



THE
ENVIRONMENT
PARTNERSHIP



AYR ROAD CHEADLE LANDSCAPE AND ECOLOGICAL MANAGEMENT PLAN

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1.0 Introduction

Purpose of the Management Plan

- 1.1 This Landscape and Ecological Management Plan (LEMP) has been produced by The Environment Partnership (TEP) Limited on behalf of Persimmon Homes (North West) to provide a framework for long term landscape and habitat management and maintenance of the open space areas associated with Phase 1 of the residential development at Ayr Road (hereby referred to as the 'Site').

Scope of the Management Plan

- 1.2 This LEMP covers all areas of public open space within Phase 1 of the Site, which is identified by the Landscape Management Plan - Phase 1 drawing (TEP ref: 10551.400). It excludes the residential gardens, which are to be maintained by the property occupiers.
- 1.3 The Management Plan provides landscape management recommendations for the duration of 25 years (including the 5 year establishment period). This Management Plan will be updated once details of Phase 2 have been confirmed.
- 1.4 The Management Plan should be read in conjunction with the following plans:
- Landscape Management Plan - Phase 1 drawing (TEP ref: D10551.400);
 - Planting Plans 1, 2 and 3 (TEP ref: D10551.201-203); and
 - Planting Schedule (TEP ref: D10551.200).

Structure of the Management Plan

- 1.5 Chapter 2.0 provides a summary of the factors influencing management and a site analysis. Chapter 3.0 outlines the long-term aims and objectives for management and Chapter 4.0 sets out how the success of the plan will be monitored, reviewed and updated over time.
- 1.6 Appendix A is the Landscape Management Plan - Phase 1 drawing (TEP ref: D10551.400), Appendix B is the Planting Plans (sheets 1, 2 and 3) (TEP ref: D10551.201 -203), Appendix C includes the Planting Schedule (TEP ref: D10551.200), Appendix D provides a table of maintenance operations and Appendix E summarises relevant legislation.

Site Location

- 1.7 The Site is centred on UK grid reference: SD 64794 05994 and lies approximately 1km north of Cheadle town centre. The Site is surrounded by residential properties to the north, open fields to the east, residential properties to the south and Froghall Road (A521) to the west.

Planning and Development Context

- 1.8 A hybrid planning application was granted by Staffordshire Moorlands District Council (application ref: SMD/2018/0180) for residential development at Land to the East of Froghall Road and North of Ayr Road and Cheltenham Avenue, Cheadle, Staffordshire.

- 1.9 The residential development consists of two phases, with a full application submitted for Phase 1 and an outline application submitted for Phase 2. This Management Plan covers Phase 1, which provides for 125 dwellings, access to a proposed primary school, associated infrastructure, and areas of public open space.

Planning Condition

- 1.10 Hybrid planning permission was granted, subject to conditions, including Condition 26 which states:

No development shall commence (including any site clearance, site stripping, site establishment, formation of new access or installation of any drainage infrastructure) until a LEMP (Landscape and Habitat Management Plan) has been submitted to and approved by the LPA, giving details of proposed creation, maintenance, management and development, including timescales and delivery mechanisms, for all landscaping and wildlife habitats and associated structures/features within the various public open spaces, ecological areas and structural landscape buffer strips across the site. This shall include full and accurate locations of existing and any proposed new habitats; technical specifications, timescales and phasing for the creation of any new habitats; 5 year establishment and aftercare management prescriptions for any newly created habitats; and minimum 20 year maintenance and management operations for all habitats throughout the site to be monitored and reviewed every 5 years. Following approval of such a management plan, it shall be fully implemented in accordance with the details and timescales so approved.

- 1.11 This Management Plan has been written to discharge Condition 26.

2.0 Site Management Considerations

Responsibility for Site Management

- 2.1 During the defects liability period, landscape maintenance and replacement of failed planting will be completed by the landscape contractor who has implemented the scheme.
- 2.2 Following the defects liability period Persimmon Homes (North West) will facilitate a managing organisation who will be responsible for operational management and maintenance of the landscape within the Site.
- 2.3 The managing organisation will require the necessary experience and certificates of competence to undertake landscape management operations on site. Where practical, contractors with experience in biodiversity management will be sought. The managing organisation will ensure that management complies with the guidelines set out in this Plan.
- 2.4 The appointed managing organisation is responsible for complying with the provisions of the Health and Safety at Work Act. All machinery and apparatus brought onto the Site shall be safe and maintained to a standard that will not breach provisions within the Health and Safety at Work Act or any other statutory obligations.
- 2.5 The managing organisation shall be adequately trained and sufficiently competent to carry out maintenance operations without causing a Health and Safety risk to themselves or other uses of the site.
- 2.6 All works shall be undertaken in accordance to the relevant codes of practice. Appropriate machinery shall be used inclusive of adequate personal protective equipment to avoid harm to themselves or any other persons.

Biosecurity

- 2.7 The management company should have a sufficient awareness of new and ongoing biosecurity threats, and the necessary precautions to avoid their spread should be undertaken on sites where they are known or suspected.
- 2.8 New findings of suspected non-indigenous plant pests and diseases should be reported to the Plant Health and Seeds Inspectorate or Forestry Commission - Forest Research Tree Health Diagnostic and Advisory Service or both.

Management Objectives

- 2.9 The long term management objectives of this plan mirror those set out within the Landscape Management and Maintenance Specification (LDS ref: LDS439(A)-LMMS), which are:
 - Conserve and enhance the ecological, amenity and landscape value of the site:
 - o Enhance the site's wildlife value;
 - o Monitor and assess the ecological value of the site via surveys;
 - o Improve the site's amenity and visual value; and

- o Retain and improve links with the wider landscape, especially the Public Open Space.
- A healthy, safe and secure site:
 - o Establish and maintain health and safety procedures for the management and maintenance of the site; and
 - o Comply with all statutory legislation and best practice.
- A sustainable site:
 - o Promote an ecological based approach to landscape management by minimising the amount of herbicide use and where possible using mechanical methods of management in favour of machinery;
 - o Maintain a flexible landscape management approach which responds to landscape changes and user requirements; and
 - o Adopt a transparent management approach.

Ecological Factors

Designations

- 2.10 There are no internationally or nationally designated wildlife sites within 1km of the Site. However there are two Local Nature Reserves (LNR) within 1km of the site:
- Cecilly Brook LNR - approximately 415m south of the Site; and
 - Hales Hall Pool LNR - approximately 480m south east of the Site.

Habitats and Species of Principal Importance in England

- 2.11 Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006) requires a list of habitats and species of principal importance in England to be drawn up.
- 2.12 Local Biodiversity Action Plans (BAP) provide an indication of the relative value given to existing habitats and species. The Staffordshire BAP has been used when assessing the value of the habitats and species present within the Site.
- 2.13 There are no priority species and habitats listed in the Staffordshire BAP that will be sustained around or within the Site.

Ecological Surveys

- 2.14 Below is a list of the ecological surveys carried out at the Site:
- Extended Phase 1 habitat assessment (TEP, June 2017);
 - Daytime bat assessment of trees (TEP, June 2017); and
 - Water vole and otter survey (TEP, June and September 2017).

Chemical Use

- 2.15 The use of herbicide will be minimised wherever possible. Hand weeding will be utilised when feasible and the use of mulch around new planting will assist with suppressing weeds.

Habitats

Trees

- 2.16 There will be new trees planted throughout the Site to provide nesting, foraging and commuting opportunities for birds and bats. Trees also provide shade, shelter and visual interest within the public open space to the east of the Site.

Invasive Non-Native Species (INNS)

- 2.17 A pre-commencement walkover survey was undertaken by TEP in September 2020, which identified Himalayan balsam on the banks of Cecilly Brook on the eastern boundary of Phase 2. Further information is provided in the INNS Method Statement (TEP ref: 8424.002).
- 2.18 These species are listed on the Invasive Alien Species (Enforcement and Permitting) Order 2019 and The Wildlife and Countryside Act 1981. The Order imposes criminal penalties for the most serious breaches of the Regulations and for ancillary offences such as making false statements, attempts to commit offences and obstruction (see Appendix E).

Hedgerows

- 2.19 New hedgerows are proposed to create wildlife connectivity through the Site and provide opportunities for foraging and nesting for birds, bats and small mammals.

Species

Birds

- 2.20 New trees and hedgerow will provide nesting and foraging opportunities for birds and connectivity to Cecilly Brook to the east of Phase 2.
- 2.21 All UK wild birds are protected while at the nest under the Wildlife and Countryside Act (1981). Effectively, this means that if removal of habitats (which can include buildings, trees, hedges, scrub and grassland) cannot be timed to avoid the bird breeding season (March to August inclusive), then a survey by a suitably experienced ecologist will be required to ensure no nesting birds will be affected. There is generally no process to gain a licence to disturb nesting birds; therefore, if active nests are present works will need to avoid the area of the nest until the young have fledged.

Bats

- 2.22 New trees and hedgerow will provide roosting and foraging opportunities for bats and connectivity to Cecilly Brook.
- 2.23 Bats and their roosts are protected under Schedule 5 of the Wildlife and Countryside Act (1981) as amended and the Conservation of Habitats and Species Regulations as amended (2017).

Social Factors

Public Amenity

- 2.24 The balance of both wildlife conservation and public amenity interests must be carefully managed due to close proximity to residential properties.

Accessibility

- 2.25 One public right of way (PRoW) (Cheadle 39) runs through the Site. The PRoW runs across the boundary of the existing dwellings in Wetherby Close and through the open space area to Donkey Lane to the north of the Site.
- 2.26 The main access to the Site is via Ayr Road to the south west and Froghall Road to the west.

Legal Factors

- 2.27 Management of the Site must be in line with all legislation relating to health and safety and the environment. A review of the relevant legislation affecting site management is at Appendix E

3.0 Management Intentions and Operations

Landscape Elements

- 3.1 The Site will comprise the following landscape elements as shown on the Landscape Management Plan - Phase 1 drawing (TEP ref: D10551.400), Planting Plans 1,2 and 3 (TEP ref: D10551.201-203) and Planting Schedule (TEP ref: D10551.200);

- Tree planting;
- Existing Hedgerow;
- Hedgerow Planting;
- Ornamental and Native Shrub Planting;
- Amenity Grassland (Germinal seeds grass mix A19);
- Attenuation Basins (Germinal seeds grass mix A4);
- Wildflower Meadow (Hay/Seed from local site); and
- Log Piles.

Site Wide

Management Intention

- 3.2 The Site will be kept free from litter through regular cleansing. Regular inspections will ensure any health and safety hazards are identified and made safe.

Chemical Use

- 3.3 It should be recognised that plants considered as weeds can provide suitable habitat for invertebrates.
- 3.4 Weed control where feasible should be undertaken by hand pulling. However in certain instances, herbicide may be the most effective measure to remove unwanted species during the planting establishment period. Where herbicide application is needed this should be in small controlled areas and should only target the undesirable species. Herbicides should comply with the Control of Pesticides Regulations as amended (1997) and be on the current list of approved products.
- 3.5 Consideration would need to be given to the fact that chemicals can prevent growth of grasses and woody species in landscape schemes.
- 3.6 Fertiliser is not to be applied to any of the wildflower meadow areas to conserve the development of a diverse sward.

Maintenance Operations

Site Cleansing

- 3.7 A litter pick of the Site will be carried out fortnightly. All litter will be removed and disposed of in an authorised manner.

Site Inspections

- 3.8 Site inspections will be undertaken monthly to identify any health and safety hazards and arrange for them to be made safe as far as is practicable.

- 3.9 Results from the monthly site inspections will be compiled and presented within the annual report which will be used in the review of the Plan as detailed in Chapter 4.0.

Tree Planting

Management Intentions

- 3.10 Tree planting is proposed to provide connectivity to the wider environment, foraging and nesting opportunities and will provide screening for the development. Trees also provide shelter, shade and visual interest in the public open space areas.

Maintenance Operation

Weed Control

- 3.11 To reduce excessive competition, a weed free area will be retained around all implemented trees and will be maintained to a diameter of 0.5m around the base of the trees. Mulch will be replenished annually to a depth of 50mm.
- 3.12 Once trees have established (Year 3+), the maintenance of a weed free base can be discontinued.

Re-firming

- 3.13 Newly planted trees will require re-firming as required.

Stakes and Ties

- 3.14 Where trees are staked, the stakes and ties will be checked monthly and it is anticipated that they will need adjusting at least twice annually. Any broken or damaged stakes will be replaced and ties re-fixed at a slightly lower position, allowing for growth since planting.
- 3.15 Stakes will be removed once the implemented trees are suitably established.

Formative Pruning

- 3.16 Young trees will require formative pruning between years 1-3 to maintain a desirable shape as well as to maintain health and vigour. Pruning and thinning of trees will be in accordance with BS7370 Part 4 maintenance of soft landscape.
- 3.17 Once a height of 3m is attained, crown pruning is desirable and any dead or severely damaged trees will be felled and replaced accordingly.

Replacement of Failed Planting

- 3.18 Failed planting will be removed and replaced with the same species between November and March for deciduous species.
- 3.19 If there is a continuous failure of a certain species, this will be reviewed and, if appropriate, an alternate appropriate species will be planted instead.

Watering

- 3.20 Single stem trees planted during the dormant season will need little or no watering. This will allow the tree to naturally acclimatise to the location and will encourage roots to spread down in search of water.
- 3.21 Watering may be required during periods of drought in the first couple of years following planting. Water should be applied to the base of the tree and should not be in excess of 20 litres every other day, as required, between April and September.

Fertiliser

- 3.22 Apply slow release multi-purpose plant food and soil improver in autumn during the first 5 years after planting.
- 3.23 Any bark or other weed suppressant should be carefully removed/lifted and fertilizer applied direct to the top layer of soil at the manufactures recommended rate.

Post Establishment Maintenance

Cyclical Maintenance

- 3.24 Wood under 250 mm diameter collected from thinning, pruning, brashing and vegetation clearance will, wherever possible, be chipped and used sustainably on site for mulching.
- 3.25 Wood greater than 250 mm diameter will be logged and used to create deadwood piles in suitable woodland locations.
- 3.26 Maintenance will be undertaken on an annual cyclical programme (5 - 10 year cycle) and will be carried outside of bird nesting season. If works are required to any trees with bat roosting potential, advice must be sought from a licensed bat ecologist prior to any works commencing. If works are required to any trees with bat roosting potential, advice must be sought from a licensed bat ecologist prior to any works commencing.

Tree Survey

- 3.27 A trained arboriculturist will carry out an inspection of mature trees within or adjacent to areas of public access to check for damage and disease and to maintain appropriate height clearances for safe pedestrian access. The survey will be carried out every three years.

Existing Hedgerows

Management Intentions

- 3.28 Hedgerows will be maintained for their amenity and aesthetic value. The existing hedgerows will be cut on a rotational basis to allow foraging and sheltering habitat for local wildlife species. Existing hedgerows are identified within the centre of the site and will be supported by surrounding landscaping elements including wildflower meadow and amenity grassland habitats.

Maintenance Operations

Hedgerow Cutting

- 3.29 Hedgerows will be cut in an 'A' shape to maintain a wide base for bird nesting and roosting. Hedgerow cutting will be cut on a rotational basis with one third cut every three years to retain foraging and sheltering opportunities. If possible, a 1m grass strip of species rich tussock grass will be left uncut next to the hedgerow to increase habitat potential and increasing connectivity. The grass strip is to be cut simultaneously with the hedge cutting regime. Arisings will be collected and removed from Site.
- 3.30 Any hedgerow management will be carried out outside of the bird nesting season (between March and August inclusive). Should any works be required within the bird nesting season an assessment will be undertaken by a suitably qualified ecologist before any works commence.
- 3.31 Additional hedgerow cutting may be required from a health and safety perspective should there be a good growing season.

Hedge Laying

- 3.32 In the long-term established hedgerow planting could facilitate traditional hedge laying to support the ecological and amenity value of the site. This is also applicable to existing hedgerows across the site with mature growth. Hedge laying can be conducted between intervals of 10 and 15 years allowing new growth to occur and thickening the hedge increase the density.
- 3.33 The hedge stem will be cut to leave a small strip of bark and will be woven between equally distanced stakes that are held at the top by bound small diameter wood stems (Commonly hazel), other coppiced wood can be utilised on-site.

Hedgerow Planting

Management Intentions

- 3.34 Hedgerow is proposed to provide additional screening for residential units and provide nesting and foraging opportunities for birds, bats and small mammals.
- 3.35 This LEMP covers hedgerow in areas of public open space only. Hedgerows in private gardens will be managed by residents.

Maintenance Operations

Weed Control

- 3.36 To reduce excessive competition, a weed free area will be retained around hedgerow plants to a diameter of 0.5m around the base. Mulch will be replenished annually to a depth of 50mm.

Formative Pruning

- 3.37 Formative 'facing up' the hedgerow will establish dense branch growth annually in September.

Spiral Guards

- 3.38 Protective spiral guards these will be checked monthly. Any broken or damaged spiral guards will be replaced.
- 3.39 Spiral guards will be removed after the third growing season.

Re-firming

- 3.40 Newly planted hedgerow plants will require re-firming as required.

Replacement of Failed Planting

- 3.41 Failed planting will be removed and replaced with the same species between November and March for deciduous species and between September and April for evergreen species.
- 3.42 If there is a continuous failure of a certain species, this will be reviewed and, if appropriate, an alternate appropriate species will be planted instead.

Hedgerow Cutting

- 3.43 The first cut to newly planted hedgerows is recommended within year 3 (dependant on growth), and will consist of 'facing up' either side of the hedge. All hedge cuts must be undertaken using appropriate hand or power tools. Manual methods of management, where appropriate, will be used in favour of machinery.

Post-Establishment

- 3.44 Once newly planted hedgerow is established (approximately after the initial 5 years) then maintenance should revert to the 'Existing Hedgerow' maintenance operations above.

Ornamental and Native Shrub Planting

Management Intentions

- 3.45 Management of ornamental and native shrub planting will focus on maintaining a neat and tidy appearance, which will also encourage plant growth through appropriate horticultural techniques.

Maintenance Operations

Mulching

- 3.46 A mulch composted wood chip or bark mulch will be maintained around the base of all young plants to suppress weed growth and will be maintained to a depth of 50mm.

Pruning

- 3.47 Pruning will be undertaken from year 5 onwards in order to clear deadwood, promote healthy growth and produce desired growth of flowers, fruit, foliage or winter colour as appropriate. Pruning will also include for clearing out crossing and damaged branches.

- 3.48 Branches to be removed should be taken back to an outward facing node and cut cleanly approximately one inch above on a diagonal angle. Pruning will be undertaken carefully by manual means with appropriate hand tools such as secateurs or loppers; which should be regularly sharpened and cleaned after use to prevent the potential spread of disease.
- 3.49 Where pruning is limited to the extent of the current year's growth, work can be carried out at any time of year. If the pruning will be extensive then the works should be undertaken outside of bird nesting season.

Weed Control

- 3.50 Weed control will be undertaken annually between April and September and where feasible should be undertaken by hand pulling and should remove all noxious weeds such as docks, thistles, nettles, ragwort and willowherb.
- 3.51 In certain instances, herbicide maybe the most effective measure to remove unwanted species. Where herbicide application is needed this should be in small controlled areas and should only target the undesirable species. Shields should be used as appropriate to prevent drift into sensitive areas. Herbicides should comply with the Control of Pesticides Regulations as amended (1997) and be on the current list of approved products.

Replacement of Failed Planting

- 3.52 Failed planting will be removed and replaced with the same species in the first five years following implementation. If there is a continuous failure of a certain species, this will be reviewed and, if appropriate, an alternate appropriate species will be planted instead.

Coppicing and Thinning Shrubs

- 3.53 Following implementation and establishment of noted native shrub planting, long-term management will need to monitor shrub density to ensure species diversity and composition is maintained. Thinning and coppicing of shrub species can be implemented to maintain diversity and composition as detailed.
- 3.54 Thinning and cutting native shrub vegetation will be undertaken on an annual cyclical programme (5 - 10 year cycle) and will be carried out outside of bird nesting season (March to August inclusive). If works are required to any native shrubs with bat roosting potential, advice must be sought from a licensed bat ecologist prior to any works commencing.
- 3.55 Native shrubs for coppicing will be cut back to 50mm above ground level. Where several stems are coppiced on one plant, cut faces are to slope away from the centre. Care will be taken to ensure that coppicing, thinning and pruning operations do not cause damage to desirable plants, or rutting of the ground in wet conditions.

Amenity Grass (Germinal Seeds Grass Mix A19)

Management Intentions

- 3.56 Open areas of grassland will be managed as required to maintain a tidy appearance as well as facilitating safe public usage.

Maintenance Operations

Grass Cutting

- 3.57 The grass will be mowed to a height of 25mm fortnightly throughout the growing season, and allow 14 cuts in total.
- 3.58 All edges and mowing margins will be trimmed.

Cultivating and Re-seeding

- 3.59 Any bare ground will be cultivated and re-seeded with germinal seeds grass mix A19 (amenity grass) as required to successfully establish sward. This will be carried out twice annually between August and October.

Weed Control

- 3.60 Weed control will be undertaken annually between April and September and where feasible should be undertaken by hand pulling and should remove all noxious weeds such as docks, thistles, nettles, ragwort and willowherb.
- 3.61 In certain instances, herbicide maybe the most effective measure to remove unwanted species. Where herbicide application is needed this should be in small controlled areas and should only target the undesirable species. Shields should be used as appropriate to prevent drift into sensitive areas. Herbicides should comply with the Control of Pesticides Regulations as amended (1997) and be on the current list of approved products.

Attenuation Basins (Germinal Seeds Grass Mix A4)

Management Intention

- 3.62 A balancing pond (SUDS Area) is designed to attenuate flows by storing runoff during the high rain-fall events and releasing it at a controlled rate during and after the event.
- 3.63 A balancing pond is proposed within the south of the site and will provide ecological value for identified local wildlife species. The proposed pond will be seeded with a specified mix to provide floral diversity during the growing season supporting the site's amenity and aesthetic value, as well as supplementing surrounding landscape features including native shrub planting and wildflower meadow.

Maintenance Operations

Inspections and Remedial Measures

- 3.64 A visual inspection will be carried out as part of the annual site inspection. This will include an inspection of the water quality for any signs of pollutants (e.g. scum, excessive algal growth and discolouration), extent of vegetation zones and open water, presence of invasive species (including fish) and presence of rubbish and debris.
- 3.65 If pollutants are detected, options for remedial action will be discussed with the landowner and appropriate authorities.
- 3.66 In the event invasive or harmful species are identified, a treatment plan will be drawn up; spot treatment or pulling by hand will be the preferred method. Any other remedial actions will be implemented accordingly.

Strimming

- 3.67 The banks of the balancing pond will be strimmed monthly between April and September to a height of 150mm.

Encroaching Vegetation

- 3.68 Dominant species (particularly reed, bulrush and reed sweet grass) will be cut back to prevent them from encroaching on areas of open water.
- 3.69 Vegetation will be strimmed back (to 150mm) annually between November and January. Approximately 25-30% of wetland vegetation will be removed to retain between 60% and 30% of open water each year with arisings removed from the Site.
- 3.70 It is important that cutting does not take place over the entire reedbed area, and should therefore be cut in alternate sections on annual rotation leaving uncut areas as refuge for wildlife.

Grass Mowing

- 3.71 During period when the basin is not operational this will be managed and mown following the amenity grassland operations above.

Herbicide Use

- 3.72 Use of herbicides near the pond will be avoided.

Wildflower Meadow (Hay/Seed from Local Site)

Management Intentions

- 3.73 The existing neutral grassland will be managed to create new wildflower meadows on Site. The implementation of wildflower meadow will form rich and diverse vegetation that will complement surrounding landscape elements including log piles, native shrub planting and scattered proposed trees.
- 3.74 Areas of Wildflower Meadow are shown on the Landscape Masterplan - Phase 1 (TEP ref: D10551.400)

Maintenance Operations

Establishment

Year One

- 3.75 The initial cut should be to a height of 25mm in March, this will provide sufficient height to allow scarification of the grassland for the first initial seeding works. All arisings should be removed prior to seeding.
- 3.76 Once the existing grass has been cut to the specified height (25mm), the proposed wildflower meadow areas can then be scarified to remove any moss or thatch and break up compacted soil to assist the successful establishment of the wildflower seed.
- 3.77 Once scarified, the grass can be sown with the specified mix at the appropriate sowing rates between March and May, either by hand or mechanical methods. Once sown, the seed will need to be worked into the sward through scarification grooves, this can be conducted using a flat backed rake. The inclusion and establishment of yellow rattle *Rhinanthus minor* is essential in assisting the establishment of a wildflower meadow by breaking down the dominant grass species.
- 3.78 If further seeding is required, then this should be carried out during periods of sufficient warmth and moisture typically between March to May and August to October.
- 3.79 Soon after sowing there will be a flush of annual weeds arising from the soil seed bank. These weeds can look unsightly, but they will offer shelter to the sown seedlings, and they will die before the year is out.
- 3.80 Weed control will be undertaken where feasible to perennial weed species by hand pulling as they start to flower but before they set any seed.
- 3.81 Following spring sowing, the first cut of the meadow should be carried out in August to a height of 75mm, with all arising removed. The young meadow shall then be maintained by mowing through to the end of March of the following year.

Year Two

- 3.82 Lush spring growth may require cutting to remove the first flush of grass growth which should be completed in April with a suitable mower to approximately 50mm in height.
- 3.83 To establish good floral diversity, the wildflower meadows will be cut in July to a height of 75mm using a suitable mower. Arising should be collected to allow new growth to establish.
- 3.84 A further cut in autumn will assist in removing excessive grass growth and encouraging flowers. Mow with a rotary or other suitable mower to 50-75mm which will leave the grass short through the winter. Arising should be collected following the cut in autumn.

- 3.85 Failed seed or any bare ground will be cultivated and re-seeded as required. If re-seeding is required this will be carried out twice annually between March to May and August and October.

Post establishment

- 3.86 By year three the wildflower meadow should have established a structurally diverse sward of grass and wildflower species. If this is not the case, and the meadow is presenting lush grass growth again in spring then the year two prescriptions should be implemented again until the desired composition has been achieved. Once established, the grass will be cut to a height of 150mm (approx.) annually in September. Arising will be collected during mowing via the use of collector mower.
- 3.87 Grass cutting should be avoided between mid-March and August (inclusive) to prevent risk of disturbance and destruction to nesting birds.
- 3.88 Great care should be taken to avoid damaging refugia hidden in the grass.
- 3.89 Failed seed or any bare ground will be cultivated and re-seeded as required. If re-seeding is required this will be carried out twice annually between March to May and August and October.

Weed Control

- 3.90 Weed control will be undertaken annually between April and September and where feasible should be undertaken by hand pulling and should remove all noxious weeds such as docks, thistles, nettles, ragwort and willowherb as they flower and before they set seed.
- 3.91 In certain instances, herbicide maybe the most effective measure to remove unwanted species. Where herbicide application is needed this should be in small, controlled areas and should only target the undesirable species. Shields should be used as appropriate to prevent drift into sensitive areas. Herbicides should comply with the Control of Pesticides Regulations as amended (1997) and be on the current list of approved products.

Fertiliser Use

- 3.92 Fertiliser is prohibited within any of the wildflower areas to conserve the development of a diverse sward.

Log Piles

Management Intentions

- 3.93 Log piles will be created using branches collected during maintenance and management operations, these should be replenished annually where appropriate. The log pile features will form suitable habitats for local invertebrate species. These will be implemented across the site within the entrance to the northwest, along the existing PRow to the south and along the edges of the basin. Exact locations are detailed on the Planting Plans 1, 2 and 3 (TEP ref: D10551.201-203).

Maintenance Operations

Replenishment

- 3.94 Log piles will be replenished annually as required using wood collected during maintenance works, this will ensure there is enough cover for the hibernation period.