlined will therefore be in compliance with the Local Plan.

Policy CS3 of the draft core strategy specifies that all development must take full account of its potential impact on climate change, demonstrating that mitigation and adaptation strategies have been put in place to limit impacts.

Suggested measures that should be considered include:

- Maximising thermal efficiency and limiting the need for mechanical heating and cooling systems
- Countering urban heat island effects, including the provision of greenspaces and roofs, planting and intelligent design

The above measures will be implemented extensively throughout the Lodge Hill site, thereby addressing the requirements of the draft core strategy policy.

### **CE5 – Energy Efficiency**

<b>Credit ref</b>	<b>Title</b>	<b>Description</b>	<b>Mandatory</b>	<b>credits available</b>
<b>CE5</b>	Energy Efficiency	Prepare an energy strategy to optimise energy consumption	Y	3

This credit seeks to increase the overall efficiency of development through energy efficient design and management. To obtain the highest credit score, development must show the steps being taken to prepare a detailed energy strategy which optimises energy consumption on site.

**Lodge Hill Response** - The Energy hierarchy approach will be adopted in the design of the buildings in Lodge Hill. This approach ensures that passive measures are implemented first to reduce energy demand, followed by active measures, energy efficiency measures and finally the use of low and zero carbon technologies as indicated in the response to CE6 below.

The thermal efficiency of the envelope for each building within the Lodge Hill development has been designed (in the indicative masterplan) to reduce the requirement for heating and cooling. Buildings will be orientated and designed to optimise daylighting and natural ventilation opportunities wherever possible. In addition, all domestic buildings will attain CSH level 4 ratings and non-domestic buildings BREEAM “Excellent” standards.

Further, sample Standard Assessment Procedure (SAP) calculations have been produced which are based on the design “backstops” indicated for achieving Code level 6 Energy Saving Trust CE292 “Energy Efficiency and the code for Sustainable Homes Levels 5 and 6”. This publication indicates suggested “U” values for the various building elements and maximum air permeability rates to assist in obtaining the code levels specified. This approach ensures that high levels of thermal efficiency will be adopted in all of the dwellings.

Lodge Hill’s response to energy efficiency mirrors a number of themes presented in the adopted Local Plan. Policies BNE4 and CF11 encourages developers to use appropriate energy efficient technologies including solar panels, use of passive solar windows, heat and power heating systems etc. The measures outlined early proposed for Lodge Hill identifies the schemes compliance with this approach.

This strategy demonstrates how the Lodge Hill development addresses the requirements of Policy CS4 of the draft core strategy which specifies the importance of reduced energy loads through passive design and the inclusion of energy efficiency measures.

#### **CE6 – Onsite Renewable**

<b>Credit ref</b>	<b>Title</b>	<b>Description</b>	<b>Mandatory</b>	<b>credits available</b>
<b>CE6</b>	Onsite renewables	Percentage of total site energy demand met through LZC technologies	Y	3

CE6 onsite renewable energy credit is closely linked with CE5 as the category promotes the increased use of renewable energy sources to reduce the dependence on fossil fuels. It is a mandatory requirement that all BREEAM schemes commit to install low or zero carbon energy technologies to provide a net contribution of at least 15% of the sites energy demand.

**Lodge Hill Response** - A comprehensive and robust energy strategy has been developed for Lodge Hill, illustrating that a district heating network could be used to utilise a combination of gas CHP units and renewable (bio) fuelled boilers, combined with localised building integrated photovoltaics will deliver the CO<sub>2</sub> emission savings required for each phase of the development in line with committed levels of CfSH and zero carbon timelines. The strategy also denotes how, if commercially and technologically viable, the developments heating and hot water demands could be met through the utilisation of LZC technologies, thereby exceeding the BREEAM “best practice” requirements. Therefore LZC technologies will deliver in excess of 25% of the development’s energy demand. It is important to note that other technologies and/ or solutions may arise during the construction of the development which therefore could also be used and incorporated within the Lodge Hill development.

As previously identified, Policies BNE4 and CF11 of the Local Plan encourages the use of onsite renewable energy. Lodge Hill has clearly adhered to this, as the energy strategy identifies the schemes proposals to use gas CHP units and renewable (bio) fuelled boilers, combined with photovoltaics to source energy to the development.

Core Strategy policy CS4 specifies the importance of reduced energy loads through passive design and the inclusion of energy efficiency measures. The strategy specifies that all developments over 10 dwellings or over 1000m<sup>2</sup> must account for 20% of the remaining on-site energy loading through renewable energy sources. It is anticipated that the PV and biomass boilers should deliver in excess of 20% of the sites' energy requirements.

Core Strategy policy CS33 also identifies the preference for a comprehensive heating grid and neighbourhood heat and power generation facility.

#### **CE7 – Future Renewable**

<b>Credit ref</b>	<b>Title</b>	<b>Description</b>	<b>Mandatory</b>	<b>credits available</b>
<b>CE7</b>	Future renewables	% of buildings to allow future fitting of solar technologies	N	3

This credit is intended to encourage the future use of active solar technologies where they are not originally supplied.

**Lodge Hill Response** - The energy strategy for Lodge Hill denotes that the sites buildings, if commercially and technologically feasible, should integrate photovoltaics to meet the BREEAM and Code for Sustainable Homes targets and zero carbon timescales. Further, it is anticipated that the design of all buildings will consider and allow, where appropriate/ feasible, the future incorporation of solar technologies.

As previously stated, Policy CS33 promotes energy efficiency. Code CE7 of the Local Plan is therefore in compliance with this, as Lodge Hills design and layout has been adapted to encourage the use of renewable energy sources both presently and in the future.

Policy CF11 also promotes the use of renewable energy sources, depending on the developments deign, location and scale.

#### **CE8 – Services**

<b>Credit ref</b>	<b>Title</b>	<b>Description</b>	<b>Mandatory</b>	<b>credits available</b>
<b>CE8</b>	Services Infrastructure	Site heating, cooling, power, water, sewerage and comms designed to run through public realm, have easy access and allow future expansion	N	3

Credit CE8 identifies the importance of implementing sustainable site services, therefore making sure that infrastructure such as site heating, cooling, power, water, sewerage and communications are easily accessible allowing for future expansion.

**Lodge Hill Response** - Since Lodge Hill is a new development, the comprehensive view of the services infrastructure is a fundamental part of the overall design of the development. The services infrastructure within the Lodge Hill development will be designed to accommodate appropriately located and sized service trenches to facilitate ease of connection of future development plots and buildings.

Policies CF9, CF10 and CF14 of the adopted Local Plan promotes this approach, identifying that infrastructure including electricity lines and power stations need to be carefully considered and implemented, so not to impact on existing and future community members. Lodge Hill's approach is therefore in accordance with the policy as it has been designed in a sensitive manner, considering the developments lifecycle implications.

**CE9 – Water Consumption**

Credit ref	Title	Description	Mandatory	credits available
CE9	Water consumption	water targets for domestic and non domestic internal water use	N	3

The importance of controlling water consumption across the development site is highlighted in CE9.

**Lodge Hill Response** - Lodge Hill has specific design specification that all domestic buildings will meet CfSH level 4 standards, whilst non-domestic buildings will achieve BREEAM Excellent. The following water efficiency measures will be considered in the design of the development:-

- Dual flush toilets;
- Low flow sanitaryware;
- Harvesting of rainwater.
- Provision of leak detection;
- Specification of native plant species for the landscaping which require limited or no irrigation.

Medway's Local Plan identifies the importance of water supply, specifying in policy CF12 that development must have sufficient water supply and therefore will not impact adversely on ground aquifers, local flora, fauna and water courses. Lodge Hill's development team have clearly acknowledged this guidance, introducing sustainable water fittings and SUD's to limit the developments impact on the native water supply.

Core Strategy policy CS3 requires the following

- All development will be expected to take full account of its potential impact in terms of climate change and demonstrate that appropriate mitigation and adaptation strategies have been put in place to limit these impacts.

- Residential development will be required to achieve at least level 3 of the Code for Sustainable Homes;
- Commercial buildings over 1,000 sq m will be required to meet the BREEAM 'very good' standard.
- Other measures that should be considered include:
  - Increasing the efficiency of water usage.

In committing to deliver all housing to Code level 4 and non-domestic buildings "Excellent" the development will address the requirements of the above core strategy policy.

## 5.2 RESOURCES

This category looks at the use of materials, their source, impacts on the environment and recyclability. Credits are awarded where targets are met or exceeded for selecting materials with a low environmental impact and/or a local source.

### RES1 – Low Impact Materials

Credit ref	Title	Description	Mandatory	credits available
RES1	Low impact materials	Proportion of materials specified as having low environmental impact	Y	3

Credit RES1 assesses the environmental impact of the materials selected and used in the construction of the public realm and infrastructure of the development, rewarding those with the lowest environmental impact with the highest score.

**Lodge Hill Response** - It is envisaged that a significant proportion of buildings materials used in the construction of the public realm and infrastructure at Lodge Hill will be specified as having A+ - B rating as defined in the Green Guide to Specification.

The Green Guide to Specification is based on a life cycle assessment of materials used in the construction process, an approach which measures and assesses a range of environmental impacts from "cradle to grave". The Green Guide gives a summary of the environmental rating for each material / element based on an A+ to E ranking system, where A+ represents the best environmental performance / least environmental impact, and E the worst environmental performance / most environmental impact.

By evaluating the performance of materials and building systems against these specific environmental impacts, which have also been ranked on an A+ to E basis, it is possible for the specifier to select specifications on the basis of personal or organisational preferences or priorities, or take decisions based on the performance of a material against a particular environmental impact.

Core Strategy policy CS3 specifies that all development must take full account of its potential impact on climate change, demonstrating that mitigation and adaptation strategies have been put in place to limit impacts. In particular it states that measures that should be considered when designing and constructing commercial buildings should include:

- Limiting the embodied energy of materials used in construction

In specifying materials with a high summary rating (i.e. A+ to B), as defined in the Green Guide to Specification, it is likely that the embodied energy of the element is also low.

### RES2 – Locally Sourced Materials

Credit ref	Title	Description	Mandatory	credits available
RES2	Locally sourced materials	Proportion of materials which are locally sourced	N	3

RES2 aims to encourage the use of locally sourced materials in the construction of the public realm.

**Lodge Hill Response** - It is envisaged that there is potential that at least 20% of materials used in the construction of the public realm will be locally sourced. In addition, it is proposed that a detailed “cut and fill” exercise will be undertaken to ensure that all demolition and excavation material on site will similarly be re-used on site where possible.

### RES3 – Road Construction Materials

Credit ref	Title	Description	Mandatory	credits available
RES3	Road Construction materials	Proportion of locally reclaimed or recycled material used in road construction.	N	3

RES3 aims to encourage the use of locally recycled or reclaimed materials in the construction of roads, pavements, public spaces and car parks.

**Lodge Hill Response** - It is envisaged that there is the potential that at least 25% of road construction materials used for the Lodge Hill development will be locally reclaimed or recycled.

### RES4 – Resource Efficiency

Credit ref	Title	Description	Mandatory	credits available
RES4	Resource Efficiency	Resource efficiency in construction and minimisation of waste in operation.	N	3

RES4 is intended to promote waste minimisation and the provision of facilities on site for ease of recycling.

**Lodge Hill Response** - WRAP construction waste reduction and re-use targets will be set for the development, which will be applied across the whole development. In addition, relative to the operational stage, kerbside collection of recyclable waste and green waste will be provided throughout the Lodge Hill development. Bring Banks will also be provided at strategic points within the development.

Policy CS23 of the draft core Strategy addresses the issue of waste, requiring that all new built developments make appropriate provision for the separation, storage and collection of waste materials.

#### RES5 – Groundwater

Credit ref	Title	Description	Mandatory	credits available
RES5	Groundwater	Inclusion of groundwater pollution prevention measures.	N	3

RES5 interrogates what measures are implemented on-site to minimise the risk of contamination /pollution of aquifers and groundwater sources.

**Lodge Hill Response** - The Lodge Hill development will utilise SUDs drainage which not only enables control and attenuation of surface water, but also provides treatment. The design will incorporate the following features to minimise adverse impacts on public and private groundwater supplies:-

- The use of swales and filter drains to transport surface water flows, where possible.
- The use of reed beds in swales or in wet attenuation pond.

Preserving local groundwater from contamination and pollution is identified in the adopted Local Plan. Policy CF12 states that development will not be permitted if it produces an unacceptable risk to the quality of groundwater resource, unless appropriate measures are taken to adequately protect those resources. Lodge Hill is therefore in compliance with the policy, providing Swales, reed beds and wet attenuation ponds to limit groundwater pollution.

## 5.3 PLACE SHAPING

This category assesses how developments make use of remediated or poor quality land and the extent to which it provides open green space, creates a safe environment whilst also addressing local housing needs.

#### PS1 – Sequential approach

Credit ref	Title	Description	Mandatory	credits available
PS1	Sequential approach	previously undeveloped / Brownfield /	N	3

contaminated  
and remediated  
land

Adopting a sequential approach is imperative to the delivery of sustainable development. PS1 seeks to ensure that the most effective and efficient use of land is proposed, therefore looking to renew contaminated, Brownfield or previously developed land.

**Lodge Hill Response** - The Site is located on predominantly previously developed land, known as Chattenden Barracks and is therefore classified as Brownfield land.

Additionally, the development potential of the site has long been acknowledged within historic planning documents. It is also cited as a major regeneration location within the South East Plan, and is included as a Strategic Allocation for a new settlement within the emerging Medway Core Strategy to meet identified development needs.

Adopting a sequential approach is identified in the adopted Local Plan to be of paramount importance. Local Plan policy S2 sets out Medway's Strategic Principals, denoting that a sequential approach considering the location of major people, traffic, retailing, leisure, educational and health facilities must be carefully considered. The notion of a sequential approach is also conveyed in policies S1 and BNE1.

In addition to these development policies, policy BNE27 promotes the re-use of contaminated land if appropriate safety measures are implemented. Lodge Hill's Brownfield status is therefore in compliance with the policy

Core Strategy policy CS1 highlights the priority given to regenerating Medway, particularly the town centres and urban waterfronts.

## PS2 – Land Reuse

Credit ref	Title	Description	Mandatory	credits available
PS2	Land reuse	quantum of site built on Brownfield / previously developed land brought back into use	N	3

PS2 promotes the importance of effective and efficient land use, detailing the sustainable merits attributed to building on previously developed/ Brownfield land.

**Lodge Hill Response** - Lodge Hill is designated as predominantly Brownfield land, suggesting the development will meet the requirements of PS2.

In addition to Policy S2 detailed previously, policy S1 encourages the re-investment in Medway's urban fabric. The policy goes onto encourage development which utilises and recycles under-used/ derelict land. Lodge Hill's redevelopment of land formally known as Chattenden Barracks site is clearly in accordance with policy S2, seeking to utilise the land to enhance and compliment Medway and the surrounding Peninsula.

As with PS1 above, the compliance of Lodge Hill with the requirements of PS1 assists in meeting the objectives of core strategy policy CS1.

### PS3 – Effective use of Land

Credit ref	Title	Description	Mandatory	credits available
PS3	Building reuse	% of existing buildings to be reused or refurbished	N	3

PS3 identifies the sustainable credentials of the effective re-use of buildings. To obtain 1 credit (minimum), 25% of existing buildings need to be reused/ refurbished.

**Lodge Hill Response** - The majority of the buildings which currently occupy the Lodge Hill / Chattenden Barracks site will not be reused. However, it is proposed that some demolition materials may be re-used in the development, where appropriate, to minimise export of waste and maximise re-use of on-site materials. In addition, it is proposed that listed buildings within the development will be retained.

Policy BNE2 of the Local Plan encourages the re-use or adaptation of existing buildings in the countryside. Although the Lodge Hill development team proposes not to re-use a significant number of abandoned buildings; it is proposed to re-use the existing buildings materials. This adaptive re-use will aid sustainable development, limiting the need to use virgin materials, limiting pressures on waste disposal, and limiting pressures on local land fill sites.

### PS4 – Landscaping

Credit ref	Title	Description	Mandatory	credits available
PS4	Landscaping	Landscaping scheme in consultation with Local authority, ecology preserved and enhanced	N	3

PS4 verifies the importance that the character and landscape of an area is respected and when possible, enhanced through the location of features. This theme is inherent within the Medway Draft Core Strategy, and is therefore intrinsic to the Lodge Hill development.

**Lodge Hill Response** - Qualified ecologists and landscape architects have been appointed at the outset of the project to advise on measures which will protect the existing landscape and biodiversity and where possible enhance it further.

Lodge Hill proposes to introduce “buffer zones” to the north and east of the site to limit the development’s impact on the existing adjacent SSSI, whilst Protected trees (categorised A/B) will also be preserved.

It is also proposed to incorporate two countryside parks, nature reserves and heritages projects to supplement the areas’ existing biodiversity levels, thus the landscapes will help enhance and

preserve the sites' heritage, whilst encouraging wider biodiversity, providing further habitats for the Peninsulas' wildlife species.

The adopted Local Plan has a range of policies which promote sensitive landscaping and the enhancement and preservation of the natural environment. Policies BNE32, BNE33, BNE34, BNE34, BNE35, BNE36, BNE 37, BNE38 and BNE39 encourage development which protects natural species and wildlife, promoting planning which is sensitive, as not to disrupt or spoil conservation sites, areas of landscape importance or areas of natural beauty. Lodge Hills response outlined earlier highlights the developments teams' commitment to preserving the natural environment, incorporating parks, buffer zones and heritage projects to enhance the area's natural environment.

Policy PS6 of the draft core strategy refers to the protection, preservation and enhancement of Medway's natural assets including the varying topography, unique hydrology features and numerous SSSI's is imperative. Policy CS6 specifies that relevant environmental strategies should be in place and functioning prior to the commencement of development, to protect wildlife habitats, wild species and biodiversity features.

Policy CS7 states that development will be permitted in the countryside provided that the character of the area is retained, or where appropriate, enhanced if the environ is protected under legislative designations. The Lodge Hill site is allocated in the emerging core strategy.

#### PS5 - Design and Access

Credit ref	Title	Description	Mandatory	credits available
PS5	Design and access	D&A statement produced and liaison with Local Authority before OPA	Y	3

The accessibility, aesthetics and architectural integrity of a development are all reviewed in BREEAM, as it encourages development teams to hold pre-application discussions with the local authority to produce a sensitive, well thought-out scheme. The importance of PS5 is confirmed as it is mandatory that all BREEAM development must obtain a minimum requirement that a Design and Access Statement has been compiled which considers a range of sustainable elements.

**Lodge Hill Response** - The project team have engaged with the Local Planning Authority for an extensive period prior to the outline application to ascertain their aspirations in respect of design and access issues. In addition, an extensive consultation process has been undertaken with the local community and stakeholders at which proposals were presented and feedback sought. Finally, the Masterplan approach has been reviewed by both CABE and the Kent Architecture Centre and demonstrates many of the principles outlined in HCA's Urban Design Compendium.

Medway's Adopted Local Plan places considerable emphasis on design and access, issuing comprehensive legislation which offers guidance. Policies BNE7, T1, T2, T3, T4, T5, T6, T7, T12, T13, T14, T15, T18, T19, T20 and T22 have all been considered in the development of the Lodge Hill masterplan. Issues such as parking, road infrastructure, public transport, cycle provision, disability access, etc have all been addressed in the Design and Access statement,

whilst expert advice from CABI and community consultation has helped to inform the development approach.

Core strategy policy CS2 requires that new development should result in buildings, streets, spaces and neighbourhoods, which are high quality, durable and well integrated with their surroundings by:

- Respecting strategic and local views and settings
- Respecting local context, townscape and landscape - including the character, scale, street and settlement patterns of the surrounding area
- Contributing to the enhancement or creation of local identity
- Creating a pattern of streets and spaces which are well connected to their surroundings and which are attractive and easy to walk through.

In meeting the above the Council will expect designers to have regard to the objectives for urban design as laid down in the government’s publication ‘By Design’. It will also measure the quality of new housing development against CABI’s ‘Building for Life’ Criteria.

Over the core strategy plan period, policy CS24 specifies that highways systems will be managed to minimise congestion. A range of pro-active strategies including control systems, the development of quality bus networks and selective junction improvements are suggested as core management principals

**PS6 – Green Areas**

Credit ref	Title	Description	Mandatory	credits available
PS6	Green Areas	Distance local community have to travel to green spaces	N	3

Access to public green spaces has become increasingly more important as the government’s recent health legislation has highlighted the importance it can play on community health levels. BREEAM for Communities Stage 2 identifies it to be imperative, stipulating that sustainable developments should ensure access to high quality public green space for all.

**Lodge Hill Response** - The Masterplan for the Lodge Hill development has been designed such that 100% of the dwellings will be within a 500m radius of green space and will meet Assessable Natural Green Space Standards.

As previously documented, Medway’s Local Plan has a number of policies which promote the provision of open space. Policy L3, L4 and L5 encourage residential and employment development which provides open spaces for recreational use and play provision. Lodge Hills extensive green space provision including parks and green spine will help the scheme meet these requirements.

Draft Core Strategy Policy CS6 requires that the protection, preservation and enhancement of Medway’s natural assets including the varying topography, unique hydrology features and numerous SSSI’s is imperative. It further specifies that relevant environmental strategies should be in place and functioning prior to the commencement of development, to protect wildlife habitats, wild species and biodiversity features.

Core Strategy policy CS7 states that development will be permitted in the countryside provided that the character of the area is retained, or where appropriate, enhanced if the environ is protected under legislative designations.

The council has placed a strong emphasis on providing equal opportunities for all people to enjoy accessible, high quality and affordable open space. Policy C8 specifies that development must be suitably connected with open spaces, linked by pedestrian walkways, cycle routes, green corridors, etc. The policy determines that wherever possible; new developments should explore opportunities to contribute to the green grid, develop new open spaces and provide appropriate civic space.

### PS7 Local demographics

Credit ref	Title	Description	Mandatory	credits available
PS7	Local demographics	how development contributes to local housing need and provides affordable for local people	Y	3

PS7 is a mandatory credit rating that seeks to ensure that development attracts a diverse community, reflecting surrounding local demographic trends and priorities.

**Lodge Hill Response** - Lodge Hill complies with this criteria, as housing will have a mix of densities, tenures and designs. It is proposed that 23% of the housing will be affordable, of which 23% of affordable housing will be provided on-site, with a commuted sum towards off-site provision. This will enable the creation of a diverse and balanced community at Lodge Hill, and represents an appropriate level of contribution towards meeting the needs of the wider Hoo Peninsula.

Policy H10 of the Local Plan helps to promote development which actively encourages diverse communities, which reflect the local demographics of the area. Policy H10 denotes that development should offer a mix of housing types and sizes to accommodate a range of community members from young couplers to elderly pensioners. Lodge Hills indicative masperplan has been informed by this approach, proposing to supply a mix of housing densities, tenures and designs.

Core Strategy policy CS13 outlines the need for more housing in the Medway region, specifying that provision will be made to build at least 17,500 new homes between 2006-2028. The policy identifies a number of strategic development sites, of which Lodge Hill falls within the Hoo Peninsula Housing Sub area.

### PS8 Affordable Housing

Credit ref	Title	Description	Mandatory	credits available
PS8	Affordable Housing	Affordable housing indistinguishable from rest of development	Y	3

Affordable housing is a key component in delivering sustainable residential schemes; it helps to create diverse commutes, preventing social inequalities by helping to foster a socially inclusive community. PS8 demonstrates the importance of affordable housing as the BREEAM credit is a mandatory requirement of the framework and states that affordable housing must be integrated evenly throughout development schemes.

**Lodge Hill Response** -Lodge Hill proposes to go above the minimum mandatory requirements, as the proposed affordable housing will be indistinguishable from other housing, integrated evenly throughout the site.

The provision of flexible and affordable housing is a key component of the Local Plan. Policy H1 and H3 reflects this, as they promote a suitable mix of affordable housing depending on a developments size. Lodge Hill is in clear compliance with the policy, as the development team’s proposal to supply 23% affordable housing on-site will contribute to the areas affordable housing needs.

Core Strategy policy CS13 indicates the requirement for more housing in the Medway region, as previously mentioned.

Further to the housing policies outlined earlier, core Strategy policy CS15 seeks that new residential schemes must create sustainable residential communities, encouraging a mix and balance of good quality housing and tenures.

**PS9 Secured by Design**

Credit ref	Title	Description	Mandatory	credits available
PS9	Secured by design	% of buildings designed to "Secured by design"	N	3

PS9 encourages the implementation of effective design measures that will reduce the opportunity for and fear of crime on new developments.

**Lodge Hill Response** - Lodge Hill proposes a number of design features to deter crime. 60% of all buildings will meet requirements issued in ‘Secured by Design’ (or equivalent). In addition, the Lodge Hill designers and developers will consult with an Architectural Liaison Officer, who offer guidance and design advice to contractors looking to implement a secure development scheme.

Policy BNE8 in the Local Plan promotes design and layout of development which seeks to maximise personal safety and security of a property. Lodge Hill’s response to this is conclusive, as the use of secured by design and consultations with Architectural Liaison Officers will help to develop a safe living and working environment.

Further to the housing policies outlined earlier, Core Strategy policy CS15 seeks that new residential schemes must create sustainable residential communities, encouraging a mix and balance of good quality housing and tenures.

## PS 10 Active Frontages

Credit ref	Title	Description	Mandatory	credits available
PS10	Active Frontages	Have Active Frontage Guidelines been met in order to promote vitality	N	3

Ensuring that building frontages encourage pedestrian usage of the surrounding streets, thus helping to make a place feel more vibrant, contributing to the areas vitality is an important dynamic when creating sustainable communities. PS10 seeks to encourage such design, as it helps to create a lively street atmosphere.

**Lodge Hill Response** - It is proposed that 100% of the buildings within Lodge Hill will meet grade C standards as set out in the Urban Design Compendium, with 50% meeting grade A specifications. These measures will mean that blind facades are kept to a minimum on site, whilst the use of high quality materials and refined edges will enhance the overall aesthetic.

In addition to Policy BNE8, the adopted Local Plan encourages design which helps to promote a vibrant and inclusive community environment.

## PS11 Defensible Spaces

Credit ref	Title	Description	Mandatory	credits available
PS11	Defensible Spaces	Clear distinction between public fronts and private backs, secure gardens, parking or delivery access at rear and overlooked, safe public realm	N	3

The aim of PS11 is to create defensible spaces that clearly define public and private spaces.

**Lodge Hill Response** - Lodge Hill aspires to create street scenes where 100% of building frontages face onto the street with no backs of rear gardens exposed, therefore creating safe, defensible spaces.

As previously outlined, Policy BNE8 promotes safe and secure community environments. Lodge Hills approach to ensure that 100% of buildings will have frontages facing onto the street with no backs or rear gardens exposed will help achieve this.

## 5.4 TRANSPORT

The credits within this category look at what is being proposed to reduce reliance on private cars through the provision of public transport services, cycling facilities and close proximity of amenities.

### TRA1 Public Transport / Location Capacity

Credit ref	Title	Description	Mandatory	credits available
TRA1	Public Transport	Development within existing public transport corridor	N	3

TRA1 promotes the use of public transport, encouraging developers to consider not only existing public transport corridors but introducing and enabling new services.

**Lodge Hill Response** - It is proposed that Lodge Hill will introduce a range of new bus services and bus lanes within the development. These services will help integrate the scheme into the Hoo Peninsula, complementing the existing bus services and helping existing and future residents journey around the area.

Policies T5 and T6 are the main policies in the Local Plan which promote the use of sustainable travel. Both policies seek to develop and enhance existing infrastructure networks, providing well connected, reliable links. Lodge Hills proposals are clearly in compliance with this legislation, as the proposed enhancements to bus lanes, planned introduction of new services and provision of new bus shelters will improve the exiting public transport network in the area.

Over the core strategy plan period, policy CS24 specifies that highways systems will be managed to minimise congestion. A range of pro-active strategies including control systems, the development of quality bus networks and selective junction improvements are suggested as core management principals.

### TRA2 Availability/ Frequency

Credit ref	Title	Description	Mandatory	credits available
TRA2	Availability / Frequency	Distance occupier has to walk, using safe routes, to access regular public transport	N	3

Public Transport is of real importance when promoting sustainable communities and therefore the availability and frequency of such services is key.

**Lodge Hill Response** - A full transport assessment has been undertaken for the Lodge Hill development. The enhanced public transport links proposed for the Lodge Hill development will offer frequent services to the local community, and stops will be located within close proximity of the development. It is proposed that stops will be a maximum distance of 1km outside of designated 'town centres' and 500m within designated 'town centres'. Lit footpaths will also be extensively provided throughout the site to ensure that routes to the transport nodes are safe and walkable.

These enhancements will ensure that Lodge Hill is connected with the wider Hoo Peninsula, helping to integrate the scheme within the wider Medway region.

As previously identified, policy T5 and T6 encourages the development of public transport waiting areas which are easy to access, safe and informative. Lodge Hills proposals to develop bus stops which are well lit and within close proximity to residential homes is therefore clearly informed by the policy.

Core Strategy CS24 requires that all significant development proposals will be subject to an agreed transport assessment, which includes an assessment of the potential to encourage modal shift away from private car use. Walking and cycling networks will be extended, catering particularly for local journeys but also sub-regionally, including in conjunction with new developments.

### TRA3 Facilities

Credit ref	Title	Description	Mandatory	credits available
TRA3	Facilities	Waiting areas for public transport which are safe and weatherproof	N	3

In addition to providing suitable public transport links, it is also important to provide waiting areas which are safe and weather proof. Provision of such facilities will encourage more frequent use of public transport all year round.

**Lodge Hill Response** - It is proposed that Lodge Hill will provide suitable shelters, however as planning is still at the outline stage, full details are yet to be confirmed.

As previously discussed, policies T5 and T6 encourage developers to incorporate bus stops which are safe and secure for community use. Lodge Hills weatherproof bus stops will therefore advocate this legislation, encouraging residents to use the public transport links.

### TRA4 Local Amenities

Credit ref	Title	Description	Mandatory	credits available
TRA4	Local Amenities	Shops, playground, post box, bank, pharmacy, etc within walking distance	N	3

The provision of local amenities, which are easily accessible by walking and cycling, contributes significantly reducing car travel and thereby reducing CO<sub>2</sub> emissions, as well as also helping to enhance community welfare.

**Lodge Hill Response** - Lodge Hill proposes that shops selling food/ fresh groceries and children's playgrounds/ amenity space will be within 500m of housing.

Policy CS2 of the draft Core Strategy confirms the importance of sustainable design and building quality, detailing that all new buildings in Medway are expected to meet the highest standards, by respecting local contexts, enhancing the surrounding areas local identity and being clearly legible, by promoting easy access to existing services and open spaces.

Policy CS19 of the draft Core Strategy promotes the enhancement and improvement of the existing network of urban and rural centres, encouraging the delivery of appropriate additional facilities. The Lodge Hill site has been identified in the strategy as one of two areas to house a convenience store of about 3,500 sq m, providing an opportunity to incorporate a large retail unit into the mixed use central hub within the proposed development.

#### **TRA5 Network (cycling)**

<b>Credit ref</b>	<b>Title</b>	<b>Description</b>	<b>Mandatory</b>	<b>credits available</b>
<b>TRA5</b>	Cycling	Network of safe bike routes to local facilities	N	3

TRA5 promotes cycling as an alternative to the use of private cars for shorter journeys, therefore helping to reduce the schemes carbon emissions.

**Lodge Hill Response** - It is proposed that a network of cycle lanes will be incorporated within the development, thus helping to promote the use of sustainable transport.

Policy T4 of the local plan encourages developers to implement strategic cycle networks, which encourage community members to use bicycles. Lodge Hill proposals to introduce cycle lanes will help support this approach, as local residents will be able to get around the development easily and safely.

The council has placed a strong emphasis on providing equal opportunities for all people to enjoy accessible, high quality and affordable open space. Core Strategy policy C8 specifies that development must be suitably connected with open spaces, linked by pedestrian walkways, cycle routes, green corridors, etc.

Additionally, Core Strategy policy CS24 requires that over the plan period, all significant development proposals will be subject to an agreed transport assessment, which includes an assessment of the potential to encourage modal shift away from private car use. Walking and cycling networks will be extended, catering particularly for local journeys but also sub-regionally, including in conjunction with new developments.

#### **TRA6 Cycling facilities**

<b>Credit ref</b>	<b>Title</b>	<b>Description</b>	<b>Mandatory</b>	<b>credits available</b>
<b>TRA6</b>	Facilities for cyclists	Provision of lockers and showers and secure bike storage	N	3

In affiliation with TRA 5, TRA 6 seeks to promote the use of cycling over private cars by providing secure bicycle facilities at local amenities and transport nodes.

**Lodge Hill Response** - The provision of bicycle facilities at Lodge Hill has not yet been established, however, a feasibility study has been carried out, recommending that a number of cycle facilities will be provided across the site.

Policy T4 of the Local Plan not only promotes the introduction of new cycle routes, but also highlights the importance of incorporating cycle bays and cycle parking standards as part of the development. The feasibility study conducted by the Lodge Hill development team encompasses this information, however at this early stage of planning full details are not yet known. It is important to note however that cycle stands and bays will form part of the developments cycle network.

#### **TRA7 Car clubs**

<b>Credit ref</b>	<b>Title</b>	<b>Description</b>	<b>Mandatory</b>	<b>credits available</b>
<b>TRA7</b>	Car Clubs	Steps to reduce private car dependency through support or establishment of car club	N	3

TRA7 seeks to reduce local resident's dependency on the use and ownership of private cars, suggesting that implementing a Car Club will help do this.

**Lodge Hill Response** - It is proposed that a car club will be provided subject to viability testing in the latter stages of the development.

#### **TR8 Flexible parking**

<b>Credit ref</b>	<b>Title</b>	<b>Description</b>	<b>Mandatory</b>	<b>credits available</b>
<b>TRA8</b>	Flexible Parking	% of car parks designed to be flexible use when not used for parking	N	3

The notion of flexible parking is another sustainable element evaluated by BREEAM. Flexible parking is defined to be parking spaces that can accommodate other uses outside the areas of peak parking demand.

**Lodge Hill Response** - Consideration will be given to the provision of flexible parking within the development and will be implemented where considered appropriate. Parking will be provided within the development in accordance with the relevant standards as amended by Medway

Council's Site-specific approach to parking at Lodge Hill. It is further anticipated that the standards will be flexibly in an attempt to minimise parking provision.

### TRA9 Local Parking

Credit ref	Title	Description	Mandatory	credits available
TRA9	Local Parking	Car parking standards compared with Local Authority requirements	Y	3

TRA9 encourages the reduction of car parking provision to encourage the wider use of public transport and other methods of mobility and communication.

**Lodge Hill Response** - Parking will be provided on the Lodge Hill site in line with the interpretation of the standards. No minimum standards exist for non-residential uses and no maximum standards exist for residential uses. In addition, alternative transport is provided extensively throughout the site.

Policies T13 and T15 presented in the Local Plan highlight Medway's commitment to implementing sustainable parking provision. Both policies highlight the importance of sensitive parking allocation, ensuring disability parking is provided in addition to suitable parking provision. Lodges Hill proposes to adopt a relaxed parking allocation, with no maximum or minimum uses suggested. This, in addition to the enhanced public transport and cycle routes will help promote sustainable car use.

Core Strategy policy CS24 policy addresses car parking as follows:-

- Lower car parking standards will be considered in areas with already or potentially good public transport availability to provide a realistic option to private car use.

### TRA10 Home Zones

Credit ref	Title	Description	Mandatory	credits available
TRA10	Home Zones	Development have resi / mixed use streets (excl primary and public transport routes) designed for pedestrian priority	N	3

This credit looks at how the design of the development enables residents the ability to use and enjoy space around homes whilst maintaining vehicular access.

**Lodge Hill Response** - The implementation of home zone areas has not been adopted in the Lodge Hill design at this stage.

Core Strategy policy CS2 confirms the importance of sustainable design and building quality, detailing that all new buildings in Medway are expected to meet the highest standards, by respecting local contexts, enhancing the surrounding areas local identity and being clearly legible, by promoting easy access to existing services and open spaces.

#### TRA11 Transport Assessment

Credit ref	Title	Description	Mandatory	credits available
TRA11	Transport Assessment	Transport assessment in line with DoT guidance carried out	Y	3

TRA11 considers the impact of the development on the existing transport infrastructure and the community.

**Lodge Hill Response** - A Transport Assessment has been undertaken for the Lodge Hill development which analyses the impact that increased traffic will have on the local area, and whether or not the traffic impacts from the new scheme will be acceptable given the benefits of the development.

As a result of the Transport Assessment, additional new and enhanced existing public transport, cycling and pedestrian facilities will be provided.

Lodge Hill will clearly have a significant impact on the existing transport infrastructure, and conducting a travel assessment is therefore of paramount importance. Policy T1 of the Local Plan confirms this, specifying that assessments must be carried out to determine if new development will impact on the existing highways network, increase traffic accident rates and create an-social traffic movements. Lodge Hills compliance with this will ultimately help to manage the traffic impact on the surrounding Hoo Peninsula.

## 5.5 COMMUNITY

The Community category aims to encourage dialogue with the existing local community to ascertain their aspirations, desires and needs.

#### COM1 Inclusive Design

Credit ref	Title	Description	Mandatory	credits available
COM1	Inclusive Design	designed for improved accessibility for mobility impaired occupants	Y	3

COM1 seeks to create developments that encourage the construction of buildings that are accessible and easily adaptable to meet the changing needs of current and future occupants.

**Lodge Hill Response** - Lodge Hill has adhered to this principal, consulting with Homes and Community Agency, Lifetime Homes and Local Authority guidance to design properties that will improve accessibility for all residents especially for those with impaired mobility.

All affordable housing provided on site will meet the requirements of Lifetime Homes. Where commercially feasible, Lifetime Homes will be delivered for private residential units.

Policy BNE7 of the Local Plan supports BREEAM inclusive design approach. BNE7 states that development should be designed so that access to buildings and external circulation areas meets the needs of people with disabilities, the elderly and people with young children. Lodge Hill's proposal to meet Lifetime Homes standards confirms that the development proposes to comply with the Local Plan's legislation.

Core strategy policy CS9 seeks to create sustainable healthy communities, where residents enjoy a high quality of life. The legislation encourages development that reduces health inequalities, provides and enhances services that contribute to the quality of life and meets the needs of the community.

Additionally, Core Strategy policy CS15 seeks that new residential schemes must create sustainable residential communities, encouraging a mix and balance of good quality housing and tenures.

#### **COM2 Consultation**

<b>Credit ref</b>	<b>Title</b>	<b>Description</b>	<b>Mandatory</b>	<b>credits available</b>
<b>COM2</b>	Consultation	Community involvement in design, consultation with local community stakeholders, etc.	Y	3

Localism has become more and more prominent in the planning agenda reinforcing the importance of community consultation. COM2 promotes mandatory community involvement in the design and development stages of development proposals, to ensure that community's needs, ideas and knowledge are taken into account to improve the quality and acceptability of development.

**Lodge Hill Response** - As part of the initial stages of Lodge Hill's Masterplan, extensive community consultation was conducted to obtain the aspirations, perceptions and opinions of the local community. Six public exhibitions were held at various locations and letters were sent out to local communities to maximise interest. 597 people attended these events, highlighting the extensive measures taken and those that continue to be taken to by the Lodge Hill development team to involve existing and future residents.

Medway's adopted Local Plan places significant emphasis on Partnerships to provide communities with thriving residential and business developments. This strategic approach therefore encourages continued consultation, a method keenly adopted by the Lodge Hill development team who have involved the community right through the development phases of the scheme.

Core Strategy policy CS33 promotes the use of community consultation throughout the development process.

### COM3 Development user Guide

Credit ref	Title	Description	Mandatory	credits available
COM3	Development User Guide	info pack detailing public transport, local amenities, utilities suppliers, refuse collection etc provided	N	3

It is one thing to implement a scheme that has numerous sustainable principles, but quite the other to ensure inhabitants are fully engaged with them. COM3 recognises this, promoting the use of a development user guide which encourages and promotes sustainable lifestyles by helping to integrate the new principles into the local community. The information pack covers issues such as transport services, utility suppliers, refuse collections, recycling facilities, etc.

**Lodge Hill Response** - All residents within the Lodge Hill development will be provided with a user guide giving residents information to enable them to maximise the sustainability of their homes and surrounding environs.

### COM4 Management and operation

Credit ref	Title	Description	Mandatory	credits available
COM4	Management and Operation	provision for community management of facilities, open space, SUDS, grey water schemes, meeting places, allotments, etc.	N	3

COM4 seeks to ensure that community facilities are maintained and the community has a sense of ownership of them.

**Lodge Hill Response** - As a minimum, the Lodge Hill development will develop and manage all community scale facilities during the construction phases and will put in place procedures to allow handover to an appropriate body at a set date upon practical completion.

## 5.6 ECOLOGY

The Ecology category encourages developers to assess the existing ecology of a site and retain and enhance it where possible to sustain local biodiversity.

### ECO1 Ecological Survey

Credit ref	Title	Description	Mandatory	credits available
ECO1	Ecological Survey	full ecological survey undertaken, strategy developed and BAP provided.	Y	3

The ecological asset of an area is of significant importance to sustainable development and therefore is a mandatory requirement of BREEAM to determine the ecological value of a site, to help maintain, enhance and protect an area's natural biodiversity.

**Lodge Hill Response** – The importance of heritage and environmental diversity of the site is fully acknowledged and indeed these are key components underpinning the vision for the site. To determine the developments impact on the natural biodiversity, an ecological survey was conducted and a strategy drawn up to preserve and enhance the existing features.

The assessment identifies that there will be minimal ecological net loss, suggesting that the development will not impact on the environment significantly. In addition, methods such as SSSI buffer zones, introduction of nature reserves and countryside parks are all proposed to preserve and enhance the areas ecological assets.

The preservation of Medway's local heritage is identified in the Local Plan, policies BNE32, BNE33, BNE34, BNE34, BNE35, BNE36, BNE 37, BNE38 and BNE39 reflect this, offering guidance and legislation to preserve the areas ecology. Lodge Hill's response is clearly in accordance with these policies, as the development team conducted a comprehensive Ecology Survey.

Core Strategy Policy CS6 specifies that relevant environmental strategies should be in place and functioning prior to the commencement of development, to protect wildlife habitats, wild species and biodiversity features.

Core strategy Policy CS7 states that development will be permitted in the countryside provided that the character of the area is retained, or where appropriate, enhanced if the environ is protected under legislative designations.

### ECO2 Biodiversity Action Plan

Credit ref	Title	Description	Mandatory	credits available
ECO2	Biodiversity Action Plan	increase in important, valued or sensitive habitats in LBAP or BAP	N	3

As previously identified for criteria ECO1, Lodge Hill proposes a range of strategies to improve the ecological values of the site and its existing habitats, therefore contributing to meeting the requirements identified in ECO2.

**Lodge Hill Response** - Following the ecological survey, a number of additional features are proposed for the Lodge Hill development site. These features include countryside parks, nature reserves, the incorporation of buffer zones between the adjacent SSSI and the development. This strategy will strengthen the ecological value of the site and prevent a decrease in the important, valued sensitive habitats which exist on and adjacent to the site.

Similarly to the Ecology preservation outlined previously, the adopted Local Plan sets out strict guidelines to preserve the regions biodiversity. Policies BNE32, BNE33, BNE34, BNE34, BNE35, BNE36, BNE 37, BNE38 and BNE39 highlight this, identifying that development will not be permitted if it is to have adverse effects on the local biodiversity. Lodge Hill's extensive green space provision and buffer zones will help preserve and enhance the areas biodiversity.

Core Strategy policy CS6 specifies that relevant environmental strategies should be in place and functioning prior to the commencement of development, to protect wildlife habitats, wild species and biodiversity features.

Core Strategy policy CS7 states that development will be permitted in the countryside provided that the character of the area is retained, or where appropriate, enhanced if the environ is protected under legislative designations.

### ECO3 Native Flora

Credit ref	Title	Description	Mandatory	credits available
ECO3	Native Flora	% of trees and shrubs specified native species	N	3

ECO3 aims to ensure that the trees and shrubs that are specified in development proposals contribute to the ecological value of the site and therefore that the majority of trees used are native species.

**Lodge Hill Response** - Lodge Hill proposes that all tree species used will be native; suggesting that detailed consideration has been paid to preserving the native flora of the site.

Policy BN43 encourages developers to retain natural trees, woodlands and hedgerows where ever possible to provide value to the areas local character. Lodge Hills countryside parks, green spine, buffer zones, etc will help to achieve this objective, whilst the extensive tree planting proposals will enhance the regions character further.

## 5.7 BUSINESS

This category looks at what can be done to create job and training opportunities and attract inward investment to the area in which the development is located.

## BUS 1 Business priority sectors

Credit ref	Title	Description	Mandatory	credits available
BUS1	Business Priority sectors	development designed to suit needs of prioritised business sectors	N	3

BUS1 aims to promote business growth within regionally prioritised sectors, designed to suit the needs of prioritised business sectors as identified by a Local Enterprise Partnership.

**Lodge Hill Response** - Lodge Hill seeks to meet these requirements, implementing a mixed use development that integrates business units throughout the scheme, whilst producing a purpose built Knowledge Park to house larger business services, and to support rural tourism through the inclusion of two hotels.

The applicant has undertaken detailed consultation with the Council and strategic partners in the area including other major landowners and education institutions. It has taken detailed market advice from agents and also considered the likely long term needs of key sectors. The proposals for development are designed to meet these needs, but also to maintain flexibility to respond to a changing market over a twenty year development period.

Policy ED3 (Local Plan) promotes the development of Business (Class B1) as long as they do not have an adverse impact on residential amenities. Lodge Hills integrated business development approach is sensitive to this policy, as business units will be integrated throughout the development proposal.

## BUS2 Labour and Skills

Credit ref	Title	Description	Mandatory	credits available
BUS2	Labour and Skills	engagement of local labour on temp/perm basis or working with local training providers	N	3

Ensuring that development contributes to community engagement is imperative to an areas' regeneration, BUS2 recognises this by encouraging developers to build on community capacity.

**Lodge Hill Response** - The applicant has undertaken a detailed analysis of likely employment opportunities in both the construction phase and the completed development. This includes identification of likely skill, types and phasing of opportunities. The applicant has engaged with the Council and training providers, including local colleges, as part of the pre-application phase and proposes to implement local labour and recruitment schemes, and involving contractors in the process, building on the best practice that they have developed as the UK's largest REIT.

Core Strategy policy CS17 encourages community wide employment, creating choice for the workforce, offering an alternative to out-commuting and achieving a balance with housing

growth. As part of this strategy, the core strategy encourages the development of local community's skill bases, by assisting in the development of the work readiness and skills required by existing and potential employers

**BUS3 Employment**

Credit ref	Title	Description	Mandatory	credits available
BUS3	Employment	potential for development to create additional permanent jobs	N	3

BUS3 encourages developments to create additional permanent jobs within the local area.

The proposals for Lodge Hill include a range of employment generating uses including commercial (B class), retail, leisure and recreation and community provision. Together these have capacity for around 3,900 FTE jobs, equating to a likely headcount of 5,500. It is anticipated that, in addition to this, there will be up to a further 750 people working from home.

One of Medway's Local Plans key objectives is to enhance the economic base of the area, promoting new commercial developments of high environmental quality. Lodge Hill's indicative masterplan mirrors this ideology, implementing high quality business units through the scheme.

As above, Core Strategy policy CS17 encourages community wide employment, creating choice for the workforce, offering an alternative to out-commuting and achieving a balance with housing growth. As part of this strategy, the core strategy encourages the development of local community's skill bases, by assisting in the development of the work readiness and skills required by existing and potential employers.

**BUS4 New Business**

Credit ref	Title	Description	Mandatory	credits available
BUS4	New Business	Business space which complements and enhances businesses already in the local area.	N	3

The aim of BUS4 is to encourage new businesses which complement and enhance those businesses that already exist within the local area.

**Lodge Hill Response** - A market survey has been undertaken which identifies the type of businesses which may enhance the area and be appropriate for the development. The business space provided within the proposed development for Lodge Hill reflects the findings of this assessment.

As previously identified, the Local Plan seeks to encourage development which enhances the areas local economy and employment bases. Lodges Hill's proposals will help achieve this objective, incorporating business space which complements and enhances the areas existing business infrastructure.

#### **BUS5 Investment**

<b>Credit ref</b>	<b>Title</b>	<b>Description</b>	<b>Mandatory</b>	<b>credits available</b>
<b>BUS5</b>	Investment	Development designed to attract inward investment	N	3

Economic wellbeing of an area is imperative and therefore attracting inward investment for businesses and organisations from outside the immediate area to increase economic wellbeing is key. BUS5 aims to encourage this.

**Lodge Hill Response** - The applicant is represented on the Locate in Kent Partnership, the inward investment agency for the area. Locate in Kent have been consulted, along with the Council and commercial property agents, on the Lodge Hill proposals and the approach set out in the planning application is the result of this. This is inevitably a long term (20 year) development process which will, therefore go through probably two further economic cycles in which there will undoubtedly be major changes in market conditions. The approach will therefore be reviewed regularly. The applicant is committed to working with the Council and partners to develop an active marketing strategy for the commercial uses on the site which will complement the wider Medway and Kent approach.

The policies in the adopted Local Plan set out a clear strategy to improve the region's economic prosperity by attracting investment. Policies such as ED2, ED3 and ED5 encourage the introduction and re-development of business sites, therefore providing a catalyst for investment. Lodge Hill's strategy to integrate business units throughout the site will help foster this approach, whilst the knowledge park has the potential to act as the regions business hub.

## 5.8 BUILDINGS

This final category examines the environmental impact of the buildings within the development. It specifically makes reference to recognised environmental assessment tools – Code for Sustainable Homes and BREEAM.

#### **BLD1 Domestic**

<b>Credit ref</b>	<b>Title</b>	<b>Description</b>	<b>Mandatory</b>	<b>credits available</b>
<b>BLD1</b>	Domestic	What CfSH level will be achieved for housing	Y	3

BLD1 is a mandatory requirement that all domestic buildings within the development are assessed by the appropriate Code for Sustainable Homes rating.

**Lodge Hill Response** - It is proposed that Lodge Hill will achieve code level 4 as a minimum and will follow the timeline for achieving zero carbon.

Core Strategy policy CS3 requires that Residential development will be required to achieve at least level 3 of the Code for Sustainable Homes.

The Local Plan stresses the importance of sustainable development, using renewable energies, public transport, strategically located services/ amenities and environmental enhancement. Lodge Hill's proposal to attain CFSH level 4 is therefore in accordance with this approach.

#### **BLD2 Non-Domestic**

<b>Credit ref</b>	<b>Title</b>	<b>Description</b>	<b>Mandatory</b>	<b>credits available</b>
<b>BLD2</b>	Non-Domestic	What BREEAM rating will be achieved for non-domestic buildings	Y	3

BLD2 is a mandatory requirement that all non domestic buildings within the development are assessed by the appropriate BREEAM rating.

**Lodge Hill Response** – It is proposed that Lodge Hill will attain a rating of “Excellent” as a minimum.

As above, Core Strategy policy CS3 requires that all Commercial buildings over 1,000 sq m will be required to meet the BREEAM ‘very good’ standard.

The Local Plan stresses the importance of sustainable development, using renewable energies, public transport, strategically located services/ amenities and environmental enhancement. Lodge Hill's proposal to attain BREEAM “Excellent” Standard therefore exceeds this requirement in many areas.

# 6

## RESPONSIBILITIES FOR SITE-WIDE AND PLOT-SPECIFIC DEVELOPERS

The methods discussed above which are proposed to achieve a BREEAM for Communities Stage 2 “Excellent” rating fall into two distinct areas of responsibility; those of the Infrastructure Developer and those of the Plot Developer.

Table 2 below gives an overview of the role both the infrastructure and plot developers will play in delivering Lodge Hill relative to the criteria to be achieved.

Lead Developer	Plot Developer
<ul style="list-style-type: none"> <li>• Dry and wet ponds, SUD Measures</li> <li>• Tree cover – to reduce heat island effect, SUD Measures</li> <li>• Primary and Secondary roads, public footpaths, cycle lanes</li> <li>• Bus shelters</li> <li>• Green spine</li> <li>• Sustainable Energy Systems and Elements</li> <li>• Countryside Parks</li> <li>• Nature reserve</li> <li>• Native flora</li> <li>• Heritage sites</li> </ul>	<ul style="list-style-type: none"> <li>• Microclimatic cooling, SUD Measures within Tertiary roads</li> <li>• Tertiary roads</li> <li>• Green Roof, SUD Measures</li> <li>• Plot contributions to CSH level 4 and BREEAM requirement</li> <li>• Solar panels</li> <li>• Shops and Services</li> <li>• User guide</li> <li>• Waste management facilities</li> <li>• Non-plot infrastructure contributions to CSH level 4 and BREEAM requirement</li> </ul>

Table 2

The delineation between the two areas is crucial, since each has inter-dependencies. For example, it will be less easy for the plot developer to achieve the BREEAM for Communities Stage 2 “Excellent” rating without the infrastructure being provided to achieve the credits which can only be achieved from the earlier stages of the construction of the development prior to the involvement of the plot developer. Typically, this will include mandatory credits such as RES1 where the materials used in the construction of the areas of public realm and infrastructure should have a low environmental impact.

Similarly, the site-wide infrastructure alone is unlikely to achieve the “Excellent” rating required since many mandatory credits, such as PS8, where affordable housing is proposed to be provided throughout the development, integrated evenly and is indistinguishable from other dwellings.

However, the proposed development appears to perform strongly in both the site-wide infrastructure and plot-specific sectors of the development and is therefore expected to achieve the BREEAM for Communities Stage 2 “Excellent” rating that is required.

A Sustainability Framework has been developed which will ensure that the objectives indicated in this report are passed on to each developer. Further, it is anticipated that a condition of planning consent is issued so that these objectives are met in subsequent development plots within the Lodge Hill site.

The Sustainability Framework proposes that the “sustainability” conditions may be structured as follows:-

- Site-wide sustainability strategy to be submitted and approved prior to Reserved Matters for Phase 1, to be implemented as approved on a site-wide and phased basis as identified within the Strategy, unless otherwise agreed with Medway Council.
- For each phase or sub-phase of the development, sustainability details to be submitted and approved prior to the commencement of development of the relevant part of the site. To be implemented as approved on a phased basis, unless otherwise agreed with Medway Council. The details for each phase/ sub-phase should be in accordance with the approved site-wide sustainability strategy unless otherwise agreed.

## CONCLUSIONS

The redevelopment of Lodge Hill offers the opportunity to incorporate sustainable development principles from the initial design concepts. All aspects of sustainability will be considered in line with the requirements of national, regional and local planning requirements and policy legislation. In addition by introducing BREEAM Communities; recognised sustainability good and best practice, such as the Code for Sustainable Homes and BREEAM Buildings standards, will be applied throughout the development. The Lodge Hill scheme will strive to exceed sustainability minimum standard requirements and achieve good and best practice where feasible.

It is proposed that the development will attain an “Excellent” BREEAM for Communities Stage 2 rating.

All domestic housing will meet CfSH level 4 as a minimum, with the flexibility to adapt to higher standards as introduced through the construction of the development. Full details of how Code Level 4 will be achieved will be provided by each plot developer.

In addition to the CfSH level 4 ratings, all non-domestic buildings will seek to attain a minimum BREEAM “Excellent” rating.

In conclusion, this report identifies how each of the eight BREEAM for Communities Stage 2 categories will be addressed within the proposed development. The development is expected to achieve at least one “best practice” rating in each of the eight categories which BREEAM for Communities Stage 2 assesses. Combined with the commitment to achieve an overall “Excellent” rating, this demonstrates that the development will be highly sustainable and also well balanced; delivering good and best practices across all aspects of the sustainability agenda.

All three pillars of sustainability have been addressed, which is reflected in the proposed development approach. Setting a stretching BREEAM for Communities Stage 2 rating target of Excellent, ensure that environmental, social and economic sustainable principals will be addressed using a holistic approach, applying equal weighting to each element. This approach has meant that the Lodge Hill proposed development not only complements Hoo Peninsula environmentally, but will help develop the area both socially and economically.