Unit 28, 2 Venture Road, Southampton Science Park
Chilworth, Hampshire SO16 7NP 0845 6440196

info@enims.co.uk www.enims.co.uk

HEAT Project, Salisbury Hospital – Ecology Statement November 2023

The following document provides information on the ecology of Salisbury Hospital HEAT Project and how the masterplan design encourages positive biodiversity outcomes.

Background

Ecology has been an early consideration of the project at the masterplanning stage with enims first undertaking a preliminary ecological appraisal of the site in 2019 to record the habitat types present and their potential to support protected and notable species. Further survey work by enims in 2020, 2021 and 2022 gathered additional information on bats, breeding birds, reptiles, badger and habitats. Salisbury Hospital falls within the recreational and nutrient catchment zones of the New Forest Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar and the River Avon SAC, respectively, and this has been and will continue to be a consideration in all aspects of project design.

The Masterplan

The design of the masterplan has been driven by the desire of the hospital and the partnership to provide a higher quality public realm than that which is currently available. This focus has resulted in an ecology and landscape-led approach rather than a building-led approach; evidenced by the lower building density and large parcels of green space spread throughout. Public realm within the hospital grounds is estimated to currently be just 3% and mostly comprises small, isolated areas. The provision of more and larger parcels of green space enables the creation of ecologically viable natural habitats to work alongside those areas with a more formal amenity focus. A greater variety of habitats types will provide a more valuable ecological resource and support greater species richness. An increase in the area and quality of green space has been factored into the design from the outset to ensure that they are usable spaces and not just spaces left over after the building layout has been designed. This approach can be seen with the large car park in the east of the hospital grounds; currently comprising hard surfacing with slithers of amenity planting. The new buildings are encompassed by a carefully thought-out, continuous parcel of soft landscape which will form part of the green infrastructure planned for the overall site. The existing layout has been re-designed to create a central decked car park replacing the at grade parking and reducing the number of disjointed small parcels of parking and amenity planting. The land to the east will have a connected parkland character with grassland, trees and woodland planting which will designed to increase biodiversity.

The re-development of the hospital and adjacent land will include the provision of more key worker accommodation and will adhere to Wiltshire Councils Recreation Mitigation Strategy for New Forest internationally protected sites and Nutrient Neutrality. The masterplan has ample scope for on-site solutions that support these local and national objectives; the parkland environment created within the hospital grounds provides a space that will be accessible to all, attractive and encourage local use, and provision for appropriate Sustainable Drainage Systems (SuDS) has been made within the scheme layout. The SuDS would have a bias towards nature conservation, meaning as well as improving water quality and providing flood risk mitigation they will create habitats for wildlife and deliver pleasing places for people to spend time in nature. The provision of significant green space area within the masterplan is regarded to be a positive influence for health and wellbeing and supports the Wiltshire built environment Action Plan; which states that "*green spaces have the added importance of having a social, recreational and aesthetic value for those living and working in the built environment, and the*

provision of greenspace as part of the work-place has been shown to reduce stress and the number of sick days taken by employees[1]".

Biodiversity

The current Salisbury Hospital site largely comprises an assortment of buildings of varying ages and indeed to this extent, the condition of the buildings are vastly different in areas. The site also comprises a network of access roads and footpaths throughout the site. Small disjointed areas of communal grassland, gardens and road verges are present around the site, providing isolated areas of soft landscaping. Tree cover is dotted throughout, and is dominated by silver birch (*Betula pendula*), whitebeam (*Sorbus aria*), beech (*Fagus sylvatica*), horse chestnut (*Aesculus hippocastanum*) and Norway maple (*Acer platanoides)*. Along the eastern boundary of the existing hospital site there is a tree belt comprising young ash (*Fraxinus excelsior)*, oak (*Quercus robur)*, hazel (*Corylus avellana)*, elder (*Sambucus nigra)*, willow (*Salix* sp.) and Norway maple. A grassland field is located to the east of the hospital and is regularly managed by mowing. On the eastern boundary of the field lies a hedgerow comprising oak, ash, hazel, beech and elder. The northern and western boundaries of the site also support a number of native trees and hedgerow shrubs.

Many buildings within the hospital grounds have the potential to support roosting bats, with bat roosts known to be present in a number of buildings. Common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*P. pygmaeus),* noctule (*Nyctalus noctula*) and serotine (*Eptesicus serotinus*) frequently use the site for foraging and commuting, with activity typically dominated by common pipistrelle. Some large, mature trees on the boundaries in the east of the site have potential to support roosting bats. The buildings, hedgerows and trees belts are utilised by a variety of bird species for nesting and skylark are present in the surrounding fields.

The retention of tree belts and wooded areas are imbedded in the masterplan in accordance with the mitigation hierarchy; therefore, greatly reducing the potential for negative impacts on wildlife and improving biodiversity net gain outcomes. Establishment of new tree planting and woodland habitat incorporated in the green infrastructure plan will maximise habitat quality and connectivity for wildlife, with linkages beyond the site, aligning with Wiltshire Biodiversity Action Plan (BAP) targets for woodland and emerging Local Plan Policies 88 and 90. The re-plan of the current hospital will see large areas of developed land converted to green space for a more positive biodiversity net gain outcome. This is important in meeting the development's goal to deliver all biodiversity net gain on site and to meet the required net gain targets. As well as improving water quality, the SuDS will create more opportunities for wildlife; increasing species diversity and contributing to biodiversity targets. The greatest biodiversity value from SuDS is likely to be delivered where they are planned as part of wider green landscapes, as is the case with this project. SuDS with permanent water create wetland habitats that provide shelter, foraging and breeding opportunities for amphibians, invertebrates, birds, bats and other mammals.

The new buildings themselves also offer the opportunity to enhance the biodiversity of the site. For example, nest boxes for declining bird species on the Red List of Conservation Concern, such as house sparrow (*Passer domesticus*) and swift (*Apus apus*), and bat roosting boxes can be built into the walls of new buildings to provide safe, long-term habitats for these species. Recent development at Salisbury Hospital for the New Elective Recovery ward demonstrates such ecological enhancement; with provision of nest boxes for house sparrow and swift, as well as bat boxes and insect bricks. Where appropriate green roofs would also be incorporated into some of new buildings and would provide a wide range of benefits to the development. In addition to providing foraging and breeding habitat for birds and invertebrates green roofs provide source control functions at the start of SuDS management train through the attenuation of storm water runoff, pollutants and dust. Furthermore, green roofs can reduce the "urban heat island" effect and protect building fabrics from sunlight and temperature fluctuations;

[1] Wiltshire Biodiversity Action Plan 2008. Available from www.biodiversitywiltshire.org.uk

avoiding the need for mechanical heating and/or cooling systems. The masterplan design ensures that existing ecological corridors along the site boundaries are retained and joined to new green space, with buildings positioned carefully to allow the ecological corridors to continue throughout the site.

Conclusion

The masterplan demonstrates that development at Salisbury Hospital will be an ecology and landscape-led approach which will maximise opportunities for biodiversity by retaining existing tree belts and tree lines and providing space for nature throughout. As well as supporting the biodiversity policies of the Local Plan, the provision of good quality public realm and natural habitats will also assist in combatting climate change and provide economic and health benefits.