6 Sustainability

Sustainability and Energy Strategy

The buildings have been designed with a Fabric First approach to energy efficiency. This seeks to create a highly efficient sealed and insulated building envelope to prevent heat loss and therefore reduce the need for using energy to heat properties. Residual space heating requirements can be efficiently supplied by individual gas boilers.

The avoidance of overheating in highly insulated buildings is becoming increasingly important to avoid the desire for energy intensive cooling. This has been carefully considered through the recessing of windows to create solar shading to the apartments which are the most susceptible form of unit to overheating. All units also enjoy Mechanical Ventilation and Heat Recovery units to ensure indoor air quality is maintained with efficient heating in winter and background ventilation in summer.

Carbon reduction technologies have been introduced through the use of Photovoltaic (PV) panels at roof level. These create electricity from sunlight that offsets the carbon intensive creation of electricity burning fossil fuels. The PV panels have been laid flat to ensure the maximum possible area of PV can be supported without creating a detrimental visual impact from the street.

The nature of the surrounding buildings also requires that the roof level of the proposed development is carefully considered as many buildings on Dartmouth Park Avenue sit much higher and look down onto the roof scape of the new building .For this reason we have chosen to use planted, 'Sedum', roofs over all available roofscape that is not required to have PV panels on.

Generous cycle storage provision supports the use of this environmentally friendly alternative form of transport and helps to support a more active lifestyle.

The richly planted landscaped areas around the site provide healthy bio diversity for local flora and fauna.

For a full description of the energy strategy and sustainable design approach please refer to the Sustainability Statement and Energy Strategy that accompany this application.

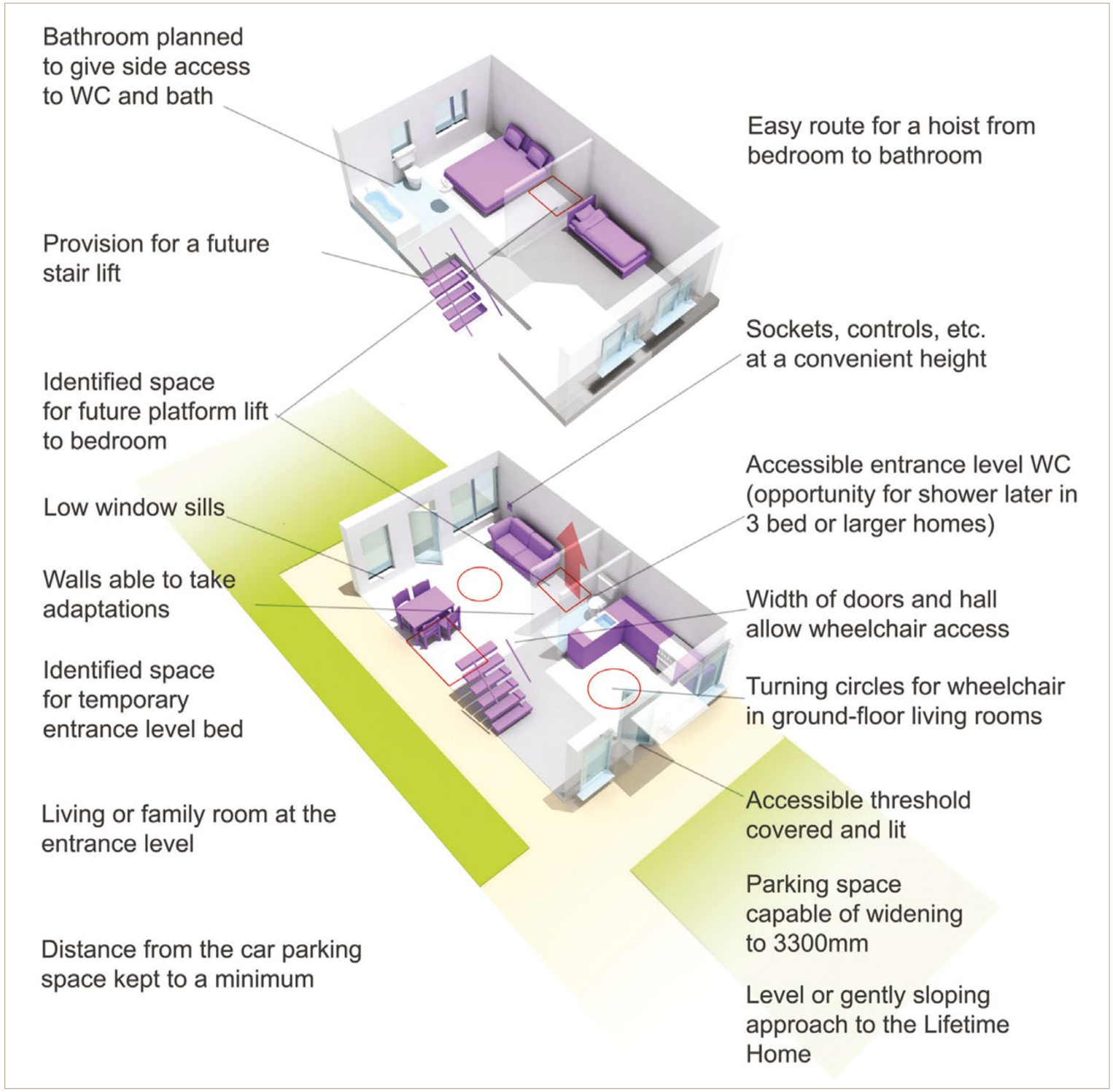
Secure by Design

The security and safety of the site is essential to creating a sustainable residential development. We have followed the guidance outlined in the Police Authorities publication, Secure By Design, New Homes - Designing Out Crime. We have also consulted with the local Architectural Liaison officer to discuss the proposals and ensure compliance.

The security of the publicly accessible open space has been carefully considered with lockable gates restricted access from dusk until dawn. The height of boundary treatments, fences and defensible boundary planting has been fully reviewed and agreed with the architectural liaison officer.

Lighting around the scheme will be very limited but carefully integrated to enable face recognition of other pedestrians within the site while avoiding light pollution to surrounding rear gardens.

For full details of the lighting strategy please refer to the Lighting Strategy document submitted as part of the application.



Lifetime homes diagram, diagram indicative only. Produced by PRP ©Crown copyright 2008

Lifetime Homes Standards

The development has been designed to fully comply with the requirement of Lifetimes homes to ensure the new residences can be used through all stages and ages of the occupant's lifespan. The diagram adjacent illustrates the requirements which include the following.

- Level access into dwellings.
- Convenient accessible parking areas with some spaces expandable to 3.3m to allow for wheelchair use.
- Minimum width doors and internal circulation with space to the side of the doors to enable them to be opened when using a wheelchair.
- Accessible kitchen areas.
- Entrance level WC capable of conversion to a shower facility and wheel chair accessibility.
- Provision for a bed space at ground level.
- A reception room at ground level.
- A suitable location for a through the floor lift in multi storey dwellings.
- Knock out panels and route for a hoist between a bedroom and bathroom.
- Adequate width to stairs to allow for the installation of a stair lift.
- Adequate circulation space around beds to get to and operate windows.

All these requirements have been designed into the proposals to ensure compliance with the Lifetimes Homes Standards.

Conclusion

These proposals provide a high quality, contextual and beneficial redevelopment of the Mansfield Bowling Club site that will preserve its use as a benefit to the local community serving it with new publicly accessible open spaces, tennis courts, a community garden and much improved areas of landscape and planting.

The buildings are a unique yet sympathetic contextual response to their surroundings that provide a great improvement to the dilapidated buildings and surrounding hard scape that exist currently.

We believe these proposals provide a sensitive and generous approach to redevelopment of this site that will secure the long term preservation of the open character of this site together with much needed new affordable homes, sale homes and great quality, publicly accessible open spaces for all to enjoy.

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