

6.0

SUSTAINABILITY

6.1 Sustainability

Lotmead Farm Villages aims to set a new standard for sustainable, mixed use communities.

The proposed development Site as allocated for development in the adopted Local Plan was identified through the Swindon Joint Study (2005) as a sustainable location for a large-scale mixed-use development within the borough.

Among the measures, the masterplan has been designed to incorporate a SUDS drainage system and high quality green space network which provides future residents attractive open spaces and walking routes.

In this Section we have briefly set out the opportunities and how they will inter-relate as the villages of Lotmead and Lower Lotmead develop.

SUSTAINABILITY PRINCIPLES

The development of the Masterplan will be based on the following principles:

- Ensure that the development provides an appropriate mix of uses, including new homes for the area.
- Ensure that the local community and relevant stakeholders are involved in the design process and the development responds to the needs of the local area;
- Ensure a socially cohesive community with a mix of uses and well designed streets and spaces;
- Provide a mix of flexible new homes that are built to last and adaptable over time;
- Reduce carbon emissions where possible and ensure the wise use of natural resources where necessary;
- Provide safe and attractive walking and cycling routes and good access to public transport and local facilities;
- Provide a high quality, inclusive public realm that meets the needs of all users, and which includes green routes;
- Improve ecology with designated biodiversity areas encouraging diversification of species and habitats;

The following appraisal of the scheme is based on the principles set out in the BREEAM Communities assessment methodology. BREEAM Communities is an assessment tool for measuring the sustainability of large scale development proposals.



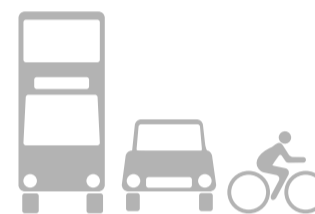
Governance

Addresses community involvement in decisions affecting the design, construction, operation and long term stewardship of the development.



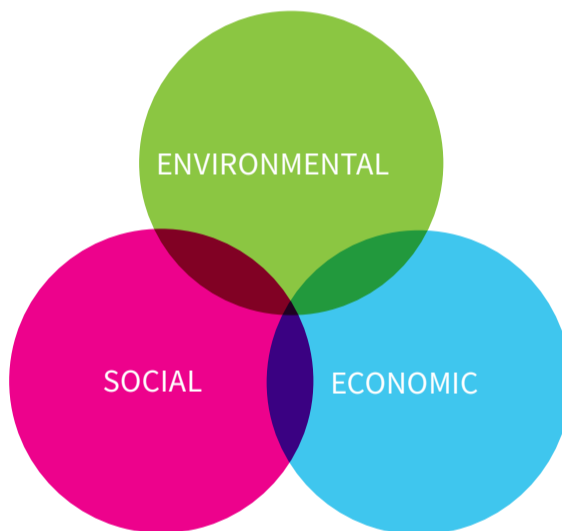
Social and Economic Wellbeing

Addresses societal and economic factors affecting health and wellbeing such as inclusive design, cohesion, flood risk, pollution, provision appropriate facilities, services and housing and access to employment.



Transport and Movement

Addresses the design and provision of transport and movement infrastructure to encourage the use of sustainable modes of transport.



Resources and Energy

Addresses the sustainable use of natural resources and the reduction of carbon emissions.



Land Use and Ecology

Addresses sustainable land use and ecological enhancement.



GOVERNANCE

The local community, including local residents and relevant stakeholders, has been appropriately consulted throughout the design process on the emerging proposals. Details of the consultation and engagement process can be found in the Statement of Community Involvement accompanying the applications.

The masterplan has been developed via consultation with key stakeholders such as the Environment Agency, Thames Water, the Highways Authority, Swindon Borough Council Planners, English Heritage, Natural England and the County Archaeologists.

MANAGEMENT AND MAINTENANCE

The masterplan proposes streets, squares and open spaces. A vital component in the successful delivery of the vision will be the long-term stewardship of these public spaces.

A robust management framework for the open space fabric running through the development is essential to its long-term sustainability.

The masterplan for the Site has been careful to create spaces that are overlooked to provide a secure environment for residents. Open spaces only work if the surrounding community feels a sense of pride and ownership, and engaging them in the long-term maintenance and vision is essential for the vision to succeed.

The Developer will provide a mechanism for the long-term delivery and stewardship of public open space and commercial buildings on the Site. Their role will be managing the Site in accordance with an agreed Management Plan.



SOCIAL AND ECONOMIC WELLBEING

The proposed development seeks approval for a mixed use community at Lotmead Farm Villages. The proposals seek to provide a range of new facilities for the local community, including the potential for educational, leisure and recreational uses. The masterplan proposals will provide new homes for the local community, provide a mix of housing in response to local need.

The proposed development, and subsequent management of the Site will strive to encourage sustainable lifestyles and habits of occupants. For example: -

The proposals seek to address the needs of the local community by:

- Improved public access for both the local community and informal recreation opportunities and new public open space network;
- Introduction of new footpaths and cycle through the Site;
- Creating attractive and valuable public spaces which will be accessible and inclusive to all;

As part of the proposals the extensive areas of open space will provide accessible open space that will:

- Encourage wildlife to flourish;
- Ensure that communities are benefitting fully from the fundamental services that healthy ecosystems provide;
- Ensure that everyone has access to wildlife-rich green spaces and can enjoy and be inspired by the natural world.



RESOURCES AND ENERGY

The indicative masterplan shows the potential for residential neighbourhoods to contain a mix of apartments, terraces, semi detached properties and detached properties.

Terraces, such as those indicated within the masterplan, provide the opportunity for more energy efficient homes and reduced heating requirements.

The plots have been designed to have appropriate day lighting and therefore reducing the demand for electricity.

Homes will be constructed in line with current buildings regulations. At detailed dwelling design stages, heating system technology considerations for individual houses will evaluate social impacts in order to minimise fuel poverty. For example end user bills will be considered, especially given affordable housing provision.

FLOOD RISK AND DRAINAGE

Managing flood risk and the creation of a sustainable urban drainage solution have been key drivers in the development of the masterplan proposals. Surface run off from the proposed and existing development will be channelled away by a combination of SUDS techniques including rill and swales, to attenuation basins. These SUDS features have been designed to be an integral part of the streetscene. They also offer additional benefits of creating a sense of place in terms of distinct character areas and encourage biodiversity.



LAND USE AND ECOLOGY

Trees and hedgerows of value have been retained as far as possible as features of the design proposals. Short sections have been lost to allow permeability of movement links across the Site. Opportunities have been utilised to reprovide / reinstate features in other parts of the Site.

Ecological surveys revealed potential for protected species on the Site, including Great Crested Newt ponds and trees with bat roost potential. These have been retained and supplemented as part of the masterplan proposals.

Additional features have been developed in response to the findings of the ecological surveys on the Site and the desktop review of the Site and surrounding habitats. Measures include:

- Extension of woodland belts and creation of community woodland;
- Two newly created ponds (in addition to SUDS and attenuation basins);
- Newly created semi-improved grassland meadow;
- Newly created marshy grassland along the floodplain restoration area on the eastern edge of the Site;
- Established biodiversity areas / nature reserve and ecology nature trails.



TRANSPORT AND MOVEMENT

The proposed development will benefit from good public transport links to central Swindon, particularly when the mass rapid transit route proposed as part of the wider New Eastern Villages is in place. Phase 1 will be serviced via a bus route from Wanborough Road. There are also good regional and national road connections due to the Site's proximity to the M4 corridor.

The Site promotes sustainable forms of transport, including both walking and cycling, by improving links to the surrounding footpath network and Swindon urban area, and providing safe and attractive cycle routes through the scheme.