Broadhaven, Pembrokeshire.



AMENITY STATEMENT & GREEN INFRASTRUCTURE STRATEGY APPLICANT: Mill Bay Homes Ltd



Introduction

dp landscape architecture [DPLA] have been commissioned by Mill Bay Homes Ltd to provide an Amenity Statement & Green Infrastructure Strategy to support the proposed residential development, located north of Marine Parade, Broadhaven, Pembrokeshire. An assessment of the existing landscape and surrounding context was undertaken on 14th March 2022 by Dan Patterson BA [hons] DipLA MLI. The assessment comprised a site walk-over and brief desktop study.

This report should be read in conjunction with DPLA drawings; 1144.01, 1144.02, 1144.03 and 1144.04; Soft Landscape Proposals.

Existing site

The existing site is located on the eastern edge of Broadhaven and is bounded by the existing residential properties of Swanswell Close to the west and existing vegetation to the north, east and south. A proportion of the site extends north-east and connects with the existing road B4341 whilst the south-west corner extends to the south of Swanswell Close. The site has been cleared of vegetation to facilitate the development under the supervision of the Ecologist.

The remaining existing landscape features are located along the site's boundaries and include hedges and scrub to the north, east and south. These have been cut back to the boundary line and 'gapped up' where appropriate with translocated plants from site and piles of dead wood to thicken the boundaries and enhance the site's ecology.

The loss of the existing vegetation within the site will be mitigated by the introduction of new native tree planting throughout the site as well as new native hedgerows, shrubs, plants known for wildlife value, wetland areas and other habitat types. The existing hedges and scrub along the north, east and south boundaries will be retained, protected and enhanced with new planting.



View west south west from within site.

Green Infrastructure Strategy

Green infrastructure (GI) is defined by the UK government as "a network of multifunctional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities". This can include natural habitats ranging from grasslands, wetlands and woodlands to parks, open spaces, playing fields, street trees, rain gardens, allotments and private gardens.

Due to the nature of the proposed development, a large amount of the site will be taken up by the residential properties and the associated access roads. Therefore, the remaining soft landscaped areas will need to work very hard in order to meet the GI objectives.

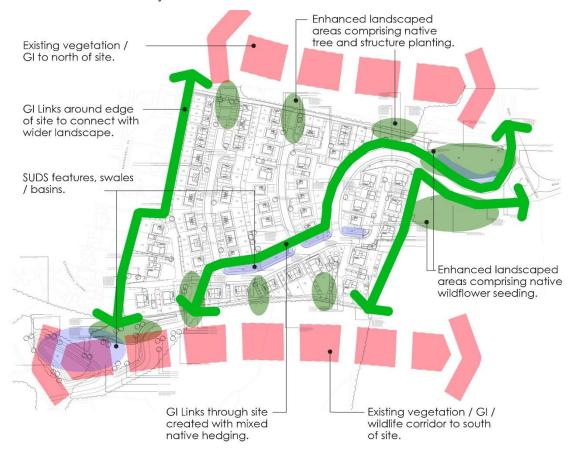


Figure 01 – Design Principles.

The site benefits from its location adjacent to 2 existing areas of dense vegetation, immediately to the north and to the south, as indicated in Figure 01 above.

This translates as a dense group of trees and scrub running along the northern boundary, extending east-west, and wrapping around the properties on Holbrook Road. Along the southern boundary is a densely vegetated valley that runs west from the Bower Farm guesthouse, past the existing Slash Pond towards the coast. These important features will be retained, protect and enhanced so that new Green Infrastructure can connect directly with the wider ecological network. This will be achieved by introducing enhanced landscape areas and a series of Gl links though the site and along its boundaries. The five principles of Green Infrastructure have been used as a guide to inform the landscape design to ensure the landscape maximises the benefits to people and wildlife.

The five principles:

- Multi-functional
- Adapted for Climate Change
- Healthy
- Biodiverse
- Smart & Sustainable

Multi-functional:

The landscape design includes a range of GI features for the benefit of people and wildlife. These include native tree planting to improve amenity as well as providing summer shade and a food source for wildlife.

The planting design includes ornamental shrubs and those that are known to support wildlife. This will improve amenity and tie in visually with the adjoining landscape. This planting also provides safe routes through the site for mammals and foraging opportunities for local fauna.

Native hedging is proposed along the western and southern boundaries, as well as either side of the new access road in the form of hedge banks. This will soften boundaries, assist with screening the upper parts of the site and provide ecological habitat and nesting opportunities for birds.

Behind the hedge banks, north and south of the access road, areas of native wildflower meadow are proposed. This will be allowed to regenerate naturally over time and will add to the biodiversity and provide important wildlife links around the site.

Finally, areas of long grass and wildflower meadow are also proposed as part of the SUDS system. The proposed mixes contain a range of flowering species which add to the amenity and attract endangered species such as bees and butterflies.

The combination of the above measures will enhance biodiversity across the site and demonstrates every effort is being made to create a multi-functional landscape.



Landscape features to benefit people and wildlife.

Adapted for Climate Change:

The drainage design for the site includes a Sustainable Urban Drainage System. [SUDS]. The design comprises a series of swales and attenuation basins as well as areas of permanent water.

This gives us an excellent opportunity at surface level to create rich wetland and grassland habitats capable of holding water on site. This will improve and manage water quality, enhance biodiversity as well as providing amenity for the people using the site.



'Wetland Seed' by Wyndrush Wild or similar.

Healthy:

The underlying principles of the landscape design for the site are to create an attractive setting for the new development for the benefit of all users.

This will be achieved by retaining and enhancing existing landscape features where possible and introducing new native tree and shrub planting as well as areas of wildflower meadow as described earlier.

The combination of the above GI features will contribute positively to the amenity of the site and to the wellbeing of those who live there and / or visit.

Biodiverse:

The planting scheme includes a large number of native species and species noted for wildlife value. These features include trees, hedges, structure planting and wetland habitats across the site.

The existing planting infrastructure to the north, east and south boundaries will be retained and enhanced. It will also be maintained to ensure a healthy biodiverse site in the long term, which in turn will benefit local ecosystems and the wellbeing of people.

In addition to the habitats created through the planting design, the site will also include other ecological measures. Logs from the felled trees will be left in piles, bat and bird boxes will be installed on the new buildings and refugia for invertebrates will also be included.



Log pile and invertebrate refugia.

Smart & Sustainable:

The planting design for the development has been carefully considered to ensure that it is not reliant on artificial irrigation.

The only exception to this could be during the establishment period, where, during periods of prolonged dry weather, the young plants may require some watering to prevent loss and to aid their successful establishment. In these circumstances, the watering should be carried out using harvested rainwater where possible.

Landscape Proposals

As well as the principles of Green Infrastructure, the landscape proposals are designed in accordance with 'Guidance on Standard S4 – Amenity' of the Sustainable Drainage Systems Standards for Wales document 2018.

Standard 4 – Amenity "addresses the design of SUDS components to ensure that, where possible, they enhance the provision of high quality, attractive public space which can help provide health and wellbeing benefits, they improve liveability for local communities and they contribute to improving the climate resilience of new developments."



Figure 02 - Extract from DPLA drawings 1144.01 – 1144.04

As part of the landscape scheme, a series of swales and detention basins are proposed. The landscape proposals embrace the inclusion of these SUDS features and aim to maximise their potential amenity benefits.

The proposed seeding mix for the SUDS features is Wetland Seed' by Wyndrush Wild or similar. The mix will be sown at the recommended rate onto LOW FERTILITY SUBSOIL. This will create an attractive wildflower meadow which will contribute to the amenity of the site and, together with the proposed tree, shrub and hedge planting, will create a pleasant living environment, enhancing the well-being of site users.

Key measures include:

- Native tree planting around the site. This provides an attractive setting for the development and adds to the existing landscape infrastructure.
- Native hedge planting to the western and southern boundaries as well as hedge banks. This provides soft boundaries, screening and enhances site ecology.
- Native structure planting provides screening, a dense layer of vegetation and ecological links.
- Open grassed areas to the south-west which will be left uncut [strimmed twice per year] will provide green space and important ecological habitats.
- Wildflower meadow areas to SUDS features provides visible amenity benefits and enhance the external environment.

The combined effect of the above measures will be the creation of a species rich landscape, appropriate to the scale and nature of the proposed development.

Conclusion

The existing landscape has been assessed and important existing features have been identified. These will be retained and enhanced where possible and as appropriate, as part of the new landscape proposals for the site.

The impact of the new development will be mitigated by creating new planting zones, native hedgerows, wetland meadows and other landscape features which will improve biodiversity, provide important ecological habitats and enhance the amenity value of the site.

The successful establishment of the landscape design for the site will provide a network of healthy, multi-functional and biodiverse green spaces, capable of delivering a wide range of environmental and quality of life benefits for people and wildlife.