

Landscape Management Plan

November 2023

**Land at West Sompting,
West Sussex -Phase 1**

Prepared by
CSA Environmental

On behalf of
Persimmon Homes
(Thames Valley)

Report No: CSA/2134/17

This report may contain sensitive ecological information. It is the responsibility of the Local Authority to determine if this should be made publicly available.

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1.0 INTRODUCTION

1.1 This report has been prepared by CSA Environmental on behalf of Persimmon Homes (Thames Valley). It sets out a Landscape and Ecology Management Plan for land located at Land at West Sompting, West Sussex – Phase 1 (hereafter referred to as 'the Site'). This report has been prepared to inform the management company engaged with the Site of the required management operations in order to ensure that the Site is kept in a good and proper condition.

1.2 The following detailed landscaping proposals for the Site have been produced and can be found in **APPENDIX A** at the back of this report. These drawings should be viewed in conjunction with management prescriptions set out herein:

Drawing ref. (CSA/2134/138-140) Hard Landscape Proposal Plans 1-3

Drawing ref. (CSA/2134/134-137) Soft Landscape Proposal Plans 1-4

Drawing ref. (CSA/2134/141) Landscape Masterplan

1.3 The proposed landscaping across the Site includes the following landscape types/habitats, for which management objectives and prescriptions are set out within this plan:

- Grassland
- Native hedgerows and open space trees
- Playing fields
- Formal landscaping
- Housing Parcels

1.4 Prescribed management works are intended to generally increase the botanical diversity and habitat structure on site in order to encourage wildlife.

1.5 The maintenance of all communal landscape areas should remain the responsibility of the installing landscape contractor (as appointed by the developer) for the first 12 months (post-installation) or until a Management Company (ManCo) is appointed to take over responsibility for the maintenance of the soft landscaping to the communal and open space areas on Site. Planting areas that are conveyed to the individual dwellings will remain the responsibility of the occupier.

2.0 GENERAL MANAGEMENT AIMS AND PRINCIPLES

General Management Aims

- 2.1 The three key aims of this management plan are as follows:
- Maximise the potential biodiversity value through the management and creation of a diversity of habitats and therefore encourage local wildlife in the long term.
 - Provide a high-quality and extensive open-space for new and existing residents.
 - To provide a range of interesting habitats and key focal features for local residents to engage with their natural surroundings.

General Management Principles

- 2.2 Any tree surgery works shall be undertaken by a suitably qualified arboricultural contractor, registered with the Arboricultural Association.
- 2.3 All tree surgery works shall be undertaken in accordance with the requirements of BS 3998:2010 'Tree work - Recommendations'.
- 2.4 All pruning/removal works to existing vegetation, including trees, should be undertaken outside of the bird-nesting season to ensure nesting birds are not disturbed. For clarification, the bird-nesting season is taken to be March to August inclusive. Where this is not possible, an ecologist will need to check for nesting birds prior to commencement of works.
- 2.5 All trees and dense scrub/shrub areas to be retained are to be protected throughout the duration of the construction works in accordance with the prescriptions set out in the arboricultural assessment to meet the criteria of BS 5837:2012 (and any newer revision) Trees in relation to Construction.
- 2.6 Where tree surgery is planned as part of this management plan or in the situation where an approved tree surgeon has recommended remedial work for health and safety reasons, the potential for bats to be present must be considered before work is carried out.
- 2.7 All new planting will be maintained in accordance with good horticultural practice to ensure the thriving of individual species.
- 2.8 All new/replacement planting will be conducted into well-prepared ground and follow good horticultural practice. All new native transplants should be protected with proprietary rabbit guards or shrub shelters.
- 2.9 Sufficient watering will be undertaken by the contractor to establish and maintain healthy plant growth.

- 2.10 New ornamental shrubs, hedges and herbaceous plants will be pruned in order to maintain attractive form as appropriate to their species.
- 2.11 Peat-based composts will be avoided wherever possible.
- 2.12 All plants will be maintained in a disease and pest free state. In most instances, 'natural' methods of pest control are to be undertaken prior to any chemical application. In the event that natural methods of eradication are unsuccessful, plants will be treated through the application of a suitable proprietary herbicide/pesticide.
- 2.13 All trees and shrubs will be monitored for any sign of defects or poor health annually or after severe weather. Any signs of ill health or damage will be noted and remedial action when required.
- 2.14 Tree shelters, stakes, ties and guards will be checked annually for adjustment and/or replacement/removal as required.
- 2.15 Areas of shrub/tree planting with a bark mulch layer will be topped up annually in the spring to retain moisture and limit weed growth, to a nominal depth of 50-75mm.
- 2.16 All formal planting areas will be kept tidy and free from weeds, trimmings, debris and litter. Weeds should be removed by hand unless where it is unfeasible; whereby weeds can be treated by the application of a suitable proprietary herbicide.
- 2.17 Any hard surfacing adjacent to management areas are to be protected from damage by machinery including mowers, with surface debris swept after each visit.
- 2.18 The appointed management company are to keep records of all visits undertaken and the operations carried out on each visit.
- 2.19 Records are to be kept in one location and copies are to be made available for inspection by the Local Planning Authority.

3.0 GRASSLAND

Wildflower Meadow Areas

- 3.1 Swathes of new wildflower meadows are proposed along the playing fields at the western and south-western Site boundaries and a few swathes dispersed along the retained hedgerows and line of trees at the western and north western Site boundaries.

Objectives

- 3.2 To provide areas of species-rich wildflower meadow of varying type to provide visual interest for local residents and maximise biodiversity value.
- 3.3 To provide woodland edge type habitats adjacent to new areas of hedge and tree planting.
- 3.4 To strengthen the landscape buffer adjacent to the western Site boundary.
- 3.5 To provide nectar and food-plants for invertebrates, in particular bees and butterflies.
- 3.6 To provide additional and better-quality foraging habitat for birds and bats.

Prescriptions

- 3.7 The agreed, locally appropriate wildflower meadow seed-mix should be nectar-rich and will be sown onto pre-prepared seed beds in accordance with the planting specification. No nutrient improvement to the existing soil will be undertaken prior to sowing or during management and where feasible, topsoil and subsoil should be mixed through deep ploughing to reduce fertility.
- 3.8 In all cases, special care should be taken to ensure the seed beds are as free from weeds as possible, through continued cultivation and herbicide applications with the aim of creating a 'stale seed' bed prior to seeding.
- 3.9 The wildflower meadow areas will be managed as follows:
- Year 1 – Following establishment, once the sward has reached 100mm, it should be maintained at this height between April and October through regular cuts (minimum monthly) for the first growing season to control weed growth and allow for the slower growing perennial wildflowers to establish.
 - Year 2 – Regular cutting to maintain a grass height of approximately 100mm should continue from April till May, at which point the sward should be left to establish to a greater height, before 2 further cuts in late July and Sept down to 100mm.

- Year 3 onwards - A standard hay meadow cutting regime will be implemented with the grassland cut to a height no lower than 200mm in in July and September to maximise vascular plant vitality.
- 3.10 The wildflower areas will be hand-weeded, or spot swiped for any perennial weeds such as docks *Rumex* sp., nettles *Urtica* sp. and ragwort *Senecio jacobaea*.

4.0 NATIVE HEDGEROWS AND OPEN SPACE TREES

Ecological Enhancements

- 4.1 Amongst existing and proposed linear hedge and tree features within the open space on Site, are proposed ecological enhancements including insect boxes, generic bird boxes, hibernaculum and refugia/log piles. For locations and specifications of these enhancements, refer to Ecological Mitigation and Enhancements Plan, CSA/2134/145 Rev C (**Appendix B**).

Retained Hedgerows

- 4.2 A number of existing hedgerows along the western and eastern Site boundaries and several internal hedgerows along the playing fields within the Site will be retained, save for some losses of short lengths of these hedgerows to enable access roads/footpaths to pass through.

Objectives

- 4.3 To protect and enhance existing linear habitat features for local wildlife, including bats.
- 4.4 To maintain the screening value of existing hedgerows.

Prescriptions

- 4.5 Existing hedgerows will be in-filled with native species of local provenance as set out within the planting schedule.
- 4.6 Infill planting will be conducted into well-prepared ground. New transplants will be protected with propriety spiral rabbit guards or shrub shelters.
- 4.7 The existing hedgerows will be monitored for any sign of defects or poor health annually or after severe weather. Any signs of ill health or damage will be noted, and remedial action taken when required.
- 4.8 Established sections of the hedgerows will be managed with a cut every three years in January to February.
- 4.9 Dead wood will be kept on site to form log piles within the woodlands and thicket areas to form habitat that can be used by saprophytic organisms and hibernating fauna.

New Native Hedgerows/Lines of Trees/Shrub Planting

- 4.10 Native hedgerow planting is proposed throughout the Site in housing parcels and near the northwestern Site boundaries along the cycling/running route, filling the gaps in between the retained hedges. Planting will comprise of several native species.

- 4.11 The pedestrian and cycle route that runs alongside the retained and enhanced linear vegetation adjacent to the west edge of the development will be reinforced with additional tree and hedge planting to provide an enhanced green corridor linking areas within the Site and the wider area.

Objectives

- 4.12 To create and maintain high quality linear habitat features for local wildlife, including bats.
- 4.13 To provide nesting/foraging opportunities for bats and other wildlife.
- 4.14 To provide screening, structure and visual interest within the proposed landscape scheme.

Prescriptions

- 4.15 New planting of native species will be conducted into well-prepared ground with new transplants protected with spiral rabbit guards.
- 4.16 New hedgerows and parkland trees will be monitored annually for good health with failed transplants replaced as appropriate.
- 4.17 Lateral growth of new hedgerow/tree species should be pruned annually in October in initial years after planting to encourage bushy growth. Once established, native hedgerows will be managed at a height of approximately 1.5m with an annual cut in January or February.

5.0 PLAYING FIELDS

Playing Fields

- 5.1 A recreation area in the south-western corner of the Site will be laid out as formal playing fields that will cater for a wide range of sports and ages. A pavilion building and changing room facilities will also be provided close to the playing fields.
- 5.2 Management prescriptions for the Playing Fields should be read in conjunction with the "Outline Playing Fields Specification" document, CS/2134/14 (**Appendix C**) produced as part of the Section 106 agreement for Land at West Sompting, West Sussex.
- 5.3 It is anticipated that the design and maintenance of the playing fields will become the responsibility of a specialist playing field contractor and any maintenance plan and prescriptions deriving from specialist input may supersede the prescriptions laid out herein or within the Outline Playing Fields Specification document (**Appendix C**) so long as it achieves the requirements stated within that document and the objectives listed below:

Objectives

- 5.4 To facilitate active recreation and field sports and to ensure the provision of a useable playing surface for the anticipated level of use.

Prescriptions

- 5.5 The playing fields will be laid out in accordance with the approved general arrangement plan.
- 5.6 It is anticipated that the final design of the playing fields will be the responsibility of a specialist playing field contractor. Any drainage requirements will be established following an assessment of the existing ground conditions. Once the pitches are established a detailed maintenance plan will be drawn up in order to maintain a useable playing surface. Prescriptions will be adapted to meet the anticipated level of use of the pitches.
- 5.7 An overview of the likely management prescriptions is set out below;
- 5.8 Regular grass cutting will be required throughout the growing season, maintained at a height of approximately 25-35mm throughout the playing season.
- 5.9 A spring and summer fertiliser should be applied to the playing fields.
- 5.10 Any bare patches on the playing fields should be over-sown in Spring.

- 5.11 Further detail regarding playing surface, drainage, gradient and maintenance is laid out in the Outline Playing Fields Specification document (**Appendix C**)

6.0 FORMAL LANDSCAPING

- 6.1 The proposed landscaping scheme includes areas of more formal planting within small pockets throughout the residential parcels.

Amenity Grassland

- 6.2 The proposed landscape scheme includes maintained amenity grassland areas across the whole Site.

Objectives

- 6.3 To provide a significant area of short mown recreational grassland to encourage active and passive recreation for the benefit of the new development and the wider community.
- 6.4 To provide a contrasting short grassland habitat to long grassland and wildflower meadows, which encourages a different range of bird and invertebrate species.

Prescriptions

- 6.5 Establish and maintain all amenity grassland areas to a height of between 25mm and 35mm by cutting as necessary through the growing season. In practice, cuts every 2-3 weeks are likely to be required. Cuttings are to be removed for the linear park and spread evenly and left in-situ for all other areas.
- 6.6 Where grass areas have become worn or have failed to establish, areas will be over-seeded with amenity grass seed. All grassed areas will receive an application of a proprietary granular slow-release fertilizer twice yearly in the spring and the autumn.

- 6.7 Provide dedicated bins for the disposal of dog mess at strategic points within the amenity areas.
- 6.8 Grass cutting will be avoided in areas planted with bulbs during late winter/early spring when bulbs are growing/flowering and for a period 6-8 weeks after flowering to allow bulbs to regain nutrients, after which a normal mowing regime can resume.

Tree Planting

- 6.9 A range of individual trees will be planted across open areas of the Site including semi-mature, extra-heavy and standard trees.

Objectives

- 6.10 To establish immediate biodiversity value, landscape structure and visual interest to areas of open space.
- 6.11 To provide immediate opportunities for local wildlife (e.g. bird nesting).

Prescriptions

- 6.12 Parkland tree species will include native species of local provenance as set out within the planting schedule.
- 6.13 All planting will be conducted into well-prepared ground in accordance with good horticultural practice. Guards, stakes and ties will be inspected twice yearly or after any severe weather. Test for soundness will be undertaken in early and late winter and replace tight or ineffective ties.
- 6.14 Ties will be replaced in slightly different positions. Stakes and ties will be removed as soon as trees are self-supporting to benefit tree establishment. Stake(s) will be wholly removed from the ground and the remaining hole will be filled with clean topsoil.
- 6.15 Trees will be re-firmed in ground after strong winds, frost heave or other disturbances. Trees will be routinely inspected, at least annually, for pests and diseases.
- 6.16 Formative pruning of young trees will be undertaken to remove any dead branches and reduce selected side branches, ensuring development of a single strong leader and good overall form. Pruning will be carried out in accordance with BS 42020:2013.
- 6.17 Maintain a mulch layer at the base of each tree by regular topping up to a depth of 75mm to a diameter of 1m around the trunk.

New Ornamental Hedge Planting

- 6.18 New ornamental hedge planting of native and ornamental species is proposed within the residential parcels.

Objectives

- 6.19 To ensure newly planted hedgerows are suitably cared for to enable successful establishment into a dense bushy hedge that can be suitably maintained for ornamental and amenity value.
- 6.20 To provide structure and visual interest within the proposed landscape scheme.

Prescriptions

- 6.21 New planting of ornamental hedgerow species will be conducted as prescribed in the Planting Specification.
- 6.22 During and following the establishment of the planting ensure that sufficient water is applied to maintain healthy growth as required. Ensure that full depth of topsoil is saturated. Watering programme should be monitored to ensure that at times of water shortage (e.g. drought), sufficient water is applied to meet the conditions.
- 6.23 Keep all hedge planting trenches clear of weeds by cultivating and use of approved herbicides. Fork-over/hoe beds as necessary to keep soil loose, disposing of arisings off-site.
- 6.24 Mulch layer to be topped-up annually to a depth of 75mm.
- 6.25 Apply an annual single dose of evenly spread, 11:22:9 NPK slow-release fertiliser at a rate of 60g per m², from March - April.
- 6.26 Ornamental hedges are to be pruned annually in January or February to an average height of 1.2m.

Street Furniture

Objectives

- 6.27 To provide bollards that will be used throughout the Site to define space and restrict access to landscaped areas as appropriate.
- 6.28 To provide and maintain litter and dog waste bins as appropriate to keep the Site tidy and free from litter.

Prescriptions

- 6.29 In the case of bollards, ensure that any painted surface has not become worn or eroded through continual use. Any worn or damaged paint work should be rectified by the application of an appropriate paint to match the existing.
- 6.30 Undertake bi-annual checks of all street furniture to ensure that it remains soundly and safely installed. Re-install any loose furniture.

- 6.31 Undertake bi-annual checks for graffiti. The contractor should keep accurate records of any graffiti and should make every endeavour to remove/remediate street furniture that is subject to graffiti.
- 6.32 Litter and dog waste bins should be emptied weekly.

Ornamental Shrub Borders

Objectives

- 6.33 To provide screening and additional landscaping between properties within the residential parcels.
- 6.34 To maximise wildlife benefit from formal landscaping.

Prescriptions

- 6.35 Planting will be conducted into well-prepared ground, min 400mm depth of topsoil and approved soil conditioner, with subsoil fully broken up by main contractor to ensure decompaction and alleviate free drainage. Shrub species to be planted are listed planting schedules.
- 6.36 During and following the establishment of the planting ensure that sufficient water is applied to maintain healthy growth as required. Ensure that full depth of topsoil is saturated. Watering programme should be monitored to ensure that at times of water shortage (e.g. drought) sufficient water is applied to meet the conditions.
- 6.37 Prune and re-shape shrub species at the appropriate time according to individual requirements. Remove dead or dying wood, in order to promote healthy growth and attractive form. Shrubs should be prevented from becoming overgrown, with particular attention to plants adjacent to windows, footpaths and roads to prevent obstruction. Avoid hard pruning to bare wood.
- 6.38 Keep all beds clear of weeds by cultivating and use of approved herbicides. Fork-over/hoe beds as necessary to keep soil loose, disposing of arisings off-site.
- 6.39 Apply an annual single dose of evenly spread, 11:22:9 NPK slow-release fertiliser at a rate of 60g per m², in March - April.
- 6.40 Mulch the surface of the planting beds with chipped tree bark following planting, to a depth of 75mm. Regularly monitor mulch levels and re-mulch in July to original depth, or when required.
- 6.41 Regularly check for plantings which have been loosened by wind or frost and re-firm any loose plants back into the ground.
- 6.42 Regularly check beds on routine visits to assess whether thinning is required. When plantings are starting to overlap it may be necessary to remove some individual plants to retain the character of the bed.

Thinning should take place as required in a logical process over several stages.

- 6.43 Monitor and replace failed planting with new equivalent plants between October and March. All plants should be maintained in a disease and pest free state through the application of a suitable proprietary herbicide/pesticide.
- 6.44 Dead head flowering shrubs following the flowering period to promote further flowering. NB Remove arisings from Site.

Fencing and Boundary Treatments

- 6.45 Knee rail fencing will be used throughout the Site to define space and restrict access to landscaped areas as shown in the detailed landscape plans (**APPENDIX A**). Brick walls will be used to restrict access and to define private ownership of properties within the residential parcels.

Prescriptions

- 6.46 Ensure that all fencing is maintained in a safe, hazard-free state to facilitate the effective function of its intended use.
- 6.47 Undertake bi-annual inspections to ensure that all fencing is sound and free from damage. Any damaged fencing should be repaired or replaced as required.
- 6.48 Damaged or broken sections of timber and wire fencing within hedge plantings should be securely repaired or replaced as required with treated softwood and mild steel wire as appropriate.
- 6.49 Undertake bi-annual inspections to ensure all brick walls are sounds and free from damage. Any damaged wall should be repaired or replaced as required.

Recreational Footpaths & Field Entrance

- 6.50 A surfaced pedestrian and cycle path will be provided along the eastern edge of the Public Open Space to the west of the Site to provide access to the open space and a north-south route from the Site entrance to the car parking and facilities associated with the playing fields. The main path has subsequent connecting paths providing access to the housing parcels to the east and the playing field changing rooms and facilities. Towards the north of the POS there is also a surfaced field entrance providing work access to the agricultural fields to the west.

Prescriptions

- 6.51 Ensure that all hard surfaces are maintained in a safe, debris-free state to facilitate all-year-round use of the open space's areas.
- 6.52 Undertake bi-annual inspections to ensure that all hard surfaces are sound and free from cracks or trip hazards. Patchy, worn areas or where the hard surface finish has visibly failed are to be clearly fenced-off from the public and repaired as new as soon as feasibly possible.

7.0 HOUSING PARCELS

Objectives

- 7.1 Maintain proposed residential landscaping to provide an attractive setting for the new housing area.

Ecological Enhancements

- 7.2 To increase opportunities for local wildlife a minimum of 4 bird nest boxes will be erected on houses throughout the development. These boxes will include a minimum of 2 No. Swift/sparrow brick, 2 No. Schwegler House martin/swallow cup. These will provide nesting opportunities for a range of birds such as tit species, house sparrow and robin. In addition to bird boxes the housing parcels will also have erected a minimum of 3 No. insect boxes and 1 No. Log pile/ reptile refugia.
- 7.3 In addition, to enhance the suitability of the Site for roosting bats, a minimum of 3 No. Habibat bat tube units will be erected within the fabric of the proposed buildings. These will be erected at a height between 3 and 6m above ground level, where there is a clear flight line for bat access and should ideally be situated on a range of aspects including several with southeast to southwest aspects.

Amenity Grass Areas/Verges

Objectives

- 7.4 To facilitate passive and active recreation on Site within amenity grassland associated with the residential development.
- 7.5 Provide an attractive setting for the residential area.

Prescriptions

- 7.6 Establish and maintain all amenity grassland areas/verges to a height of between 25mm and 35mm by cutting as necessary through the growing season. In practice, cuts every 2 – 3 weeks are likely to be required. Cuttings are to be removed at the first cut of the season, with arisings spread evenly over the cut area at all other times.
- 7.7 Where grass areas have become worn or have failed to establish, areas should be over-seeded with appropriate grass seed of a similar mix.

New Tree, Shrub and Herbaceous Planting

Objectives

- 7.8 New tree and shrub planting to provide structure, colour and seasonal interest and create an attractive setting for the new development and soften the built environment.

- 7.9 Select suitable species, where appropriate, to maximise benefits for wildlife.

Prescriptions

- 7.10 The detailed landscape proposals set out formal planting for each development parcel. Native trees, shrubs and herbaceous plants have been considered where appropriate to provide benefit for wildlife e.g. pollinating insects, foraging birds, etc.
- 7.11 All shrub/hedge planting should be conducted into well-prepared ground, of pre-prepared beds consisting of topsoil to a depth of no less than 300mm, mixed with appropriate soil conditioner.
- 7.12 All planting should be maintained in accordance with good horticultural practice in order to ensure the thriving of individual species. Shrubs, hedges and herbaceous plants will be pruned in order to maintain attractive form as appropriate to their species.
- 7.13 Avoid the use of peat-based composts and minimise the use of the pesticides in the implementation and maintenance of any landscape scheme.
- 7.14 Inspect stakes and ties to trees and shrubs, twice yearly or after severe weather. Test for soundness in early and late winter and replace tight or ineffective ties. Ties should be replaced in slightly different position. Remove stakes and ties as soon as trees are self-supporting to benefit tree establishment. Ensure that stake(s) are wholly removed from the ground and that the remaining hole is filled with clean topsoil.
- 7.15 Re-firm trees in ground after strong winds, frost heave or other disturbances.
- 7.16 Trees should be routinely inspected for pests and diseases.
- 7.17 Crown prune young trees by removing dead branches and reducing selected side branches, ensuring development of a single strong leader. Pruning should be carried out in accordance with BS 7370-4.
- 7.18 Maintain a mulch layer at the base of all trees and to all shrub beds by regular topping up to a depth of 75mm.