

PART EIGHTEEN
LANDSCAPE ANALYSIS
Ecology & Biodiversity



Landscape Analysis

Ecology & Biodiversity
Stage I

CALDYNE PARK

Land at Caldine Park,
Turners Hill Rd,
West Sussex
RH10 4NB

Part I - Restoration & Removal

The proposed landscape and ecological strategy is at the heart of this proposal and is two-fold. The first part is extensive restoration and conservation of the surrounding ecology. Both the ancient woodland and native woodland within the site suffer from invasive and problem species, which has had a profoundly detrimental effect on both the biodiversity and cultural heritage features. Planted conifers and rhododendrons are the most widespread and densely shading plants that can all but eradicate ground flora. Therefore, the proposed large-scale removal of the invasive and problem species (especially rhododendrons) will allow native ground flora to thrive, improving the local biodiversity.

Restoring and clearing the woodlands and open spaces will allow ground flora and new diverse understory planting to take root. The next phase of this strategy will enhance the existing flora to provide species richness and habitat diversity, resulting in an overall significant net gain to biodiversity. These critical environmental measures underpin the design proposal.

REMOVAL OF INVASIVE SPECIES PRIMARILY RHODODENDRONS

The proposed removal of the invasive rhododendrons will open up the site and allow light to reach the woodland floor. This alone will significantly improve the local biodiversity.



Key:

Ancient Woodland

SuDs Driveway

Extent of PROPOSED Rhododendron Removal

Surveyed Trees

Derelict Building to be Removed

PART 1 - FEATURES:

- Careful woodland management to let in sunlight and remove non-native species, including the rhododendron, which encourages ground flora and native species to thrive again, reversing the years of damage.
- Utilising the existing tracks as access into the woodlands for management and conservation to prevent further ground flora damage.
- Removal of derelict buildings and rubbish on-site. This involves clearing any contaminants on-site (i.e. glass, mattress, plastics dumped on-site).
- Removal of specific trees and problem plants identified in the Tree Survey to open up existing woodland areas and create areas with increased light conditions.
- Excavated foundations and hardstands from the site (fuel storage tank remains) are to be reused on the site wherever possible. Once removed, nutrient-rich and appropriate soil will be put in its place to allow further species-rich understory planting and trees to be planted (Part 2)
- Contribute to the Woodland Management Plan to ensure the removal of rhododendrons from a significant portion of the county's ancient woodland over the next three to four years.



Landscape Analysis

Ecology & Biodiversity
Stage 2

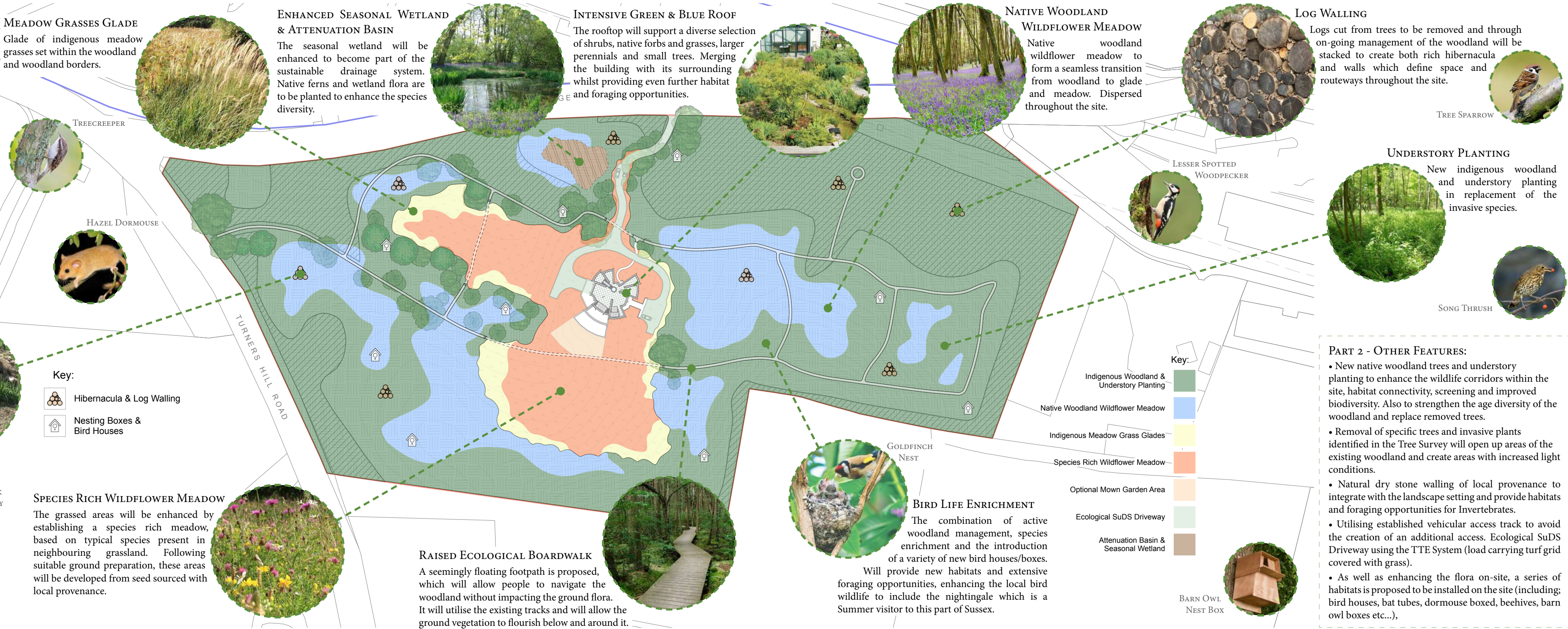
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Part 2 - Enhancement & Species Richness

The second part of the landscape and ecological strategy significantly enhances the site's habitat diversity and species richness. This strategy is at the centre of the proposal and has provided a dwelling that sits sensitively within the site and enhances the local biodiversity. Introducing new native woodland understory planting and individual specimen tree planting will enrich and diversify the existing age and range of the woodland. Active woodland management will strengthen the age diversity, habitat diversity and replace the removed trees.

Enhancement of the existing grassland to a species-rich meadow will also significantly improve the habitat value of open areas of the site. Native woodland and wildflower planting will be established within selected open areas through the existing forest, further improving biodiversity value.



- PART 2 - OTHER FEATURES:**
- New native woodland trees and understory planting to enhance the wildlife corridors within the site, habitat connectivity, screening and improved biodiversity. Also to strengthen the age diversity of the woodland and replace removed trees.
 - Removal of specific trees and invasive plants identified in the Tree Survey will open up areas of the existing woodland and create areas with increased light conditions.
 - Natural dry stone walling of local provenance to integrate with the landscape setting and provide habitats and foraging opportunities for Invertebrates.
 - Utilising established vehicular access track to avoid the creation of an additional access. Ecological SuDS Driveway using the TTE System (load carrying turf grid covered with grass).
 - As well as enhancing the flora on-site, a series of habitats is proposed to be installed on the site (including: bird houses, bat tubes, dormouse boxed, beehives, barn owl boxes etc...),

