ChilmingtonGreen

RESERVED MATTERS APPLICATION FOR PARCEL R

# LANDSCAPE MANAGEMENT AND MAINTENANCE PLAN

Prepared by NTA

Rev C April 2020

# Chilmington Green

# PARCEL R

# Ashford Kent

SP0358_01, **Landscape** Management and Maintenance Plan
(Planning Submission purposes only):

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Revision C

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# 1.0 PROJECT PARTICULARS

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## 1.1 PROJECT TEAM

| | |
|---|---|
| Client | BDW Kent |
| Q.S. | TBC |
| Architect | Noble Architects |
| Structural Engineer | |
| Civil Engineer | Stuart Michael |
| Landscape Architect | NTA |
| M&E Engineer: | TBC |
| CDM Planning Supervisors | TBC |
| Planning Consultants | BDW Kent |
| CMO Project Team (ABC) | TBC |

# 2.0 INTRODUCTION and THE PLANNING BACKGROUND

## 2.1 Introduction and the Planning Background

2.1.1 Neil Tully Associates were appointed by BDW Kent as Landscape Architects for the design of the landscape for Chilmington Parcel R and adjacent advanced buffer planting areas. This report forms the landscape management and maintenance plan for the landscape areas of public open space, including play spaces and landscape buffer areas in respect of the Reserved Matters Application for Parcel R. In addition, it is intended for this document to form the working template for further Reserved Matters applications across the Chilmington Green development area.

The management of landscape creation around Parcel R is also subject to a separate Ecological Management Plan or EMP - Bakerwell (2019) Enhancement, Mitigation, Management and Monitoring Plan for Landscape and Ecology. Bakerwell; Kent. The EMP includes details of protected species present within or adjacent to areas of habitat creation and measures that must be taken during management to ensure the ongoing protection of species present such as timing of works of prohibiting use of herbicides within ecological habitat creation. This maintenance and management document should be read in conjunction with the EMP (Bakerwell, 2019).

2.1.2 An outline planning application (OPA) for Chilmington Green was submitted in August 2012, by a group of developers known as the Chilmington Green Consortium and a decision was made by Ashford Borough Council (ABC) to grant planning approval in October 2014. The Design and Access Statement (DAS) that forms part of the outline application includes an illustrative masterplan and sets out principles for land use, movement, height and housing density. The OPA DAS also defines a number of different character areas and concept designs for important pieces of public realm.

2.1.3 Chilmington Green offers a fresh start for Ashford in a well-connected, green and family friendly environment. With its spacious park, bustling High Street and direct bus link to Ashford Town Centre, it combines the very best of town and country living.

2.1.4 The new community will grow over time to create three distinct neighbourhoods, with a hamlet at its heart.

2.1.5 The Vision for Chilmington Green seeks to set out the key features of Chilmington Green, which the planning of the site will address

Chilmington Green will be a great place to live – a place that:

- is lively and fun, with an attractive High Street that meets peoples' daily needs;
- works for people of all ages and provides a range of community, education and health facilities;
- sets challenging standards of innovative design, becomes a place of special and varied character;
- has sustainability integrated into all aspects of design;
- offers a range of local jobs, but also caters for those working in the town centre and elsewhere with high speed, high quality bus connections;
- has its own, strong, identity in a landscape setting, but closely linked to the urban area and able to offer new opportunities to other residents of Ashford, in particular those in Brisley Farm, Singleton, Shadoxhurst and Stanhope;
- respects and integrates heritage buildings, landscape features and wildlife habitats as part of a well-planned layout;

- fosters local pride and a strong community that develops a strong sense of pride and local ownership and the capacity to help manage Chilmington Green on a day to day basis, and
- Is flexible in design and resilient to change, and able to respond positively to advances in technology and changing working and daily lifestyles.

2.1.6 In order to comply with a condition of the outline planning approval a Design Code for the new settlement was prepared in consultation with ABC. The Chilmington Green Design Code and associated Regulatory Plan aim to ensure that the Consortium's aspirations for delivering a high-quality environment with a memorable sequence of public spaces and a variety of character areas will be achieved as the masterplan is built out over a period of around 25 years by a series of different developers. The Design Code includes more detailed requirements for Chilmington Green's five distinct character areas:

1. Chilmington Rise
2. Orchard Village
3. Chilmington Brook
4. The Hamlet
5. Brisley Farm Edge

This Reserved Matters Application site falls within the Brisley Farm Edge character area.

# 3.0 PRINCIPLES AND STANDARDS

## 3.0 The Proposed Principles and Standards

*Introduction*

3.1 This Landscape Management and Maintenance Plan (LMMP) specifies how the approach to landscape management and its ongoing maintenance complements the quality objectives for the development as a whole.

This Plan offers guiding principles and standards, but where the principle of flexibility to accommodate the intended character differentiation for the development is important. Further, it recognises that over time, community desires, trends and economics will evolve and change. Accordingly, flexibility to adapt design and maintenance arrangements, but without compromising Chilmington Green's quality aims, is an important principle.

*Landscape management goals*

Before setting out proposals for detailed principles, it is important to specify the particular goals driving the approach in this plan. These are to:

a) Differentiate landscape (soft and hard) areas and their maintenance through a set of landscape zones to promote a coherent and proportionate approach to landscape management
b) Establish best practice design and landscape installation guidelines
c) Preserve and complement the pre-development landscape utilised within the development, ensuring that appropriate and sensitive maintenance arrangements are implemented
d) Offer design and maintenance proposals to promote environmental sustainability, the reasonable conservation of natural resources and to lessen long-term maintenance demands
e) Provide coherence and support to the character sets of the development through site furnishings, materials, and planting selections
f) Advance the development identity as a great place to live
g) Enhance residents, users and visitors experiences and well-being through comfortable and well maintained public outdoor spaces
h) Encourage the active involvement of the community in the overall effort to develop and maintain the quality and social experience of landscaped and hardscaped areas

*LMMP specific objectives*

This Plan is both a statement of approach and a working document to guide a long-term stewardship approach. It has the following specific objectives:

a) To support the development vision as defined at paragraph 2.1.5 above.
b) The support the landscape management goals as specified above
c) To promote and enable flexibility to adapt as the development and time progress
d) To be appropriate for application in accordance with the Section 106 requirements, with particular reference to the intended Community Management Organisation

(CMO) as the planned stewardship body, and for its use as a guiding set of principles

e) To act as a reference point for monitoring maintenance delivery
f) To act as a reference document for residents and others
g) To be longstanding, and to set out an approach for the development as a whole

*The transition to long-term stewardship by the CMO*

It is intended that the new community management organisation (potentially a charitable company) takes ownership of most areas of open space and public hardscaped areas. The exceptions to this are:

a) Areas of highway verge and associated planting (including trees) that are adopted by KCC as the highway authority (although the CMO is then likely to enter into a maintenance contract agreement with KCC)

b) Areas of hardscape and soft landscape retained within the developers' ownership with maintenance responsibility vested in a private management company (although subject to agreement the CMO may consider responsibility for these areas in the future)

For all other areas of public space and prior to the formal endowment of land to the CMO, the developers will retain the maintenance responsibility for a period of time, referred to as the defects period.

Defects periods will last for up to three years from the point of landscaping being completed. The timing of transfer to the CMO within this period will be agreed with the CMO. In many instances, the defects period may be expected to cover two summer periods following completion. In some instances where landscaping does not involve greater variety of planting, transfers may occur at a shorter period, again subject to the agreement of the CMO.

Within the defects period the developers will retain maintenance responsibility and will commission contractors to perform the work in accordance with the standards and technical requirements otherwise included in this Plan.

*Area Prioritisation*

An adaptable and carefully planned approach to landscape design and stewardship will further strengthen the intended quality aims and character differentiation desired for the development as a whole. Careful planning and ongoing maintenance will follow the design code, and support the landscape management principles set out above.

The proposed zonal approach will achieve this, where landscape specifications are specified to support the varying visibility and use impacts associated with the planned geographical and character aims for the development.

*Category (or Priority) Zones*

For each detailed reserved matters application coming forward it is intended to differentiate planned landscape and hardscaped areas according to categories described below. This approach will apply to all developers, with the intention of

compiling a comprehensive Management and Maintenance Plan. However, not all zonal categories are capable of specification at this stage. Added categories will come forward as part of the future planning process.

The Parcel R areas subject to site wide management include:

a) A 5m wide buffer landscape strip between the proposed development and existing residences. This will comprise a range of native shrub/hedging varieties and individual trees with a maintenance access strip formed of wildflower meadow species, which also doubles as a drainage strip.

b) Included within and adjacent the main site areas are street trees and verges, which will be subject to CMO maintenance.

c) The sustainable urban drainage scheme, which include a pond to the west of the site and a swale system which runs from the existing offsite pond to the new SuDS network in Discovery Park.

In order to concentrate management and maintenance resources in the most efficient and visually effective manner, the landscape areas have been divided into a series of priority zones based on public visibility and usability (see summary plan at Appendix D). These are:

*Zone A - Highly visible impact areas (Yellow on Zonal Plan)*

Areas within this zone have highest visibility and user impact (to residents, visitors, workers and other users) commanding highest aesthetic qualities and functionality. Designs and standards of maintenance will reflect the impacts of these more formal public areas.

Areas covered by this Zone include:

a) The main road access and boulevard trees, and the immediate frontage verges

Zone A areas will display shrub and tree planting with high aesthetic focus and durability.

These areas include specimen formal trees and ornamental planting arrangements, formal play equipment and street furniture, better quality paving materials, including natural stone, hardscape features, and sculptural features / works of art. These will exhibit the finest aesthetic quality and functionality of the site landscapes.

These will be the highest maintenance areas, typically where hedges (formal and informal), shrubs and herbaceous areas will be pruned regularly to provide optimal aesthetic value. Trees (including pleached and pollarded specimens) will be pruned for structural integrity and aesthetic purposes. All tree specimens will have a mulched base. Seasonal flowerbeds may be located in these areas. Lawn grass in these areas will be regularly mown to maintain short turf height, using roller mowers where required to create formal striping.

*Zone B….Less visible but still important areas (Purple on Zonal Plan)*

Areas here will be more visible to local residents, and less so to everyday users of the development and those passing. Areas here are of local strategic significance. They will

display good design principles supported by good maintenance standards, and within the development will cover:

*N/A to this application area*

These areas include specimen trees, rough and closer mown grasslands (including mown paths), wildflower swathes, new woodland copse and belts, and scrub edge margins. Informal play areas, kick-about and picnicking areas, doorstep play areas with robust seating. Furniture, including litterbins, dog waste bins, seating and signage will be distributed throughout the Zone B areas.

All street furniture and play elements will be designed to minimise ongoing maintenance requirements. Along with landscape maintenance objectives, the requirements of the EMP in promoting biodiversity will further influence maintenance operations in these areas and will be reflected in the tailored Management and Maintenance schedules.

*Zone C… Areas of minimal use/impact (Green on Zonal Plan)*

The Zone C areas will require regular maintenance at the similar timings as Zone B and with similar Management and Maintenance regimes, but potentially less frequently and with an onus in the early years on developing the objectives of the EMP.

Areas here may be more limited in scope and for example may cover:

a) 5m Buffer Planting Zone and roadside ecological area
b) The central swale area and adjacent landscape areas

*Zone D…SuDs above ground and ditches (Grey on Zonal Plan)*

Areas here are self-defined and will have specific maintenance and management plans approved as part of the relevant planning application process.

Landscape Management and Maintenance will be undertaken following the schedules defined for Zone B and C as applicable with any detailed requirements defined in the Technical SuDS Operational Manuals. Typically, grass cutting, and management of marginal and aquatic vegetation will be required to promote best aesthetic effect and operational efficiency. Structures associated with the SuDS features will require particular attention to maintain clear flows and public safety (pipe grilles, headwall railings, lifebuoys etc).

*Maintenance of SuDS (Condition 66h)*

To ensure the SuDS features remain optimised and fully functional during the life time of the development, thus preventing an increase in the flood risk both within the site and elsewhere, maintenance of the system is crucial across the short, medium and long term timescales. It is proposed that the below ground SuDS features are to be maintained by the Independent Water Network who will be the adopting authority. The IWN has confirmed that subject to appropriate design, they would be prepared to adopt these together with the upstream pipe network. The maintenance requirements for these will generally be in accordance with Table 23.1 of the CIRIA 753 manual as included in Appendix C, Zone D maintenance schedule, with minimum requirements for the swales set out in Table 17.1, also in Appendix C.

*Zone E…managed farmland (where retained as part of the development – in due course)*

Areas here will be self-defined and follow a strategic approach.

Landscape Management and Maintenance will reflect usage, and will be dependent on tenancy arrangements put in place at the time.

*Zone maintenance specifications*

Each zone is to have a specific maintenance specification that recognises the planned differentiation for visibility and impact, taking into account the location, the planting types, intended usage and so on. A coherent approach to zoning is intended across the whole development. Specifications of this type will provide greater clarity to the CMO for aiding its interpretation of long-term maintenance requirements and standards.

Proposed specifications are contained in Section 5 of this report, Appendix C.

# 4.0 GENERAL DESCRIPTION OF WORKS AND RESPONSIBILITIES

## 4 General Description of works.

4.1 The wider landscape works comprise woodland and native edges, hedgerow planting along with extensive seeding works for ecological and recreation areas. The creation of public access through footpaths and street furniture will be implemented in a phased programmed of works, scope and timing of which is to be determined. The amenity/recreational areas are to be developed to include informal play elements along with specialised surfacing, associated furniture and lighting.

The woodland buffer planting and edge planting will be of native tree and shrub species, whips and feathered trees with feature planting of SS/EHS and ANS trees as shown on the drawings, along with hedgerow/buffer planting of native species.

Seeding works within the new landscape areas will entail low maintenance mixes and wildflower and wild grass mixes.

Landscape compartments and hedgerows where appropriate will be fenced using post and wire fencing with rabbit proof netting applied. Additional rabbit proof guards will be applied to all plants.

Ornamental planting to key focal areas will comprise shrubby, herbaceous and grass species in combination with formal street trees and EHS/ANS and SM tree planting of both indigenous and ornamental trees.

Footways will be created using a variety of surfaces including self-bound gravel surfaces, mown grass and improved grass paths with hardcore bases. Footpaths and roads within the built form will be in Stone mastic asphalt, exposed aggregate block paving with conservation trims, as indicated on the drawings.

Works to the footpath and roads within the built area will entail tree planting in compactable tree pits (hard paved areas) and tree, shrub and grass planting in open areas.

Tree protection to BS 5837: 2012 standards is detailed on the tree survey and should be referred to as necessary and when working close to areas of retained vegetation.

This specification is to be read in conjunction with current NTA and Makeower Architects Drawings Refer to up to date NTA drawing issue sheets for current revision status.

The objective of the design is to create a street landscape and public open space structure with a strong identity that conforms to the overall site masterplan. Furthermore the scheme will soften the interface between street and buildings, providing a buffer between public and private space.

Hard elements of the design such as paving and stone benches have been selected for their robust qualities and for their aesthetic appeal. A fuller description of the landscape design and strategy is included in the Design and Access Statement accompanying the Reserved Matter Application.

## Maintenance responsibilities.

The long-term intention is to transfer all areas of public open space to the Community Management Organisation (CMO).

During the initial Defects Liability Period of 12 months the landscape will be maintained by a contractor appointed by BDW Kent.

Following a up to a further two-year maintenance period a contract will be put in place by BDW Kent, worded to permit the handing over of established landscape Zones to the CMO at a mutually agreed time and subject to a formal handover process.

Any areas of communal landscaping around apartment blocks/mews streets will either be transferred to the CMO or to a private management company (unknown at this time). Again BDW Kent will maintain these areas until they have been transferred to the relevant parties.

## Extent of maintenance works

As indicated on the Zonal Extents Drawing and as defined in the Zone M&M schedules (Appendix C).

The maintenance tasks will incorporate, *inter alia*:

Maintenance of and replanting where required to: Trees, shrubs, herbaceous species, hedges and lawn areas/verges, maintenance and topping up of bark and stone chip mulches and timber edgings, cleaning and maintenance of all hard surfaces, slabs, setts, kerbs and street furniture / lighting, maintenance and repair of balustrades where required and regular litter collection.

## Location

Situated to the south east of Ashford

## Topography

Rolling agricultural landscapes, shallow stream courses and field ditches.

## Soil conditions

All soiled areas for general and amenity planting and seeding have been provided with the correct depths of Multi-Purpose Soil to BS 3882. Soiled areas for wildflower meadows will be As Dug type low fertility soil.

At the time of implementation soil will have been tested to ensure fitness for use and compliance with BS 3882.

## Watering arrangements

When necessary, the CMO is to provide bowsered water or stand pipe water supply by agreement with the relevant authorities.

## Microclimate

The site is generally open agriculture at present but on development of future phases will benefit from more distant screening from the west and maturing landscape along the access roads and higher areas of woodland planting. The new buildings will protect the planting from strong Easterly winds however at ground level there is likely to be some wind funneling. The proximity of buildings means that some of the planting and paved areas will be in shade for part of the day.

## Existing vegetation

Existing Trees and Hedgerows. Refer to plans.

## Maintenance of landscape areas

The purpose of maintaining and managing the site is to encourage the satisfactory establishment and long-term viability of the landscape proposals.

It is recognized that soft landscape is a living dynamic system and it may be appropriate to vary the proposals contained herein as the scheme develops. It is intended that this specification will outline the intentions of the scheme whilst highlighting good practice. The CMO, being responsible for the site should keep to the spirit of the original design concept whilst responding in a sensitive and practical way to issues which may arise in future years.

## Commissioning and monitoring arrangements

When the CMO takes on ownership and management responsibility for the LMMP, it will be obliged by the CMO Framework Agreement to adhere to the Maintenance Standards herein (subject to variation by joint agreement). In the event of the CMO contracting-out elements of the work to external contractors or in-sourcing the work through its own workforce the CMO must follow the conditions of this Plan and ensure all external contractors are similarly bound to the requirements of the LMMP, the EMP and all site specific SuDS maintenance requirements. In all cases, the CMO must ensure continued monitoring of works on site and adherence to the specification of the LMMP.

## Changes to standards

Following CMO takeover of completed landscape zones it may determine other and more appropriate standards to be adopted, but only with the express agreement of the developers and other Framework Agreement parties.

# 5.0 MAINTENANCE CONDITIONS AND SPECIFICATIONS

Part A – General conditions

Part B -Zonal Specifications

## 5. Part A – General conditions

References to the CMO in this Appendix are taken to mean once transfer of responsibility to the CMO has occurred, following the formal and agreed defects periods.

*Standard of work*

The Landscape Maintenance is to be carried out to a high standard. Public and semi-private planted areas must be kept neat and clean in appearance at all times, weed and litter free, with all planting in a healthy state. The CMO shall ensure that the works themselves do not cause inconvenience or danger to the public and users.

*British Standards*

All materials, workmanship and horticultural terms shall comply with the current, appropriate British Standards unless specifically stated in this specification.

*Protection to property*

The CMO shall prevent damage to and protect as necessary, existing paving, buildings, fittings, utilities and all existing plants. Any damage caused thereto shall be made good by the CMO.

*Protection of people – use of hazardous materials*

The CMO shall ensure that any chemical application is undertaken by a trained operative who has the NPTC/ National Sprayer Testing Scheme (NSTS) certificate and in accordance with the manufacturer's directions and with the Approved Code of Practice for the Safe Use of Pesticides for Non-Agricultural Purposes where they apply. The CMO shall ensure at all times that the public and its own staff and contractors are not subject to any hazard from the use of chemicals, and that all equipment, containers and materials are kept in a secure place when on site and not in use, and that all empty containers, etc. are removed from site at the end of each day. The CMO will take responsibility for any loss or damage caused by misuse of chemicals, especially with regards to third persons. The CMO will keep or arrange for its contractor(s) to maintain daily records of all chemicals used and their dosage. Herbicide application in areas open to the public shall not be carried out, unless risk assessments have been made and adequate precautions taken to safeguard third parties.

*Protection of water courses*

The CMO shall ensure that no application of chemical pesticide, herbicide or fertilizer is made in the run-off areas adjacent to water bodies. Due care shall be taken that no other foreign material shall enter the water bodies.

Special care is to be taken when working adjacent to water particularly by existing field ditches, swales and other SuDS areas.

*Cleanliness*

At the end of work visit, the CMO shall arrange for the removal from site of all rubbish, trimmings, and superfluous materials, leaving the site in a clean and tidy condition.

Particular attention shall be paid to ensuring all areas of hard surfacing are left in a clean condition, free from any soil, mud, leaves, cuttings and plant prunings.

*Programme of operations*

The CMO shall follow the Programme of Operations as listed within the Maintenance Specifications. Prior to transfer of land and management responsibility the CMO shall agree with the developer a comprehensive maintenance programme showing intended maintenance schedules.

*Operating conditions*

The CMO shall order works to take account of any specific ground and weather conditions required for maintenance works.

Chemical applications shall only be undertaken in suitable weather conditions as described by manufacturers.

*Watering*

The CMO shall ensure that it and its contractors are conversant with the positions of watering point(s) and any irrigation systems on site. The CMO shall include for transporting water in an appropriate manner to the areas where it is required wherever necessary.

Where trees and plant areas are not within watering point radii, the CMO shall be responsible for ensuring that all planting is sufficiently watered to maintain healthy growth. When necessary, water using a fine rose or sprinkler until the topsoil reaches field capacity.

Care is to be taken when undertaking maintenance tasks within planting beds or when cutting lawn areas not to damage the irrigation pipes and jets, or the pop-up sprinklers. Any damaged pipes /sprinklers are to be repaired or replaced.

*Pests and disease*

The CMO shall notify the relevant authorities in place at the time of any pest or disease problems occurring which affect the vegetation on site, (such as Defra/AFRA). In the first instance the CMO operatives should inform the CMO contracts manager of the occurrence The CMO shall implement appropriate treatment as agreed to coincide with normal maintenance visits, where possible. All operations shall comply with statutory safety requirements. All diseased wood, prunings etc. shall be removed from site and burnt.

*Replacements*

The CMO operatives shall advise the CMO contracts manager of all trees and plants found to be dead, dying, vandalized or not growing in a vigorous condition

*Insurance*

The CMO shall be fully insured for Public Liability and shall provide details of the amount of cover prior to the transfer of land and management responsibility.

*Protective clothing*

Appropriate protective clothing shall be used by the CMO contractors and/or its own staff at all times and shall comply with the Health and Safety at Work Regulations.

*Mulching*

Mulched areas are to be topped up as necessary using the same material as was originally specified to maintain the original specified depth until such time as canopy closure occurs.

Beds mulched with stone chippings are to be maintained in a weed free state at all times, with the chippings being maintained at the minimum specified depth.

*Fertilising*

The CMO shall arrange a yearly application of slow release fertilizer to all ornamental shrub areas and tree pits.

*Weed control*

In the course of the routine maintenance visits, the CMO shall undertake the weed control necessary to keep the site in a neat, tidy and weed free condition and to allow specified species to develop free from unnecessary competition.

Weeding may be carried out by hand, by machine, by herbicide or by a combination of all three consistent with the other requirements of this maintenance specification. Where a herbicide is to be used, it is the CMO's responsibility to ensure that the herbicide it proposes to use is appropriate for the purpose and location (see also Protection of Water bodies).

Use of herbicides will be in accordance with the manufacturer's recommendations and in strict accordance with the latest Control of Substances Hazardous to Health (COSHH) regulations. Unless otherwise approved only contact/ translocated herbicides shall be used. Specific areas where weed control will be necessary include weeds/ moss in paving areas, undesirable species in grass areas and weeds in tree/ shrub/ groundcover beds.

Weeds and other debris will be removed from site at the end of each visit.

*Litter*

At every maintenance visit, the CMO shall ensure the removal and proper disposal of any litter from planted areas.. The CMO shall concentrate particularly on the removal of litter and debris within planting beds which are difficult to reach by any contracted t cleaners who also have cleaning duties in external areas.

*Planted areas (general)*

Planted areas comprising trees, shrubs, hedges and herbaceous, groundcover and climbers shall be maintained in accordance with the general conditions. Particular emphasis should be given to weed control and maintenance of the mulch layer for ornamental areas and encouraging the prompt spreading of groundcovers.

Only limited thinning of planting is expected to the planted scheme. Any thinning should be carried out with the aim to allow ornamental plants to thrive, groundcovers / low plants

space to grow without competing for space and to encourage flowering and removing dead stems from perennials.

Maintenance of trees and shrubs shall include tightening of the underground guying system to maintain an upright orientation, with racket tensioners and turnbuckles greased to ensure smooth future operation. Geotextiles and mulch is to be replaced and secured after tightening guys.

Maintain all climbers thinning out dead and overcrowded wood and securing to walls and columns as necessary. Additional water is to be applied to all plants adjacent to walls or in isolated areas of paving.

Aeration and irrigation pipes are to be kept free of detritus and caps secured and protected with mesh.

Removal of support systems may occur within 5-8 years of planting, dependent on stability achieved.

Specimen trees should be pruned clear of vassal suckers and side growths and crown-lifted gradually to produce strong specimens with clean boles up to the first desired lateral branches.

Manual irrigation of the trees will be via the aeration pipes that are connected to circular perforated pipe around the circumference of the root-ball. Watering will be carried out as required, with daily visits during periods of dry weather greater than one week.

Maintenance of the ornamental shrub areas shall follow the general guidelines, with pruning according to species and form, in order to clear dead wood, promote healthy growth and produce desired naturalistic form.

Weed control to the ornamental planting should be reduced as the planting matures and groundcovers spread. Where necessary, weeds should be controlled by combined hand weed and spray operations and the application of approved contact herbicide. The CMO shall be responsible for all notification as appropriate for work adjacent to water bodies.

Maintain all mulched and gravelled areas on a monthly basis, sweeping any loose material from adjacent surfaces and topping up where required on a three monthly basis.

Hedging within CMO areas and adjacent to buildings is to be maintained to a height and width of either 40cm for Buxus hedges (and similar) and for native/Carpinus hedges (or similar) 110cm (70cm width) above soil level.

*Specific Ecological Management requirements:*

*Extracts from Bakerwell Ecology Management document:*

*Dormice, GCN, reptiles and breeding birds are known to use the boundary hedgerows, ditch and grassland which form existing ecological corridors. The retained hedgerow bounding the site will be supplemented with a mixture of native shrubs and trees to infill gaps in line with the Landscape Masterplans (Appendix 4). It is important that these hedges are full and healthy, and that there are flowering and fruiting areas in all years. Mulch around trunk and weed for the first year to allow new shrubs and trees to establish.*

*Hedgerow trimming will be carried out on a three year rotation following DEFRA guidelines (DEFRA, unpublished). A different third of the hedge area will be cut each year. This will allow two thirds to flower and fruit each year providing foraging opportunities for dormice and birds. A more regular cut may be required in areas adjacent to footpaths to allow these to remain open.*

*Cutting will ideally be carried out in February as this allows the fruit to remain on the trees for the longest period to feed the birds. All cutting should be carried out outside of the bird nesting season and during the dormouse hibernation season (November to February).*

*Native Hedgerow Planting*

*Planted native hedgerows will be trimmed on a three-year rotation following DEFRA guidelines (DEFRA, unpublished). A different third of the hedge area will be cut each year. This will allow two thirds to flower and fruit each year providing foraging opportunities for mammals and birds. A more regular cut may be required in areas adjacent to footpaths to allow these to remain open.*

*Laying of hedgerows should be considered where the growth is consistently of the correct age, which for newly planted hedgerow will be approximately after ten to fifteen years of growth. Mulch around trunk and weed for the first year to allow trees to establish.'*

*Hard areas (general)*

Hard areas are to be kept clean at all times using hand or mechanical sweepers. Ensure joints are sealed prior to commencing mechanical cleaning (do not use mechanical cleaners within the first 6 months of repaired areas). Suction cleaners are not to be used on sand jointed surfaces.

Keep all hard areas clean of litter, dirt, stains, leaves, weeds and moss and in a safe condition. Use suitable approved herbicides in accordance with the general conditions.

Inspect all hard standings on a monthly basis. If dangerous surfaces or edges are identified make the area safe, erecting suitable warning barriers and contact the CMO's contracts manager immediately. Repairs should be carried out promptly in accordance with best practice and all safety standards.

On a monthly basis inspect all drains and sumps, cleaning and flushing blockages as required.

Wash and scrub all stone benches every 3 months with suitable liquid cleaners and scrubbers to remove any stains without damaging the stone surface.

All resin bound and rigid surfaces are to be brushed and washed in June to remove accumulated dust and soil.

*Grass areas (general)*

The cutting of grass areas is to be carried out by the CMO. Cut areas with a cylinder or rotary type mowing machine according to land surface and zone, using a box to remove clippings, unless otherwise specified in the zone specification.

Areas requiring repair should be renovated using turf as originally specified.

Depressions and humps in the grass areas are to be levelled out and re-turfed as required as part of the maintenance work.

Manually irrigate turf areas to maintain a healthy sward as required. Allow for one watering a week, of grass without an irrigation in the summer months.

Where a pop-up irrigation system is employed maintain and monitor the systems in accordance with the supplier's instructions.

Pernicious weeds should be controlled by application of approved translocated herbicide at the manufacturer's recommended rates during periods of active growth, typically May / June in favourable conditions.

Occasional turf fungal diseases may be treated by localized application of an approved broad-spectrum fungicide, although this treatment is expected to be minimal.

*Seeding: general areas*

SEED FOR all standard grassed areas and gardens
(Where required and as indicated on the drawings)
Mixture:

| % | Latin name | Common name |
|---|---|---|
| 10 | Agrostis castellana | Highland Bent |
| 50 | Festuca rubra | Slender-creeping Red-fescue |
| 20 | Lolium perenne | Perennial Ryegrass |
| 20 | Poa pratensis | Smooth-stalked Meadow |

With Trifolium repens – small leaved white clover

*Seeding: wildflower areas*

SEED FOR - Proposed public grass paths, verges and open spaces with wildflower content mix for flowering lawn mixture.
(Where required and as indicated on the drawings)
Mixture:

| % | Latin name | Common name |
|---|---|---|
| 3 | Galium verum | Lady's Bedstraw |
| 0.5 | Leontodon hispidus | Rough Hawkbit |
| 1 | Leucanthemum vulgare | Oxeye Daisy |
| 3 | Lotus corniculatus | Birdsfoot Trefoil |
| 1.5 | Primula veris | Cowslip |
| 5 | Prunella vulgaris | Selfheal |
| 3 | Ranunculus acris | Meadow Buttercup |
| 2 | Rumex acetosa | Common Sorrel |
| 1 | Trifolium pratense | Wild Red Clover |
| 20 | | |

*Grasses*

| % | Latin name | Common name |
|---|---|---|
| 8 | Agrostis capillaris | Common Bent |
| 40 | Cynosurus cristatus | Crested Dogstail |

| | | |
|---|---|---|
| 28 | Festuca rubra | Slender-creeping Red-fescue |
| 4 | Phleum bertolonii | Smaller Cat's-tail |
| 80 | | |

SEED FOR - Proposed meadow wildflower/grass meadow mix (Where required and as indicated on the drawings)
This mix is composed of species that are adapted to growing on soils with a high clay content. Clay soils are generally mildly acid to neutral, prone to waterlogging, sticky and heavy when wet, and hard to crumble when dry.

Mixture:

| % | Latin name | Common name |
|---|---|---|
| 0.5 | Achillea millefolium | Yarrow |
| 1 | Betonica officinalis - | (Stachys officinalis) Betony |
| 3 | Centaurea nigra | Common Knapweed |
| 1.5 | Galium verum | Lady's Bedstraw |
| 1 | Leucanthemum vulgare | Oxeye Daisy |
| 0.5 | Lotus corniculatus | Birdsfoot Trefoil |
| 2.6 | Plantago lanceolata | Ribwort Plantain |
| 0.3 | Primula veris | Cowslip |
| 2 | Prunella vulgaris | Selfheal |
| 3 | Ranunculus acris | Meadow Buttercup |
| 1.5 | Rhinanthus minor | Yellow Rattle |
| 1.5 | Rumex acetosa | Common Sorrel |
| 0.1 | Silene flos-cuculi - | Ragged Robin |
| 0.1 | Trifolium pratense | Wild Red Clover |
| 1.4 | Vicia cracca | Tufted Vetch |
| 20 | | |

*Grasses*

| % | Latin name | Common name |
|---|---|---|
| 10 | Agrostis capillaris | Common Bent |
| 2 | Alopecurus pratensis | Meadow Foxtail (w) |
| 1 | Anthoxanthum odoratum | Sweet Vernal-grass (w) |
| 1 | Briza media | Quaking Grass (w) |
| 36 | Cynosurus cristatus | Crested Dogstail |
| 24 | Festuca rubra | Slender-creeping Red-fescue |
| 2 | Hordeum secalinum | Meadow Barley (w) |
| 4 | Phleum bertolonii | Smaller Cat's-tail |
| 80 | | |

SEED FOR - Proposed meadow wildflower/grass meadow mix for wetlands (Where required and as indicated on the drawings)
This mix contains species suitable for seasonally wet soils and is based on the vegetation of traditional water meadows. Soils in wet meadows may flood for short periods in winter, but are usually well drained in summer.

*Wild Flowers*

| % | Latin name | Common name |
|---|---|---|
| 0.5 | Achillea millefolium | Yarrow |
| 0.2 | Achillea ptarmica | Sneezewort |
| 1 | Betonica officinalis - | Betony |
| 2.5 | Centaurea nigra | Common Knapweed |
| 2 | Filipendula ulmaria | Meadowsweet |

| | | |
|---|---|---|
| 1 | Galium verum | Lady's Bedstraw |
| 0.5 | Geum rivale | Water Avens |
| 0.6 | Leucanthemum vulgare | Oxeye Daisy |
| 0.8 | Lotus pedunculatus | Greater Birdsfoot Trefoil |
| 1 | Plantago lanceolata | Ribwort Plantain |
| 0.2 | Primula veris | Cowslip |
| 1.5 | Prunella vulgaris | Selfheal |
| 2.5 | Ranunculus acris | Meadow Buttercup |
| 1.5 | Rhinanthus minor | Yellow Rattle |
| 1.5 | Rumex acetosa | Common Sorrel |
| 1 | Sanguisorba officinalis | Great Burnet |
| 0.2 | Silene flos-cuculi - | Ragged Robin |
| 1.5 | Vicia cracca | Tufted Vetch |
| 20 | | |

*Grasses*

| % | Latin name | Common name | |
|---|---|---|---|
| 10 | Agrostis capillaris | Common Bent | |
| 4 | Alopecurus pratensis | Meadow Foxtail (w) | |
| 1 | Anthoxanthum odoratum | Sweet Vernal-grass (w) | |
| 1 | Briza media | Quaking Grass (w) | |
| 32 | Cynosurus cristatus | Crested Dogstail | |
| 1 | Deschampsia cespitosa | Tufted Hair-grass (w) | |
| 24 | Festuca rubra | Red Fescue (w) | |
| 1 | Hordeum secalinum | Meadow Barley (w) | |
| 6 | Schedonorus pratensis - | (Festuca pratensis) | Meadow Fescue (w) |
| 80 | | | |

Rate of application: 4-5g/m2

*Grass seed for wildflower areas*

Mixture as per specifications
Application rate: 4g/m$^2$.

*Quality of seed for all grassed areas*

Supplier to guarantee British/native provenance (local genotype if possible).
Certification: Blue label certified varieties.
Standard: EC purity and germination regulations.
Official Seed Testing Station certificate of germination, purity and composition: Submit when requested. Samples of mixtures: Submit when requested.

*Sowing*

Sow seed in calm weather during Autumn or Spring as approved with the Landscape Architect to suit the construction programme

The seed must be surface sown and can be applied by machine or broadcast by hand. To get an even distribution and avoid running out divide the seed into two or more parts and sow in overlapping sections. Do not incorporate or cover the seed, but firm in with a roll, or by treading, to give good soil/seed contact.

August-September and March-April usually produce the best conditions for sowing outside in most parts of the UK. May to July sowings also work well in wetter western regions. Late autumn sowings should be avoided on sites prone to water-logging in winter and late spring and summer sowings should be avoided on droughty sites. Sowings into existing grass work best in autumn.

Recommended sowing rates for wild seed mixtures are much lower than conventional lawn and amenity grass rates (4g/m2 compared with 25g/m2). This is deliberate, as rather than aiming for rapid ground cover to suppress all weeds, wild seeding aims to allow an extended period of establishment with room for both fast growing grasses and slower germinating flower seeds

*Grass sowing season*

Grass seed generally: March to May or September to October.

*Protecting/cutting*

*First cut of turfed areas*

When grass is approximately 60mm high remove debris, litter and all stones and clay balls larger than 25mm in any dimension and roll with a light roller.
About 48 hours later and when grass is reasonably dry cut with a sharp five bladed cylinder box mower to approximately 25mm high. Remove and dispose of all arisings.

*First cut of lawns*

When grass is 75 mm high remove debris, litter and all stones and earth clods larger than 25 mm in any dimension, and when grass is reasonably dry, cut to approximately 25 mm high, using a cylinder mower
Arisings: remove from site

*First cut of general areas – species rich mix areas:*

Mow newly sown flowering lawns regularly (every 7 -10 days during growing season) throughout the first year of establishment. Cut to a height of 40-60mm, removing cuttings if dense. This will gradually develop a good sward structure, help maintain balance between faster growing grasses and slower developing wild flowers, and control annual weeds.

*Management once established*

Mow regularly as a lawn but not too short (25-40mm) with hand machinery.
To permit flowering, mowing can be relaxed from late June. Cut again when the sward gets untidy (after 4-8 weeks). Mowing may be suspended earlier in the year to allow cowslips to flower. Heavy quantities of cuttings should be collected and removed from site.

*First cut of wildflower grassed areas*

Timing: When grass is reasonably dry.
Height of initial growth: 150-200 mm.
Preparation:
Debris and litter: Remove.

Stones and earth clods larger than 25 mm in any dimension: Remove
Height of first cut: 40-60 mm. NB: cutting must be conducted when reptiles are active to ensure they are not harmed during cutting operations. No lower than 150mm on reptile's sites – minimum three cuts should be conducted in the first year to height of 40-60cm, a single cut on October through to February to no lower than 150mm in any year thereafter.
Only use handtools - Mower type: Rotary or strimming (area dependant).
Arisings: leave cuttings to dry for 1 – 7 days then remove from site.

*SUDs Ponds and Swales*

The ponds and swales will be planted with a native seed mix for wetlands. This wetland meadow mix will be cut regularly from late summer onwards to 40-60cm in the first year only, to control annual weeds from the soil in the first growing season.

*Extracts from Bakerwell Ecology M+M*

*After the first year, the wetland meadows will be cut once annually after flowering in July or August to no lower than 150mm. Further cuts to the same height can be undertaken between November to February. The cuttings will be left to dry for 1-7 days then removed from site. Where permanent water is retained, a 1m boundary will left uncut around the edge as cover for species leaving the pond and swales.*

*During the first two years following ponds and swale creation, algae such as blanket weed should be thinned to a third of coverage. Care should be taken when clearing out algae that this does not disturb wildlife inhabiting or breeding within the plant mass. Algae can be removed by hand or using a pitchfork and should be left on the ditch edge for 48 hours to allow any animals to re- colonise the pond, before it is taken away for disposal.*

*SUDs ponds and swales can become clogged with plants or sediment over time, this will reduce their effectiveness as SUDs and as wildlife features. Woody material will be removed from the SUDs features every 2-3 years to avoid scrub encroachment and encourage in-stream vegetation to develop. Where sediment and aquatic vegetation is removed, no more than one quarter of the area should be cleared in any one year. Material should be left on the pond bank for at least 48hrs before being removed and composted of disposed of properly to allow wildlife time to re-enter the water. Dredging can be carried out annually after a two-year rest period following construction if there has been an accumulation of sediment.*

*The presence of invasive alien species should also be monitored and managed if found to be present, with fish being removed humanely. No fertilisers or herbicides should be used within this area, with the exception of treatment of invasive species.*

*Failures of seeding/turfing*

Duration: Carry out the following operations from completion of seeding/ turfing until: the end of the rectification period. Monitoring for wildflowers grassland will only apply to those being retained.
Defective materials or workmanship: Areas that have failed to thrive.
Exclusions: Theft or malicious damage.
Method of making good: Recultivation and reseeding/ returfing.
Timing of making good: The next suitable planting season.

*Ecological Features*

Ecological features and management requirements for the landscape buffer area to the north of the site and the associated swale zone are detailed in the EMP prepared by Bakerwell (2019) "Enhancement, Mitigation, Management and Monitoring Plan for Landscape and Ecology". Bakerwell; Kent

## Part B - Zone Conditions

Tailored maintenance schedules for each Zonal Area are included in Appendix C along with the Zonal Plan

# 6.0 REFERENCES

References:

EMP : Bakerwell (2019) Enhancement, Mitigation, Management and Monitoring Plan for Landscape and Ecology. Bakerwell; Kent

# APPENDICES

# APPENDIX A

## PLANTING SPECIFICATION FOR REPLACEMENT PLANTS

APPENDIX A

References to the CMO in this Appendix are taken to mean once transfer of responsibility to the CMO has occurred, following the formal and agreed defects periods.

## PLANTING SPECIFICATION FOR REPLACEMENT PLANTS

### A1.1 TRANSPORT AND HANDLING

A1.1.1 Transport and handling shall be carried out in accordance with season and good horticultural practice.

Transport and handling shall comply with CPSE 'Handling and establishing landscape plants' (obtainable from the Horticultural Trades Association) Part I, Part II and Part III, paragraphs 1.3.3 to 1.3.6, 3.0, and 4.0.

All packages shall be adequate to protect the plants and prevent their drying out or damage of any kind during transportation.

All plants must be in a turgid condition and stacked in such way that breakage or crushing by the weight of the plants above or securing ropes will not occur in transit.

The plants shall be loaded in a manner suitable to facilitate simple unloading techniques which are not labour intensive and minimise risk of damage.

The growers' price shall be taken to include packaging and carriage within a 500 mile radius from the growers' nursery.

Protect plants/trees from frost. Handle plants/trees with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.

Plant packaging: co-extruded polythene bags. Packaging of bulk quantities: pallets or shrink wrapped

### A1.2 TREES, SHRUBS AND HERBACEOUS

#### A1.2.1 TREES GENERALLY

All plants shall be true to name and character and shall be supplied as bare-rooted, root-balled or container grown. Unless otherwise stated all trees shall be supplied root-balled. They shall be grown and handled according to good horticultural practice and according to all current UK Government and EC regulation. The grower shall be expected to carry out thorough and rigorous production methods to ensure that the trees are of the highest standard.

#### A1.2.2 SEMI-MATURE TREES

Semi-mature trees shall conform with BS 4043:1989 and shall have a stem girth as specified in the schedules at 1 metre above ground level. They shall have been last transplanted no more than 3 years previously and shall be lifted with a soil rootball appropriate to the size of the tree.

These shall be:

| Girth Size Rootball | Minimum diameter Rootball | Depth of |
|---|---|---|
| 20-25 cms | 100 | 70 |
| 25-30 cms | 100 | 70 |
| 30-35 cms | 110 | 90 |
| 35-40 cms | 120 | 90 |
| 40-45 cms | 140 | 100 |
| 45-50 cms | 140 | 100 |
| 50-60 cms | 160 | 110 |

Trees shall have a well developed, balanced head, either well-branched or with an upright central leader and laterals depending on species. Branch framework shall consist of a minimum of 5 main branches with lateral shoots. Trees shall have a good fibrous root system and shall have been transplanted as scheduled to build up main roots with laterals and fibre.

All semi-mature trees shall be supplied root-balled as scheduled and conducive with successful transplanting. Prior to lifting, the lower branches and clear stem shall be wrapped down to ground level in accordance with BS 4043 using 150mm maximum hessian strip. Insulation wrapping shall overlap to form a double thickness and shall be securely bound with cord.

Prior to lifting all branches are to be tied to avoid damage during lifting, transit and off-loading.

All trees are to be loaded to avoid breaking or crushing during the lifting, transit and off loading. During lifting, loading and off-loading, trees shall only be lifted by the root-ball which shall be supported by chains, straps or a frame. In addition, support shall be provided on the main stem to control movement of the tree during lifting. No tree shall be lifted by means of the trunk of main stem.

### A1.2.3 ROOT-BALLED TREES

Root-balled trees shall be adequately supported by wire mesh, hessian, or other suitable material to prevent collapse of the rootball. The rootball shall be minimum 600mm diameter and sufficient size to contain the fibrous roots. Trees which have a collapsed root ball to expose major parts of the root system shall be rejected by the CMO on delivery or replaced if damaged during handling on site.

### A1.2.4 CONTAINER GROWN TREES

Container grown trees shall be supplied in rigid containers of 80L capacity. All trees shall have been grown in containers for at least one full growing season prior to delivery.

The root systems will thoroughly permeate the contents of the container with clear evidence of the proper establishment of a healthy fibrous root system within the full volume of the container. Plants showing signs of being pot bound or waterlogged will not be acceptable.

The compost used will hold sufficient reserves of nutrients to maintain the plants in a satisfactory condition for a reasonable period of time after leaving the Growers Nursery. The compost shall be free from any perennial weeds and have reasonable moisture content. The compost shall not contain peat from UK Sites of Special Scientific Interest or the equivalent from other countries.

### A1.2.5 CONTAINERISED TREES

When requested to containerise the plants, the plants shall be placed in containers of appropriate size and managed to encourage the continued development of the plants to ensure they 'root through'. Specification for the development and condition of the trees shall be as above.

### A1.2.6 CLEAR STEM TREES

All clear stem trees shall have a full and well developed crown with uniform leaf coverage appropriate to their age and species. All shall bear a single central leader. Unless otherwise stated, they shall have a 1.8m clear stem height.

### A1.2.7 FEATHERED TREES

All feathered trees shall be fully furnished with single leader and well developed laterals to ground level with uniform and full leaf coverage appropriate to their age and species.

### A1.2.8 CONTAINER GROWN SHRUBS

All plants will be true to name and character and shall be supplied container grown. They shall have been grown and handled according to good horticultural practice and to all current UK government and EC regulations.

All plants shall be well developed and bushy and grown in a container for at least one full growing season prior to delivery.

The root system will thoroughly permeate the contents of the container with clear evidence of the proper establishment of a healthy fibrous root system within the full volume of the container. Plants showing signs of being pot bound or waterlogged will not be acceptable.

They shall show a high degree of extension growth typical to the species or type and appropriate to the specified container size.

The compost will hold sufficient reserves of nutrients to maintain the plant in a satisfactory condition for a reasonable period of time after leaving the growers nursery. The compost shall be free from any perennial weeds and have reasonable moisture content. The compost shall not contain peat from UK Sites of Special Scientific Interest or the equivalent from other countries.

All plants shall on delivery be free from diseases and pests and materially undamaged.

All plants shall be properly hardened off before delivery.

A1.2.9 All plants supplied shall come from nurseries accredited by the HTA as grown in accordance with the National Plant Specification. If the CMO wishes to use plants imported from overseas or supplied from non-accredited nurseries then approval from the Landscape Architect must first take place.

## A1.3 OTHER MATERIALS

### A1.3.1 LABELS

Provide each tree/plant or group of trees/plants of a single species or cultivar with supplier's labelling for delivery to site, showing:
- The full botanical name
- Total number
- Number of bundles
- Part bundles
- Supplier's name
- Employer's name and project reference
- Plant specification, in accordance with the scheduled National Plant Specification categories

Label all trees/plants in accordance with the relevant part of BS 3936.

### A1.3.2 PLANTING COMPOST

Shall comprise suitable humus-forming material such as leaf mound, spent mushroom compost, composted bark, or other suitable organic material. Use of peat is not permitted.

Planting compost shall be obtained from an approved source and the CMO shall notify the Landscape Architect of the material content he proposes to use before carting to site.

An analysis of the compost should be obtained and supplied to the Landscape Architect prior to its approval.

### A1.3.3 POLYMER

Shall be 'Broadleaf P4' Agricultural polymer or equivalent approved. Available from Agricultural Polymers Ltd, Pillar and Lucy House, Merchants Road, Gloucester GL1 5RG., or equivalent approved.

### A1.3.4 ROOT DIP

Shall be 'Broadleaf' root dip as supplied by Agricultural Polymers Ltd or equivalent approved.

### A1.3.5 ANTI-DESICCANT SPRAY

Anti-Desiccant spray shall be a liquid, pine oil based (25% W-WDI-L -P-methene) anti-transpirant mixed in accordance with the manufacturer's instructions. The type of anti-desiccant shall be stated by the supplier.

### A1.3.6 CHEMICAL FERTILISER

Manufacturer and reference: Sierrablen Flora
Apply evenly over all areas to be planted at rates appropriate to planting type to manufacturers specification.

### A1.3.7 TREE STAKES

75/100mm turned pressure treated tree stakes, Pointed at the end, with a chamfered top and treated with Green Osmose AE500 or similar approved. Supplied by Green-tech Ltd, Rabbit Hill Business Park, Great North Road Arkendale, Knaresborough,
HG5 0FF T: 01423 332100 F: 01423 332101 sales@green-tech.co.uk

(Where applicable-all larger trees to be underground guyed)

### A1.3.8 TREE TIES

Holdfast webbed Belting, 38mm (w) x 50m. in combination with Rainbow thermoplastic ribbed rubber cushions and Holdfast balkck rubber backing blocks. Supplied by Green-tech Ltd, Rabbit Hill Business Park, Great North Road Arkendale, Knaresborough,
HG5 0FF T: 01423 332100 F: 01423 332101 sales@green-tech.co.uk

(Where applicable all larger trees to be underground guyed)

### A1.3.9 UNDERGROUND GUYING

Semi-mature trees are to anchored using appropriate Platipus anchoring kit. Available from: Platipus Anchors Ltd, Perrywoods Business Park, Honeycrocks Lane, Salfords (nr Redhill), Surrey, Tel: 01737 762300 or equivakent approved.

### A1.3.10 MULCH GENERERALLY

Clear all weeds, water, leaf matter and soil thoroughly, and mulch the whole surface of planting beds with 75mm settled layer of mulch

The mulch shall be from an approved source and representative sample of the mulch shall be supplied for approval prior to delivery to site.

Edge mulch with timber edging when an edging is required.

### A1.3.11 BARK MULCH

Shall consist of matured, well composted British conifer bark with an even particle size distribution between 5-35mm. All dust and fine material to be expended. The mulch shall contain less than 5% wood. The mulch shall be pest, disease and weed free and be free of Methyl Bromide contamination.

### A1.3.12 STONE CHIPPINGS

Shall match existing chippings in all areas: 6mm-dust CEDEC, laid to a thickness of 50mm.
Source of chippings: CED Ltd 01708 867237 or equal approved.
Lay mulch over Terram 1000 geotextile membrane, well secured and hidden.

### A1.3.13 IMPORTED TOPSOIL (SHRUB BEDS)

To BS 3882, grade: Multi-purpose
Source to be approved by LA prior to importing to site.
Provide a declaration of analysis including information detailing each of the relevant parameters given in BS 3882 for the grade of topsoil specified

### A1.3.14 TREE PIT SOIL (STREETS)

Provide as necessary to make up levels
Supplier: TBC

## A1.4 INSTALLATION AND WORKMANSHIP

### A1.4.1 GENERALLY

All work specified in this section shall be carried out in accordance with BS 4428: 'General Landscape Operations'.

### A1.4.2 STORAGE

If the plants are not to be planted within 24 hours of delivery, they shall be heeled in by placing the roots in a prepared trench, covering them with fine soil and firming well or watering in to prevent air pockets. Container grown plant material will be stored upright in a location on site agreed with the Landscape Architect or on-site manager. Any plant material stored on site shall be protected from drying winds, frost and shall be watered.

### A1.4.3 ANTI-DESICCANT SPRAY

All trees planted in full leaf, evergreens and deciduous material planted out of season, shall be treated with anti-desiccant spray according to the manufacturer's instructions no more than 3 days before lifting.

### A1.4.4 SEASON

All containerised shrubs and trees will be planted with prior agreement of the Landscape Architect and on-site manager. Root-balled trees will be planted during the October-March planting season.

### A1.4.5 PLANTING CONDITIONS

All planting works shall be carried out in accordance with the agreed programme when soil and weather conditions are suitable and as directed by the Landscape Architect. No planting shall be carried out when the ground is frozen, snow covered, waterlogged or excessively dry.

In the event of the planting taking place during prolonged hot and dry conditions, the CMO is to ensure that the plants are well watered to ensure successful establishment.

### A1.4.6 WORK BY MACHINE OR HAND

All operations herein after described may be carried out by suitable machines or by hand. Any work in confined or awkward spaces or areas or which it is impracticable to carry out by machine for any reason shall be executed by hand.

### A1.4.7 APPLICATION OF HERBICIDE

All planting areas shall have all weeds killed prior to planting with the exception of any areas containing existing native vegetation which is to be retained and additional planting added. Application in accordance with above clauses.

### A1.4.8 PLANTING GENERALLY

The CMO shall be responsible for setting out all areas of planting to the satisfaction of the Landscape Architect and shall rectify any errors in setting out at his own expense. Replacement plants shall be planted in the numbers indicated on the original drawings or as or as directed by the Landscape Architect and shall be evenly spaced for a group of any one plant species. Whilst rigid accuracy in spacing and setting out is not essential, the CMO will be expected to achieve the general distribution of plants as shown on the drawing.

No planting shall take place unless the ground is free of perennial weeds. Carefully position the root-balls of all plants and trees to suit their original growth habit and consolidate the soil firmly around them. All plants are to have the same relation to the ground as they had in their original nursery position. Great care should be taken to avoid damage to the root system, and stem when planting. The rootball around pot grown plants, evergreens etc. shall not be disturbed. If damage to the root is done, the root shall be cut clean with a knife and treated with 'Alginure' root-dip.

### A1.4.9 CULTIVATION

Areas to feature ornamental material shall have all weeds killed prior to planting. Beds shall be dug by hand to a minimum depth of 300mm, breaking down all lumps, incorporating planting compost and polymer as specified below, then forking, raking and collecting and removing from site all weeds and any debris greater than 50mm diameter. The surface is to be left with a medium tilth (particles less than 10mm diameter) with smooth, flowing contours, removing all minor hollows and ridges. Finished levels after settlement shall be 30mm above adjoining paving or kerbs, not less than 150mm below the dpc of adjoining buildings and smoothly merged with adjoining soil areas. Finished topsoil grading shall be approved by the Landscape Architect prior to commencement of planting.

## A1.5 TREE PLANTING

### A1.5.1 SETTING OUT

Light stakes or canes are to be placed at all tree positions, as marked on the drawings; the right is reserved to adjust the exact position of the trees after they have been set out on site. Forty-eight hours notice shall be given before tree pits or trenches are to be dug in order that the Landscape Architect may approve or adjust the positions.

### A1.5.2 TREE PITS / TRENCHES

Pits or trenches shall be prepared before trees arrive and the CMO shall ensure that during periods of intense and prolonged frost suitable measures shall be taken to protect the bottom and sides of the pits / trenches and piles of topsoil from becoming frozen.

For trees with root-balls, pits / trenches are to be excavated to a depth of 1m and should be adjusted at planting to ensure a depth of 225mm greater than the depth of rootball and 250mm backfill around the sides of the rootball.

During the digging operation, topsoil should be stripped first and put aside for re-use; subsoil and unusable material should be carted away to tip.

The bottom of the tree pit should be broken up to a depth of 225mm to assist drainage and root penetration. Compacted glazed sides of pits resulting from the use of mechanical diggers in heavy soils should also be roughened.

Ensure that any drainage layer at 1100mm below ground level is intact. Replace any damaged geotextile wrapping to the drainage layer.

Carefully work around or remove the existing aeration system.

### A1.5.3 BACKFILL TREES IN HARD AREAS

Backfill is to consist of an approved tree planting soil suitable for use in a hard paved area and in accordance with the tree pit type implemented (i.e. Silva Cell OEA). This is to have slow release fertiliser at manufacturers recommended rates and polymer added at 100g per cu./m. of planting pocket capacity.

If the aeration system is damaged it is to be replaced by a similar system (Heidemy ventilation and irrigation system from Peter Scott Tree Care for example, tel. 020 8254 5889) or equivalent approved.

Any surplus excavated from the pits / trenches is to be removed and either spread in location as agreed with the Landscape Architect or removed from site as decided by the Landscape Architect.

Secure trees with the existing underground guy or with a matching system as specified.

The backfilling shall be firmed down and compacted in strict accordance with the manufacturers instructions.

The Landscape Architect reserves the right to inspect all pits and trenches prior to the CMO being allowed to backfill.

All trees shall be watered thoroughly immediately after backfilling.

Any subsequent settlement over tree pits / trenches shall be allowed for or made good by the CMO.
The tree shall be set in the centre of the pit or trench.

Any damaged roots should be cut to sound growth. The trees should be vertical and parallel to the stake where this method of securing is indicated, and on the leeward size. The bottom of the planting pit should be covered with 50-75mm of backfill mixture before the tree is placed in the hole. Trees and shrubs shall be planted at the depth at which they have been previously growing.

The depths at the centre of the pits shall be adjusted to ensure that the trees are planted to the depth of the nursery soil mark on the stem, and this shall be maintained on the finished ground level to allow for settlement after planting. All damaged roots shall be painted with fungicidal sealant.

All cages, platforms, ties etc. shall be removed. All wrappings shall be removed, unless damage is likely to result from this operation, in which case, wrappings shall be left in place and the surplus cut away. Wrapping around top of root ball should be loosened.

Trees with the crown tied-in may have the fastenings removed and the branches freed before or after planting at the discretion of the CMO.

Spread and level 75mm depth, 10mm nom. Sized quartz chippings across full extent of

opening between slabs. Geotextile weed suppressant membrane to be laid onto urban soil to take chippings.

### A1.5.4 PLANTING SEMI-MATURE TREES (IN SOFTWORKS AREAS)

Transplant to BS 4043 with additional precautions and measures noted below.

The bottom of the tree pit should be covered with 50-75mm of backfill mixture before the tree is positioned vertically in the hole.

The backfill mixture shall be finely broken, thoroughly mixed, placed and carefully packed around the rootball in layers not deeper than 150mm. Each layer shall be lightly consolidated in the pit and the top layer heeled firmly around the root collar. Trees shall be planted at the depth at which they have been previously growing.

Platipus Anchors shall be required for all semi-mature trees. The anchoring kit shall be installed accordingly to the manufacturer's recommendations. The anchoring kit is to be fixed over 3no. 100mm x 50mm x 20mm pressure impregnated softwood planks arranged in a triangle over the rootball and secured with 3no. galvanised nails at each corner. Planks to be sawn off at the appropriate length. After tightening the turnbuckles, lightly cover them with oil or grease. A mark shall be painted on the base of the trunk, above ground level to indicate the location of the turnbuckle for future adjustment.

All semi-mature trees shall be fitted with watering tubes. Where replacements are made and watering tubes are still in good working order these may be re-used.

The trunks of semi-mature trees in paved areas, particularly those with thin bark are to be wrapped with 150mm wide hessian wrap to reduce drying and prevent sun scorch.

## A1.6 SHRUB AND HERBACEOUS PLANTING

### A1.6.1 PLANTING COMPOST

A 50mm thick consolidated layer of planting compost shall be spread over shrub beds and well worked into the soil during cultivation. Prior to delivery, the Landscape Architect shall approve a sample load for quality.

### A1.6.2 POLYMER

Polymer shall be incorporated into the soil during cultivation at the rate of 100g/m$^2$.

### A1.6.3 SETTING OUT

Planting beds shall be pegged out in accordance with the planting plan. Figured dimensions shall be taken for preference, but where these are not given and the limits are not defined by paths, paving or other works, scaled dimensions may be used.

### A1.6.4 PLANT SPACING

Plant spacing shall be carried out in accordance with the contract drawings. The Landscape Architect reserves the right to adjust the exact position of specimen shrubs after they have been pegged out. The aim will be to space the plants evenly so that when established they will completely fill the areas indicated as precisely as possible. The extent

of the area to be filled by each species shall first be defined by plants spaced around the perimeter. The remaining plants shall then be used to fill the centre of the area in an informal manner avoiding straight lines and regular geometric patterns.

### A1.6.5 PLANTING SHRUBS AND HERBACEOUS

Plants shall be planted at the same depth as previously grown, with care being take to avoid any damage to the root system and stems. Sufficient soil shall be taken out from the bed to enable roots to be fully spread. Plants shall be placed in position showing their best side to the front, their roots to be fully spread out and packed around the fine soil. Care shall be taken to avoid breaking up the rootball of pot grown shrubs, but plants that have become pot bound shall have their roots gently eased out. The plants shall be gently shaken to allow the fine soil to surround the roots. As the rest of the soil is returned it shall be well consolidated and firmed around the roots to eliminate all air pockets.

### A1.6.6 PLANTING CLIMBING PLANTS

Remove the full depth of topsoil, setting it aside for re-use and excavate a hole 300 x 300 x 300mm deep and remove any subsoil encountered from site. Sufficient soil shall be taken out from the bed to enable the roots to be fully spread. The bottom 50mm of the pits shall be forked over, incorporating planting compost and polymer at the rates specified.

## A1.7 COMPLETION OF PLANTING

### A1.7.1 PRUNING

Immediately after planting, cut back carefully any damaged, dead or diseased branches Remove any weak, thin or malformed growth and treat wounds greater than 25mm diameter with a fungicidal sealant.

### A1.7.2 WATERING

Water all trees and plants thoroughly immediately after planting until field capacity is achieved.

### A1.7.3 MULCH

After watering spread a minimum 75mm deep layer of mulch as specified above over all plant beds. The mulch shall be moist at application. After mulching, all stems, particularly of ground cover species shall be arranged above the surface of the mulch.

### A1.7.4 REPLACEMENT OF PLANTS

The CMO shall make good, at his own expense, all losses of trees, shrubs and other material from whatever cause.

Replacement stock shall be of a standard to that specified above and in the original specification showing vigorous growth and free from disease.

### A1.7.5 MAINTENANCE OF NEWLY PLANTED TREES AND SHRUBS AND HERBACEOUS

The CMO shall maintain the replacement planting to the same standard as the rest of the planting and in line with the maintenance and management document.

The CMO shall maintain and guarantee the plants from the time of planting and for the 12

months and subsequently in accordance with the contract.

### A1.7.6 REINSTATEMENT OF LAWNS

Reinstate worn areas as follows:
Remove damaged turf to a depth of 30mm, cultivate to a fine tilth and either:
Re-turf using turf of a quality and appearance to match existing, or
Fill with fine topsoil to BS 3882 Premium grade, substantially free form stones, debris and weeks, and reseed with a seed mix to match existing grass in quality and appearance.
Provide protection and watering to promote successful germination and /or establishment.

# APPENDIX B

# MAINTENANCE VISIT REPORT SHEET

# Chilmington Parcel R
# SITE MAINTENANCE VISIT REPORT

| | |
|---|---|
| DATE: | |
| CMO : | |
| CONTRACTORS REP: | |
| TIME ARRIVED: | |
| TIME DEPARTED: | |
| SITE ADDRESS: | |
| DESCRIPTION OF WORK COMPLETED: | |
| SIGNED - (CMO ) | |
| SIGNED - (S.O.) | |
| COMMENTS FOR ATTENTION OF LANDSCAPE ARCHITECT / ECOLOGIST INCLUDING NOTES ON ANY NATURE CONSERVATION OBSERVATIONS: | |

# APPENDIX C

# ZONAL MAINTENANCE OPERATION SCHEDULES

# APPENDIX D

# ZONAL PRIORITY PLANS

# APPENDIX C

# ZONAL MAINTENANCE OPERATION SCHEDULES

**APPENDIX C: LANDSCAPE MAINTENANCE SCHEDULE ZONE A** –Notes: Unless otherwise agreed all works within this schedule are the responsibility of the nominated landscape maintenance contractor or estate managing agent as instructed on behalf of the CMO. Timings for operations are indicative and for guidance only and will be subject to site specific and/or CMO requirements. Additional maintenance requirements for specialised equipment may be necessary – refer to manufacturer's guidance.

| Area | Maintenance Operation | Objective | Notes | Frequency of Operation | Action By |
|---|---|---|---|---|---|
| Generally (Whole Site) | Litter Picking | To maintain high standard of appearance | All contents to be bagged up and disposed of in the appropriate manner off site | Weekly | Landscape Maintenance Firm |
| | Emptying/clean litterbins. Dispose of waste. Clean as required including cigarette stub plates if applicable and immediate surrounding area. | To maintain high standard of appearance to area and cleanliness. Ensures litterbins are useable at all times. | All contents to be bagged up and disposed of in the appropriate manner off site | Weekly | Landscape Maintenance Firm |
| | Manual weed control | To ensure ongoing success of landscape planting and hard surfaces remain weed free. | To be undertaken by hand, using hand tools only throughout all planted areas and hard surfaces. All weeds to be removed, bagged up and disposed of off site | Monthly | Landscape Maintenance Firm |
| | Chemical weed control (non-residual) | To ensure ongoing success of landscape planting. | Generally utilised where all other methods of weed control are proven to be unsuccessful. | As required and approved (generally monthly during growing season) | Landscape Maintenance Firm |
| | Mechanical cleaning of hard surfaces | To maintain high standard of appearance to area and to ensure all hard surfaces remain free from debris/trip hazards | Road/path sweepers and pressure washers only permitted, use of chemical not permitted. | As required and approved (generally monthly) | Landscape Maintenance Firm |
| | Removal of dog dirt from dog bins and ground | To ensure the park remains a clean, safe and pleasant environment for all users. | Remove dirt and dispose of by bagging and disposal off site. | Weekly | Landscape Maintenance Firm |
| | Graffiti removal | To maintain high standard of appearance | | Monthly | Landscape Maintenance Firm |
| | Clearance of fallen leaves | To reduce potential slip hazards | Leaf litter to be disposed of off-site in a sustainable manner I.e. to a composting facility | Twice a month during Oct / Nov / Dec | Landscape Maintenance Firm |
| | Watering | All planting and seeded areas as required to ensure successful establishment and create a high quality pleasant landscaped environment. | Watering is envisaged to be required predominantly at regular intervals throughout the spring and summer months following planting works, however some additional watering may be required during excessive dry spells throughout the year. | As required (Generally 1-3 times a week during spring and summer and once a week outside this period). | Landscape Maintenance Firm |
| | Snow removal | Removal of snow from all hard surfaces, mature shrubs and trees. | Excessive snow to be removed from shrub / tree planting to avoid damage to planting due to weight from snow build up. | As required during winter months | Landscape Maintenance Firm |
| | Ice removal/gritting | Make safe all hard surfaces during extreme cold / icy spells and avoid hazards | Any products used must be non toxic to humans and animals, and 100% biodegradable and eco friendly. | As required during winter months | Landscape Maintenance Firm |
| Amenity Grass Areas | Grass cutting to height of between 35-40mm arisings spread on site if suitable. | To maintain high standard of appearance and ensure all amenity grassed areas are not overgrown and are suitable for use at all times. | The height of growth must not exceed 75 mm at any time. Trim all edges /obstructions prior to general cut and sweep adjacent hard surfaces. Bare areas and areas of dead grass that have failed to thrive shall be made good by re-cultivation and reseeding / turfing. | As required to ensure height is maintained. (Generally fortnightly during growing season between Mar & Oct) | Landscape Maintenance Firm |

| Area | Maintenance Operation | Objective | Notes | Frequency of Operation | Action By |
|---|---|---|---|---|---|
| Grass edging | To maintain high standard of appearance. | To be undertaken by hand using edging shears where grass areas meet hard surface edges, edges of planting beds and around newly planted trees. | As required to ensure height is maintained. (Generally weekly during growing season between Mar & Oct) | Landscape Maintenance Firm | Grass edging |
| | Over-seed / re-seed bare patches and areas of grassland that have failed. Using same grass mixes as originally proposed. | To ensure no bare patches exist and successful grass establishment where weeds have been removed or areas have failed to establish in order to maintain high standard of appearance. | Ongoing specific monitoring of areas of grassland and patches that have been re-seeded to ensure successful establishment. Amenity grass areas shall be maintained and watered well in accordance with overall ongoing management. | Bi-Annually as required during August-Sep and/or March-April. | Landscape maintenance Firm |
| | Recreational amenity grass areas to be rolled as required during growing season between March and October following grass cutting. | To ensure a firm, level and well drained surface in order to maintain high standard of appearance and use for recreational purposes. | Heavy roller shall be used at varied frequency, starting with light and infrequent passes. Rolling should be undertaken when ground is moist but avoid wet or saturated ground conditions as well as completely dry soil. | As required following grass cutting, to ensure level and firm surface (During growing season between Mar & Oct) | Landscape Contractor |
| Wildflower Grass Areas | Single summer hay-cut, leaving hedgerow margin areas unmown each time. Cuttings to be left to dry *in-situ* and shed seed and removed 1-7 days after cut. Maintenance cuts throughout autumn and winter to maintain short sward. | To maintain high standard of appearance and ensure all wildflower grassed areas create a tall sward and offer diversity and foraging places / shelter for wildlife and ecology purposes. Hedgerow margins areas shall be left unmown. | Wildflower areas should have a cutting regime centred largely around a summer hay cut, leaving hedgerow margins areas unmown each time. An annual hay cut takes place in later summer following which grass is kept at a short sward height through autumn and winter via cutting and allowed to grow between Spring and early summer prior to the hay cut, with remaining unmown areas allowed to develop into tall swards for ecological benefits being strimmed every 1-2 years. Arisings to be left to dry and shed seed following the summer hay cut. Cuttings to be removed offsite directly following autumn/winter maintenance cuts. | Single annual hay cut in late July-early August to 40-75mm with arising left to dry *in-situ* and shed seed for 1-7days before removal. Minimum of two cuts between August and March to maintain winter sward height of <75mm with arisings removed immediately. | Landscape Maintenance Firm |
| | Over-seed / re-seed bare patches and areas of grassland that have failed. Using same wildflower grass mixes as originally proposed. | To ensure no bare patches exist and successful grass establishment where weeds have been removed or areas have failed to establish in order to maintain high level of diversity. | Ongoing specific monitoring of areas of grassland and patches that have been re-seeded to ensure successful establishment. Wildflower grass areas shall be maintained and watered well in accordance with overall ongoing management. | Bi-Annually as required during August-Sep and/or March-April. | Landscape Maintennance Firm |
| Tree Planting | Check all trees. Removal of dead, dying or diseased trees & pruning as required. Replacement with same or an approved substitution if unavailable. | To ensure success of scheme and to promote healthy future growth and keep all footpaths and routes clear from obstructions | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons. | Monthly (Pruning as required) | Landscape Maintenance Firm |
| | Check tree stakes, guards, ties and remove once fully established (max 5years) | To provide planting with the greatest opportunity for success and to ensure ties / stakes / guards do not impact tree growth. | | Monthly | Landscape Maintenance Firm |
| | Spray off 1200mm radius around the base of each tree | To minimise competition from surrounding weed/grass growth | | Bi-Annually | Landscape Maintenance Firm |
| | Crown lift specimen trees as they mature where necessary to ensure clear sight lines / activity zones and footways / roadways. | To ensure clear sight lines / activity zones and footways / roadways and avoid vandalism. | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons. | Bi-Annually | Landscape Maintenance Firm |
| Existing Trees | Check all trees. Removal of dead, dying or diseased trees & pruning as required. | To promote healthy future growth and keep all footpaths and routes clear from obstructions | All tree surgery works should be carried out in accordance with British Standard BS 3998 (2010), *Recommendations for tree work*, and should be undertaken by appropriate persons as necessary. | As required | Landscape Maintenance Firm |
| Hedge Planting | Check all plants. Removal of dead, dying or diseased plants & pruning as required. Replacement with same or an approved substitution if unavailable. | To ensure success of scheme and to promote healthy future growth and robust hedgerow is created. | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons. | Monthly (Pruning as required) | Landscape Maintenance Firm r |
| | Check tree stakes, guards, ties and remove once fully established (max 5years) | To provide planting with the greatest opportunity for success and to ensure ties / stakes / guards do not impact tree growth. | | Monthly | Landscape Maintenance Firm |

| Area | Maintenance Operation | Objective | Notes | Frequency of Operation | Action By |
|---|---|---|---|---|---|
| Existing Hedges | Check all hedgerows. Removal of dead, dying or diseased plants & make good gaps with similar species. Pruning as required in early spring or late summer to maintain broad A-shape of hedge and remove suckering growth annually. | To promote ongoing healthy future growth and maintain shape of existing hedgerows. | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons.<br>Works to existing established hedgerows to avoid general bird breeding season. | Monthly (Pruning as required) | Landscape Maintenance Firm |
| | Height of formal existing hedgerows to be maintained at 1.2-1.5m, mixed native hedgerows and boundary hedges allowed to grow taller and/or maintained at existing height or as specified. | To promote ongoing healthy future growth and maintain shape and height of existing hedgerows. | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons.<br>Works to existing established hedgerows to avoid general bird breeding season. | Monthly (Pruning as required) | Landscape Maintenance Firm |
| Structural Native Planting | Check all plants. Removal of dead, dying or diseased plants & pruning as required. Replacement with same or an approved substitution if unavailable. | To ensure success of scheme and to promote healthy future growth and keep all footpaths and routes clear from obstructions | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons. | Monthly (Pruning as required) | Landscape Maintenance Firm |
| | Check stakes, guards, ties and remove once fully established (max 5years) | To provide planting with the greatest opportunity for success and to ensure ties / stakes / guards do not impact tree growth. | | Monthly | Landscape Maintenance Firm |
| | Thinning out of structural planting areas. | To ensure long term succession, remove low quality plants to encourage longer living species and development of structural planting. | The native structural / woodland planting belt should be actively managed as one cohesive unit and the maintenance of it shall be continued to encourage the future sustained growth of the woodland. | Annually | Landscape Maintenance Firm |
| Ornamental Shrub Planting | Removal of dead, dying or diseased plants Replacement with same or an approved substitution if unavailable. | To ensure success of scheme and to promote healthy future growth and high quality ornamental planting areas are created. | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons. | Monthly | Landscape Contractor |
| | Prune plants at a time and in a manner which is appropriate to the species growth habit and form. | To promote healthy plants and provide planting with greatest opportunity for success. | | Monthly (Pruning as required) | Landscape Maintenance Firm |
| | Re mulching to all planted areas to maintain specified depth. | To minimise weed growth within planting Areas. | Bark mulch to be certified to ensure it is an inert product and in accordance with drawings / specifications. | Bi-Annually | Landscape Maintenance Firm |
| Boundary Treatments (Inc Fencing & Gates) | Assessment of all boundary treatments (and repair where required). All boundaries within playspace and public open spaces, (including timber post and rail fencing, metal railings and self closing gates). | To maintain high standard of appearance and functionality of all boundaries, fencing and gates. To ensure access to existing watercourse is restricted. | Any damage is to be fenced off immediately to avoid risk of injury and repaired at the earliest opportunity. | Monthly | Landscape Maintenance Firm |
| | Re-stain timber fencing, seating, play equipment and other timber features. Apply preservative coatings as required in accordance with manufacturer's guidance. Paint metal work of fencing, railings, seating, play equipment and other metal features as required in accordance with manufacturers guidance. | To ensure longevity of the equipment in line with manufacturer's recommendations. | All treatments to be appropriate to specific use in/near play areas. Additional guidance from manufacturers should be sought. | As required and in accordance with manufacturers guidance (Annually) | Landscape Maintenance Firm |
| Street Furniture | Regular visual checking of all street furniture | To ensure quality and safety of all street furniture | Where defects occur, areas are to be cordoned off immediately to ensure safety, with repairs/replacement undertaken at the earliest opportunity using materials to match those original specified | Monthly | Landscape Maintenance Firm |
| | Restaining / Repainting if required by manufacturer guidance as per boundary treatments above. | To maintain high standard of appearance and functionality and improved longevity of all street furniture. | | As required | Landscape Maintenance Firm |
| Footpaths and other hard surfaces / paved areas | Regular visual checking of all hard surfaces | To ensure quality and safety of all hard surfaces | Where defects occur, areas are to be cordoned off immediately to ensure safety, with repairs undertaken at the earliest opportunity | Monthly / As required | Landscape Maintenance Firm |

**APPENDIX C: LANDSCAPE MAINTENANCE SCHEDULE ZONE B** –Notes: Unless otherwise agreed all works within this schedule are the responsibility of the nominated landscape maintenance contractor or estate managing agent as instructed on behalf of the CMO. Timings for operations are indicative and for guidance only and will be subject to site specific and/or CMO requirements. Additional maintenance requirements for specialised equipment may be necessary – refer to manufacturer's guidance.

| Area | Maintenance Operation | Objective | Notes | Frequency of Operation | Action By |
|---|---|---|---|---|---|
| Generally (Whole Site) | Litter Picking | To maintain high standard of appearance | All contents to be bagged up and disposed of in the appropriate manner off site | Weekly | Landscape Maintenance Firm |
| | Emptying/clean litterbins. Dispose of waste. Clean as required including cigarette stub plates if applicable and immediate surrounding area. | To maintain high standard of appearance to area and cleanliness. Ensures litterbins are useable at all times. | All contents to be bagged up and disposed of in the appropriate manner off site | Weekly | Landscape Maintenance Firm |
| | Chemical weed control (non-residual) | To ensure ongoing success of landscape planting. | Generally utilised where all other methods of weed control are proven to be unsuccessful. | As required and approved (generally monthly during growing season) | Landscape Maintenance Firm |
| | Mechanical cleaning of hard surfaces | To maintain high standard of appearance to area and to ensure all hard surfaces remain free from debris/trip hazards | Road/path sweepers and pressure washers only permitted, use of chemical not permitted. | As required and approved (generally monthly, less frequent in winter months) | Landscape Maintenance Firm |
| | Removal of dog dirt from dog bins and ground | To ensure the areas remains a clean, safe and pleasant environment for all users. | Remove dirt and dispose of by bagging and disposal off site. | Weekly | Landscape Maintenance Firm |
| | Graffiti removal | To maintain high standard of appearance | | As required | Landscape Maintenance Firm |
| | Clearance of fallen leaves | To reduce potential slip hazards | Leaf litter to be disposed of off-site in a sustainable manner I.e. to a composting facility | Twice a month during Oct / Nov / Dec, adopted roads/footpaths | Landscape Maintenance Firm |
| | Watering | All planting and seeded areas as required to ensure successful establishment and create a high quality pleasant landscaped environment. | Watering is envisaged to be required predominantly at regular intervals throughout the spring and summer months following planting works, however some additional watering may be required during excessive dry spells throughout the year. | As required in periods of drought | Landscape Maintenance Firm |
| | Snow removal | Removal of snow from all hard surfaces, mature shrubs and trees. | Excessive snow to be removed from shrub / tree planting to avoid damage to planting due to weight from snow build up. | As required during winter months | Landscape Maintenance Firm |
| | Ice removal/gritting | Make safe all hard surfaces during extreme cold / icy spells and avoid hazards | Any products used must be non toxic to humans and animals, and 100% biodegradable and eco friendly. | As required during winter months | Landscape Maintenance Firm |
| Amenity Grass Areas | Grass cutting to height of between 45-75mm arisings spread on site if suitable. | To maintain high standard of appearance and ensure all amenity grassed areas are not overgrown and are suitable for use at all times. | The height of growth should not exceed 75 mm at any time. Trim all edges /obstructions prior to general cut and sweep adjacent hard surfaces. Bare areas and areas of dead grass that have failed to thrive shall be made good by re-cultivation and reseeding / turfing. | As required to ensure height is maintained. (Generally fortnightly during growing season between Mar & Oct) | Landscape Maintenance Firm |

| Area | Maintenance Operation | Objective | Notes | Frequency of Operation | Action By |
|---|---|---|---|---|---|
| | Over-seed / re-seed bare patches and areas of grassland that have failed. Using same grass mixes as originally proposed. | To ensure no bare patches exist and successful grass establishment where weeds have been removed or areas have failed to establish in order to maintain high standard of appearance. | Ongoing specific monitoring of areas of grassland and patches that have been re-seeded to ensure successful establishment. Amenity grass areas shall be maintained and watered well in accordance with overall ongoing management. | Bi-Annually as required during August-Sep and/or March-April. | Landscape maintenance Firm |
| Wildflower Grass Areas | Single summer hay-cut, leaving hedgerow margin areas unmown each time. Cuttings to be left to dry *in-situ* and shed seed and removed 1-7 days after cut. Maintenance cuts throughout autumn and winter to maintain short sward. | To maintain high standard of appearance and ensure all wildflower grassed areas create a tall sward and offer diversity and foraging places / shelter for wildlife and ecology purposes. Hedgerow margins areas shall be left unmown. | Wildflower areas should have a cutting regime centred largely around a summer hay cut, leaving hedgerow margins areas unmown each time. An annual hay cut takes place in later summer following which grass is kept at a short sward height through autumn and winter via cutting and allowed to grow between Spring and early summer prior to the hay cut, with remaining unmown areas allowed to develop into tall swards for ecological benefits being strimmed every 1-2 years. Arisings to be left to dry and shed seed following the summer hay cut. Cuttings to be removed offsite directly following autumn/winter maintenance cuts. | Single annual hay cut in late July-early August to 40-75mm with arising left to dry *in-situ* and shed seed for 1-7days before removal. Minimum of two cuts between August and March to maintain winter sward height of <75mm with arisings removed immediately. | Landscape Maintenance Firm |
| | Over-seed / re-seed bare patches and areas of grassland that have failed. Using same wildflower grass mixes as originally proposed. | To ensure no bare patches exist and successful grass establishment where weeds have been removed or areas have failed to establish in order to maintain high level of diversity. | Ongoing specific monitoring of areas of grassland and patches that have been re-seeded to ensure successful establishment. Wildflower grass areas shall be maintained and watered well in accordance with overall ongoing management. | Bi-Annually as required during August-Sep and/or March-April. | Landscape Maintenance Firm |
| Tree Planting | Check all trees. Removal of dead, dying or diseased trees & pruning as required. Replacement with same or an approved substitution if unavailable. | To ensure success of scheme and to promote healthy future growth and keep all footpaths and routes clear from obstructions | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons. | Quarterly (Pruning as required) | Landscape Maintenance Firm |
| | Check tree stakes, guards, ties and remove once fully established (max 5years) | To provide planting with the greatest opportunity for success and to ensure ties / stakes / guards do not impact tree growth. | | Quarterly | Landscape Maintenance Firm |
| | Spray off 1200mm radius around the base of each tree | To minimise competition from surrounding weed/grass growth | | Bi-Annually | Landscape Maintenance Firm |
| | Crown lift specimen trees as they mature where necessary to ensure clear sight lines / activity zones and footways / roadways. | To ensure clear sight lines / activity zones and footways / roadways and avoid vandalism. | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons. | Bi-Annually | Landscape Maintenance Firm |
| Existing Trees | Check all trees. Removal of dead, dying or diseased trees & pruning as required. | To promote healthy future growth and keep all footpaths and routes clear from obstructions | All tree surgery works should be carried out in accordance with British Standard BS 3998 (2010), *Recommendations for tree work*, and should be undertaken by appropriate persons as necessary. | As required | Landscape Maintenance Firm |
| Hedge Planting | Check all plants. Removal of dead, dying or diseased plants & pruning as required. Replacement with same or an approved substitution if unavailable. | To ensure success of scheme and to promote healthy future growth and robust hedgerow is created. | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons. | Quarterly (Pruning as required) | Landscape Maintenance Firm r |
| | Check tree stakes, guards, ties and remove once fully established (max 5years) | To provide planting with the greatest opportunity for success and to ensure ties / stakes / guards do not impact tree growth. | | Quarterly | Landscape Maintenance Firm |

| Area | Maintenance Operation | Objective | Notes | Frequency of Operation | Action By |
|---|---|---|---|---|---|
| Existing Hedges | Check all hedgerows. Removal of dead, dying or diseased plants & make good gaps with similar species. Pruning as required in early spring or late summer to maintain broad A-shape of hedge and remove suckering growth annually. | To promote ongoing healthy future growth and maintain shape of existing hedgerows. | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons.<br>Works to existing established hedgerows to avoid general bird breeding season. | Quarterly (Pruning as required) | Landscape Maintenance Firm |
| | Height of formal existing hedgerows to be maintained at 1.2-1.5m, mixed native hedgerows and boundary hedges allowed to grow taller and/or maintained at existing height or as specified. | To promote ongoing healthy future growth and maintain shape and height of existing hedgerows. | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons.<br>Works to existing established hedgerows to avoid general bird breeding season. | Quarterly (Pruning as required) | Landscape Maintenance Firm |
| Structural Native Planting | Check all plants. Removal of dead, dying or diseased plants & pruning as required. Replacement with same or an approved substitution if unavailable. | To ensure success of scheme and to promote healthy future growth and keep all footpaths and routes clear from obstructions | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons. | Quarterly (Pruning as required) | Landscape Maintenance Firm |
| | Check stakes, guards, ties and remove once fully established (max 5years) | To provide planting with the greatest opportunity for success and to ensure ties / stakes / guards do not impact tree growth. | | Quarterly | Landscape Maintenance Firm |
| | Thinning out of structural planting areas. | To ensure long term succession, remove low quality plants to encourage longer living species and development of structural planting. | The native structural / woodland planting belt should be actively managed as one cohesive unit and the maintenance of it shall be continued to encourage the future sustained growth of the woodland. | Annually | Landscape Maintenance Firm |
| Ornamental Shrub Planting | Removal of dead, dying or diseased plants Replacement with same or an approved substitution if unavailable. | To ensure success of scheme and to promote healthy future growth and high quality ornamental planting areas are created. | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons. | Quarterly | Landscape Contractor |
| | Prune plants at a time and in a manner which is appropriate to the species growth habit and form. | To promote healthy plants and provide planting with greatest opportunity for success. | | Quarterly (Pruning as required) | Landscape Maintenance Firm |
| | Re mulching to all planted areas previously mulched to maintain specified depth. | To minimise weed growth within mulched planting Areas. | Bark mulch to be certified to ensure it is an inert product and in accordance with drawings / specifications. | Bi-Annually | Landscape Maintenance Firm |
| Boundary Treatments (Inc Fencing & Gates) | Assessment of all boundary treatments (and repair where required). All boundaries within playspace and public open spaces, (including timber post and rail fencing, metal railings and self closing gates). | To maintain high standard of appearance and functionality of all boundaries, fencing and gates. To ensure access to existing watercourse is restricted. | Any damage is to be fenced off immediately to avoid risk of injury and repaired at the earliest opportunity. | Monthly | Landscape Maintenance Firm |
| | Re-stain timber fencing, seating, play equipment and other timber features. Apply preservative coatings as required in accordance with manufacturer's guidance. Paint metal work of fencing, railings, seating, play equipment and other metal features as required in accordance with manufacturers guidance. | To ensure longevity of the equipment in line with manufacturer's recommendations. | All treatments to be appropriate to specific use in/near play areas. Additional guidance from manufacturers should be sought. | As required and in accordance with manufacturers guidance (Annually) | Landscape Maintenance Firm |
| Street Furniture | Regular visual checking of all street furniture | To ensure quality and safety of all street furniture | Where defects occur, areas are to be cordoned off immediately to ensure safety, with repairs/replacement undertaken at the earliest opportunity using materials to match those original specified | Monthly | Landscape Maintenance Firm |
| | Restaining / Repainting if required by manufacturer guidance as per boundary treatments above. | To maintain high standard of appearance and functionality and improved longevity of all street furniture. | | As required | Landscape Maintenance Firm |
| Footpaths and other hard surfaces / paved areas | Regular visual checking of all hard surfaces | To ensure quality and safety of all hard surfaces | Where defects occur, areas are to be cordoned off immediately to ensure safety, with repairs undertaken at the earliest opportunity | Monthly / As required | Landscape Maintenance Firm |

**APPENDIX C: LANDSCAPE MAINTENANCE SCHEDULE ZONE C** –Notes: Unless otherwise agreed all works within this schedule are the responsibility of the nominated landscape maintenance contractor or estate managing agent as instructed on behalf of the CMO. Timings for operations are indicative and for guidance only and will be subject to site specific and/or CMO requirements. Additional maintenance requirements for specialised equipment may be necessary – refer to manufacturer's guidance.

| Area | Maintenance Operation | Objective | Notes | Frequency of Operation | Action By |
|---|---|---|---|---|---|
| Generally (Whole Site) | Litter Picking | To maintain high standard of appearance | All contents to be bagged up and disposed of in the appropriate manner off site | Weekly along primary routes, as required all other areas | Landscape Maintenance Firm |
| | Emptying/clean litterbins. Dispose of waste. Clean as required including cigarette stub plates if applicable and immediate surrounding area. | To maintain high standard of appearance to area and cleanliness. Ensures litterbins are useable at all times. | All contents to be bagged up and disposed of in the appropriate manner off site | Weekly | Landscape Maintenance Firm |
| | Chemical weed control (non-residual) | To ensure ongoing success of landscape planting. | Generally utilised where all other methods of weed control are proven to be unsuccessful. | As required and approved (generally monthly during growing season, primary routes) | Landscape Maintenance Firm |
| | Mechanical cleaning of hard surfaces | To maintain high standard of appearance to area and to ensure all hard surfaces remain free from debris/trip hazards | Road/path sweepers and pressure washers only permitted, use of chemical not permitted. | As required and approved (generally monthly, less frequent in winter months) | Landscape Maintenance Firm |
| | Removal of dog dirt from dog bins and ground | To ensure the areas remains a clean, safe and pleasant environment for all users. | Remove dirt and dispose of by bagging and disposal off site. | Weekly | Landscape Maintenance Firm |
| | Graffiti removal | To maintain high standard of appearance | | As required | Landscape Maintenance Firm |
| | Clearance of fallen leaves | To reduce potential slip hazards | Leaf litter to be disposed of off-site in a sustainable manner I.e. to a composting facility | Twice a month during Oct / Nov / Dec, adopted roads/footpaths | Landscape Maintenance Firm |
| | Watering | All planting and seeded areas as required to ensure successful establishment and create a high quality pleasant landscaped environment. | Watering is envisaged to be required predominantly at regular intervals throughout the spring and summer months following planting works, however some additional watering may be required during excessive dry spells throughout the year. | As required in periods of severe drought | Landscape Maintenance Firm |
| | Snow removal | Removal of snow from all hard surfaces, mature shrubs and trees. | Excessive snow to be removed from shrub / tree planting to avoid damage to planting due to weight from snow build up. | As required during winter months, primary routes only. | Landscape Maintenance Firm |
| | Ice removal/gritting | Make safe all hard surfaces during extreme cold / icy spells and avoid hazards | Any products used must be non toxic to humans and animals, and 100% biodegradable and eco friendly. | As required during winter months, primary routes only | Landscape Maintenance Firm |
| Amenity Grass Areas | Grass cutting to height of between 65-100mm arisings spread on site if suitable. | To maintain high standard of appearance and ensure all amenity grassed areas are not overgrown and are suitable for use at all times. | The height of growth should not exceed 100 mm at any time. Trim all edges /obstructions prior to general cut and sweep adjacent hard surfaces. Bare areas and areas of dead grass that have failed to thrive shall be made good by re-cultivation and reseeding. | As required to ensure height is maintained. (Generally two monthly during growing season between Mar & Oct) | Landscape Maintenance Firm |

| Area | Maintenance Operation | Objective | Notes | Frequency of Operation | Action By |
|---|---|---|---|---|---|
| | Over-seed / re-seed bare patches and areas of grassland that have failed. Using same grass mixes as originally proposed. | To ensure no bare patches exist and successful grass establishment where weeds have been removed or areas have failed to establish in order to maintain high standard of appearance. | Ongoing specific monitoring of areas of grassland and patches that have been re-seeded to ensure successful establishment. Amenity grass areas shall be maintained and watered well in accordance with overall ongoing management. | Bi-Annually as required during August-Sep and/or March-April. | Landscape maintenance Firm |
| Wildflower Grass Areas | Single summer hay-cut, leaving hedgerow margin areas unmown each time. Cuttings to be left to dry *in-situ* and shed seed and removed 1-7 days after cut. Maintenance cuts throughout autumn and winter to maintain short sward. | To maintain high standard of appearance and ensure all wildflower grassed areas create a tall sward and offer diversity and foraging places / shelter for wildlife and ecology purposes. Hedgerow margins areas shall be left unmown. | Wildflower areas should have a cutting regime centred largely around a summer hay cut, leaving hedgerow margins areas unmown each time. An annual hay cut takes place in later summer following which grass is kept at a short sward height through autumn and winter via cutting and allowed to grow between Spring and early summer prior to the hay cut, with remaining unmown areas allowed to develop into tall swards for ecological benefits being strimmed every 1-2 years. Arisings to be left to dry and shed seed following the summer hay cut. Cuttings to be removed offsite directly following autumn/winter maintenance cuts. | Single annual hay cut in late July-early August to 40-75mm with arising left to dry *in-situ* and shed seed for 1-7days before removal. Minimum of two cuts between August and March to maintain winter sward height of <75mm with arisings removed immediately. | Landscape Maintenance Firm |
| | Over-seed / re-seed bare patches and areas of grassland that have failed. Using same wildflower grass mixes as originally proposed. | To ensure no bare patches exist and successful grass establishment where weeds have been removed or areas have failed to establish in order to maintain high level of diversity. | Ongoing specific monitoring of areas of grassland and patches that have been re-seeded to ensure successful establishment. Wildflower grass areas shall be maintained and watered well in accordance with overall ongoing management. | Bi-Annually as required during August-Sep and/or March-April. | Landscape Maintenance Firm |
| Tree Planting | Check all trees. Removal of dead, dying or diseased trees & pruning as required. Replacement with same or an approved substitution if unavailable. | To ensure success of scheme and to promote healthy future growth and keep all footpaths and routes clear from obstructions | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons. | Annually (Pruning as required) | Landscape Maintenance Firm |
| | Check tree stakes, guards, ties and remove once fully established (max 5years) | To provide planting with the greatest opportunity for success and to ensure ties / stakes / guards do not impact tree growth. | | Bi-Annually | Landscape Maintenance Firm |
| | Spray off 1200mm radius around the base of each tree | To minimise competition from surrounding weed/grass growth | | Annually, as required to individual trees set in amenity grassland. | Landscape Maintenance Firm |
| | Crown lift specimen trees as they mature where necessary to ensure clear sight lines / activity zones and footways / roadways. | To ensure clear sight lines / activity zones and footways / roadways and avoid vandalism. | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons. | Annually, or as required to ensure tree stock remains in a safe condition. | Landscape Maintenance Firm |
| Existing Trees | Check all trees. Removal of dead, dying or diseased trees & pruning as required. | To promote healthy future growth and keep all footpaths and routes clear from obstructions | All tree surgery works should be carried out in accordance with British Standard BS 3998 (2010), *Recommendations for tree work*, and should be undertaken by appropriate persons as necessary. | As required | Landscape Maintenance Firm |
| Hedge Planting | Check all plants. Removal of dead, dying or diseased plants & pruning as required. Replacement with same or an approved substitution if unavailable. | To ensure success of scheme and to promote healthy future growth and robust hedgerow is created. | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons. | Quarterly (Pruning as required) | Landscape Maintenance Firm r |
| | Check tree stakes, guards, ties and remove once fully established (max 5years) | To provide planting with the greatest opportunity for success and to ensure ties / stakes / guards do not impact tree growth. | | Quarterly | Landscape Maintenance Firm |

| Area | Maintenance Operation | Objective | Notes | Frequency of Operation | Action By |
|---|---|---|---|---|---|
| Existing Hedges | Check all hedgerows. Removal of dead, dying or diseased plants & make good gaps with similar species. Pruning as required in early spring or late summer to maintain broad A-shape of hedge and remove suckering growth annually. | To promote ongoing healthy future growth and maintain shape of existing hedgerows. | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons.<br>Works to existing established hedgerows to avoid general bird breeding season. | Quarterly (Pruning as required) | Landscape Maintenance Firm |
| | Height of clipped existing hedgerows to be maintained at 1.2-1.5m, mixed native hedgerows and boundary hedges allowed to grow taller and/or maintained at existing height or as specified. | To promote ongoing healthy future growth and maintain shape and height of existing hedgerows. | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons.<br>Works to existing established hedgerows to avoid general bird breeding season. | Quarterly (Pruning as required) | Landscape Maintenance Firm |
| Structural Native Planting | Check all plants. Removal of dead, dying or diseased plants & pruning as required. Replacement with same or an approved substitution if unavailable. | To ensure success of scheme and to promote healthy future growth and keep all footpaths and routes clear from obstructions | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons. | Quarterly (Pruning as required) | Landscape Maintenance Firm |
| | Check stakes, guards, ties and remove once fully established (max 5years) | To provide planting with the greatest opportunity for success and to ensure ties / stakes / guards do not impact tree growth. | | Quarterly | Landscape Maintenance Firm |
| | Thinning out of structural planting areas. | To ensure long term succession, remove low quality plants to encourage longer living species and development of structural planting. | The native structural / woodland planting belt should be actively managed as one cohesive unit and the maintenance of it shall be continued to encourage the future sustained growth of the woodland. | Annually | Landscape Maintenance Firm |
| Ornamental Shrub Planting | Removal of dead, dying or diseased plants Replacement with same or an approved substitution if unavailable. | To ensure success of scheme and to promote healthy future growth and high quality ornamental planting areas are created. | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons. | Quarterly | Landscape Contractor |
| | Prune plants at a time and in a manner which is appropriate to the species growth habit and form. | To promote healthy plants and provide planting with greatest opportunity for success. | | Quarterly (Pruning as required) | Landscape Maintenance Firm |
| | Re mulching to all planted areas previously mulched to maintain specified depth. | To minimise weed growth within mulched planting Areas. | Bark mulch to be certified to ensure it is an inert product and in accordance with drawings / specifications. | Bi-Annually | Landscape Maintenance Firm |
| Boundary Treatments (Inc Fencing & Gates) | Assessment of all boundary treatments (and repair where required). All boundaries within playspace and public open spaces, (including timber post and rail fencing, metal railings and self closing gates). | To maintain high standard of appearance and functionality of all boundaries, fencing and gates. To ensure access to existing watercourse is restricted. | Any damage is to be fenced off immediately to avoid risk of injury and repaired at the earliest opportunity. | Monthly | Landscape Maintenance Firm |
| | Re-stain timber fencing, seating, play equipment and other timber features. Apply preservative coatings as required in accordance with manufacturer's guidance. Paint metal work of fencing, railings, seating, play equipment and other metal features as required in accordance with manufacturers guidance. | To ensure longevity of the equipment in line with manufacturer's recommendations. | All treatments to be appropriate to specific use in/near play areas. Additional guidance from manufacturers should be sought. | As required and in accordance with manufacturers guidance (Annually) | Landscape Maintenance Firm |
| Street Furniture | Regular visual checking of all street furniture | To ensure quality and safety of all street furniture | Where defects occur, areas are to be cordoned off immediately to ensure safety, with repairs/replacement undertaken at the earliest opportunity using materials to match those original specified | Monthly | Landscape Maintenance Firm |
| | Restaining / Repainting if required by manufacturer guidance as per boundary treatments above. | To maintain high standard of appearance and functionality and improved longevity of all street furniture. | | As required | Landscape Maintenance Firm |
| Footpaths and other hard surfaces / paved areas | Regular visual checking of all hard surfaces | To ensure quality and safety of all hard surfaces | Where defects occur, areas are to be cordoned off immediately to ensure safety, with repairs undertaken at the earliest opportunity | Monthly / As required | Landscape Maintenance Firm |

**APPENDIX C: LANDSCAPE MAINTENANCE SCHEDULE ZONE D: Above Ground SuDS Swales, Basins Ditches** –Notes: Unless otherwise agreed all works within this schedule are the responsibility of the nominated landscape maintenance contractor or estate managing agent as instructed on behalf of the CMO. Timings for operations are indicative and for guidance only and will be subject to site specific and/or CMO requirements. Additional maintenance requirements for specialised equipment may be necessary – refer to manufacturer's guidance.

| Area | Maintenance Operation | Objective | Notes | Frequency of Operation | Action By |
|---|---|---|---|---|---|
| Generally (Whole Site) | Litter Picking | To maintain high standard of appearance | All contents to be bagged up and disposed of in the appropriate manner off site | Weekly along primary routes, as required all other areas. (monthly) | Landscape Maintenance Firm |
| | Chemical weed control (non-residual) | To ensure ongoing success of landscape planting. | Generally utilised where all other methods of weed control are proven to be unsuccessful. | As required and approved (generally monthly during growing season) | Landscape Maintenance Firm |
| | Mechanical cleaning of hard surfaces/strcutures | To maintain high standard of appearance to area and to ensure all hard surfaces remain free from debris/trip hazards | Road/path sweepers and pressure washers only permitted, use of chemical not permitted. | As required and approved (generally monthly, less frequent in winter months) | Landscape Maintenance Firm |
| | Graffiti removal | To maintain high standard of appearance | | As required to above ground SuDS structures | Landscape Maintenance Firm |
| | Clearance of fallen leaves | To reduce potential slip hazards | Leaf litter to be disposed of off-site in a sustainable manner I.e. to a composting facility | Twice a month during Oct / Nov / Dec, Ensure drainage inlets and outlets are kept debris free at all times. | Landscape Maintenance Firm |
| | Watering | All planting and seeded areas as required to ensure successful establishment and create a high quality pleasant landscaped environment. | Watering is envisaged to be required predominantly at regular intervals throughout the spring and summer months following planting works, however some additional watering may be required during excessive dry spells throughout the year. | As required in periods of severe drought | Landscape Maintenance Firm |
| | Snow removal | Removal of snow from all hard surfaces, mature shrubs and trees. | Excessive snow to be removed from shrub / tree planting to avoid damage to planting due to weight from snow build up. | As required during winter months, Remove form inlets/outlets as required to ensure free flowing drainage at all times. | Landscape Maintenance Firm |
| | Ice removal/gritting | Make safe all hard surfaces during extreme cold / icy spells and avoid hazards | Any products used must be non toxic to humans and animals, and 100% biodegradable and eco friendly. | As required during winter months, primary routes only | Landscape Maintenance Firm |
| Amenity Grass Areas | Grass cutting to height of between 65-100mm arisings spread on site if suitable. | To maintain high standard of appearance and ensure all amenity grassed areas are not overgrown and are suitable for use at all times. | The height of growth should not exceed 100 mm at any time. Trim all edges /obstructions prior to general cut and sweep adjacent hard surfaces. Bare areas and areas of dead grass that have failed to thrive shall be made good by re-cultivation and reseeding. | As required to ensure height is maintained. (Generally monthly during growing season between Mar & Oct) | Landscape Maintenance Firm |
| | Over-seed / re-seed bare patches and areas of grassland that have failed. Using same grass mixes as originally proposed. | To ensure no bare patches exist and successful grass establishment where weeds have been removed or areas have failed to establish in order to maintain high standard of appearance. | Ongoing specific monitoring of areas of grassland and patches that have been re-seeded to ensure successful establishment. Amenity grass areas shall be maintained and watered well in accordance with overall ongoing management. | Bi-Annually as required during August-Sep and/or March-April. | Landscape maintenance Firm |
| Wildflower Grass Areas | Single summer hay-cut, leaving hedgerow margin areas unmown each time. Cuttings to be left to dry *in-situ* and shed seed and removed 1-7 days after cut. Maintenance cuts throughout autumn and winter to maintain short sward. | To maintain high standard of appearance and ensure all wildflower grassed areas create a tall sward and offer diversity and foraging places / shelter for wildlife and ecology purposes. Hedgerow margins areas shall be left unmown. | Wildflower areas should have a cutting regime centred largely around a summer hay cut, leaving hedgerow margins areas unmown each time. An annual hay cut takes place in later summer following which grass is kept at a short sward height through autumn and winter via cutting and allowed to grow between Spring and early summer prior to the hay cut, with remaining unmown areas allowed to develop into tall swards for ecological benefits being strimmed every 1-2 years. Arisings to be left to dry and shed seed following the summer hay cut. Cuttings to be removed offsite directly following autumn/winter maintenance cuts. | Single annual hay cut in late July-early August to 40-75mm with arising left to dry *in-situ* and shed seed for 1-7days before removal. Minimum of two cuts between August and March to maintain winter sward height of <75mm with arisings removed immediately. | Landscape Maintenance Firm |

| Area | Maintenance Operation | Objective | Notes | Frequency of Operation | Action By |
|---|---|---|---|---|---|
| | Over-seed / re-seed bare patches and areas of grassland that have failed. Using same wildflower grass mixes as originally proposed. | To ensure no bare patches exist and successful grass establishment where weeds have been removed or areas have failed to establish in order to maintain high level of diversity. | Ongoing specific monitoring of areas of grassland and patches that have been re-seeded to ensure successful establishment. Wildflower grass areas shall be maintained and watered well in accordance with overall ongoing management. | Bi-Annually as required during August-Sep and/or March-April. | Landscape Maintenance Firm |
| Tree Planting | Check all trees. Removal of dead, dying or diseased trees & pruning as required. Replacement with same or an approved substitution if unavailable. | To ensure success of scheme and to promote healthy future growth and keep all footpaths and routes clear from obstructions | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons. | Annually (Pruning as required) | Landscape Maintenance Firm |
| | Check tree stakes, guards, ties and remove once fully established (max 5years) | To provide planting with the greatest opportunity for success and to ensure ties / stakes / guards do not impact tree growth. | | Bi-Annually | Landscape Maintenance Firm |
| | Spray off 1200mm radius around the base of each tree | To minimise competition from surrounding weed/grass growth | | Annually, as required to individual trees set in amenity grassland. | Landscape Maintenance Firm |
| | Crown lift specimen trees as they mature where necessary to ensure clear sight lines / activity zones and footways / roadways. | To ensure clear sight lines / activity zones and footways / roadways and avoid vandalism. | All landscape works should be carried out in accordance with appropriate British Standards and should be undertaken by appropriately trained persons. | Annually, or as required to ensure tree stock remains in a safe condition. | Landscape Maintenance Firm |
| Existing Trees | Check all trees. Removal of dead, dying or diseased trees & pruning as required. | To promote healthy future growth and keep all footpaths and routes clear from obstructions | All tree surgery works should be carried out in accordance with British Standard BS 3998 (2010), *Recommendations for tree work*, and should be undertaken by appropriate persons as necessary. | As required | Landscape Maintenance Firm |
| | Check tree stakes, guards, ties and remove once fully established (max 5years) | To provide planting with the greatest opportunity for success and to ensure ties / stakes / guards do not impact tree growth. | | Quarterly | Landscape Maintenance Firm |
| Boundary Treatments (Inc Fencing & Gates) | Assessment of all boundary treatments (and repair where required). All boundaries (including timber post and rail fencing, metal railings etc). | To maintain high standard of appearance and functionality of all boundaries, fencing and gates. To ensure access to existing watercourse is restricted. | Any damage is to be fenced off immediately to avoid risk of injury and repaired at the earliest opportunity. | Monthly | Landscape Maintenance Firm |
| | Re-stain timber fencing, and other timber features. Apply preservative coatings as required in accordance with manufacturer's guidance. Paint metal work of fencing, railings, seating, play equipment and other metal features as required in accordance with manufacturers guidance. | To ensure longevity of the equipment in line with manufacturer's recommendations. | All treatments to be appropriate to specific use in/near play areas. Additional guidance from manufacturers should be sought. | As required and in accordance with manufacturers guidance (Annually) | Landscape Maintenance Firm |
| Additional Requirements | In addition to the operations described above the above ground SuDS components must be maintained in accordance with the CIRIA 753 manual as below | | | | |

**TABLE 23.1 Operation and maintenance requirements for ponds and wetlands**

| Maintenance schedule | Required action | Typical frequency |
|---|---|---|
| Regular maintenance | Remove litter and debris | Monthly (or as required) |
| | Cut the grass – public areas | Monthly (during growing season) |
| | Cut the meadow grass | Half yearly (spring, before nesting season, and autumn) |
| | Inspect marginal and bankside vegetation and remove nuisance plants (for first 3 years) | Monthly (at start, then as required) |
| | Inspect inlets, outlets, banksides, structures, pipework etc for evidence of blockage and/or physical damage | Monthly |
| | Inspect water body for signs of poor water quality | Monthly (May – October) |
| | Inspect silt accumulation rates in any forebay and in main body of the pond and establish appropriate removal frequencies; undertake contamination testing once some build-up has occurred, to inform management and disposal options | Half yearly |
| | Check any mechanical devices, eg penstocks | Half yearly |
| | Hand cut submerged and emergent aquatic plants (at minimum of 0.1 m above pond base; include max 25% of pond surface) | Annually |
| | Remove 25% of bank vegetation from water's edge to a minimum of 1 m above water level | Annually |
| | Tidy all dead growth (scrub clearance) before start of growing season (Note: tree maintenance is usually part of overall landscape management contract) | Annually |
| | Remove sediment from any forebay. | Every 1–5 years, or as required |
| | Remove sediment and planting from one quadrant of the main body of ponds without sediment forebays. | Every 5 years, or as required |
| Occasional maintenance | Remove sediment from the main body of big ponds when pool volume is reduced by 20% | With effective pre-treatment, this will only be required rarely, eg every 25–50 years |
| Remedial actions | Repair erosion or other damage | As required |
| | Replant, where necessary | As required |
| | Aerate pond when signs of eutrophication are detected | As required |
| | Realign rip-rap or repair other damage | As required |
| | Repair / rehabilitate inlets, outlets and overflows. | As required |

**TABLE 17.1 Operation and maintenance requirements for swales**

| Maintenance schedule | Required action | Typical frequency |
|---|---|---|
| Regular maintenance | Remove litter and debris | Monthly, or as required |
| | Cut grass – to retain grass height within specified design range | Monthly (during growing season), or as required |
| | Manage other vegetation and remove nuisance plants | Monthly at start, then as required |
| | Inspect inlets, outlets and overflows for blockages, and clear if required | Monthly |
| | Inspect infiltration surfaces for ponding, compaction, silt accumulation, record areas where water is ponding for > 48 hours | Monthly, or when required |
| | Inspect vegetation coverage | Monthly for 6 months, quarterly for 2 years, then half yearly |
| | Inspect inlets and facility surface for silt accumulation, establish appropriate silt removal frequencies | Half yearly |
| Occasional maintenance | Reseed areas of poor vegetation growth, alter plant types to better suit conditions, if required | As required or if bare soil is exposed over 10% or more of the swale treatment area |
| Remedial actions | Repair erosion or other damage by re-turfing or reseeding | As required |
| | Relevel uneven surfaces and reinstate design levels | As required |
| | Scarify and spike topsoil layer to improve infiltration performance, break up silt deposits and prevent compaction of the soil surface | As required |
| | Remove build-up of sediment on upstream gravel trench, flow spreader or at top of filter strip | As required |
| | Remove and dispose of oils or petrol residues using safe standard practices | As required |

CIRIA SuDS Manual 2015

# APPENDIX D

# ZONAL PRIORITY PLANS

# Chilmington Green:
# Landscape Maintenance Priority Zones
# Phase 1 Parcel R

## APPENDIX D

Existing trees and buffer planting

**Proposed trees semi mature and ANS specimen trees:**
Large Avenue/Feature trees TBC
Semi-mature - 25-30cmg:
TcG Tilia cordata Greenspire

ANS - Extra Heavy standards - 18-20-cmg:
Larger Avenue specimens
ApC Acer platanoides Columnare
CbF Carpinus betulus Frans Fontaine
PC Pyrus calleryana Chanticleer

Small trees - Garden frontages
ARH Amelanchier x grandiflora Robin Hill
CmS Crataegus monogyna Stricta
Ll Ligustrum lucidum 'Excelsum Superbum'
Mk Magnolia kobus
Mts Malus tschonoskii
PA Prunus Amanagowa
Ppv Parrotia p. Vanessa
**Shrub planting - Pond surround & flood area**
Cs Cornus sanguinea
Vl Viburnum lantana

Larger Specimen/Shelterbelt/Parkland areas
All trees - size ave. 4.5/5.5m high, RB, clear stem 2.5m.
Ac Acer campestre 'Streetwise'
BuJ Betula utilis Jaquemontii
Cs Castanea sativa
FsP Fagus s. Purpurea
LsW Liquidambar styraciflua Worplesdon
Lt Liriodendron tulipifera
Pni Pinus nigra
Pth Prunus Tai Haku
Qr Quercus robur 'Fastigiata Koster'
Qru Quercus rubra

Trees in buffer planting
ANS - Extra Heavy standards - 18-20-cmg:
Ac Acer campestre
Al Alnus glutinosa
BuJ Betula utilis Jaquemontii
Pa Prunus avium
St Sorbus torminalis
All trees - size ave. 4.5/5.5m high, RB, clear stem 2.5m.

New homes are to be provided with one fruit tree of choice from the following list of local sourced varieties:
Cydonia o. Fruitful, Ficus Brown Turkey, Malus d. 'Bountiful BR', Malus d. 'Greensleeves' BR, Malus Coxs Pippin, Prunus a. 'Farleigh' , Pyrus d. 'Beth' , Pyrus d. 'Concorde', Pyrus Conference, Prunus d. 'Guinevere' Morus nigra, Prunus Merryweather(damsom).

Wall Shrubs and Front Garden Shrubs
Planted against buildings and boundary walls
HP Hamamelis × intermedia 'Pallida'
Ob Osmanthus × burkwoodii
Pa Pyracantha Saphyr Orange
VbD Viburnum × bodnantense 'Dawn'
all 30L min. 1.5m ht, minimum 450mm BS 3882 topsoil

Climbers to boundary walls and fences
Planted and trained onto horizontal line wires to 2.0m height, on eye bolt with turnbuckle tensioners.
Pq Clematis armandii -20%
Lg Lonicera per. Graham Thomas -20%
Tj Tracheleopsernum jasminoides - 20%
Hp Hydrangea petiolaris - 20%
Vv Vitis vinifera - 20%
25L, min. 2.0m ht, minimum 450mm BS 3882 topsoil

Grass verges and open spaces using species rich seed mix - Emorsgate EL1 flowering lawn seed mix

Private seeded grass garden areas EG22C seed mix

Wildflower/grass meadow seed mix: using Emorsgate EM4 for heavy soils

Native marginal and aquatic species to ponds - to be detailed at later stage, all to ecologist approval

**Front Garden Hedges**
**final layout subject to detail planting plans.**
Ornamental hedge mix 1.1m tall to include:
Berberis thunbergii f. atropurpurea
Euonymus japonicus 'Jean Hugues'
Ilex Crenata
Photinia 'Little Red Robin'
Viburnum tinus

Hornbeam hedge
Carpinus betulus hedge 1.2m tall
Topsoil to BS 3882 to trench min 600mm deep.

**Buffer planting:**
Matrix planting of shrub whips (1+1) set out on a 1 metre grid planting density:
Corylus avellana, Euonymus europaeus, Ilex aquifolium, Ligustrum vulgare, Cornus sanguinea, Viburnum lantana, Rosa Canina, Crataegus monogyna.

**Ornamental Herbaceous, groundcover and bulbs** Shade areas
Planted in groups of 3,5 and 7. Topsoil depth to 450mm to BS 3882
Mulch all areas with 40mm blue slate chippings to 40mm depth.
60% of total area - 2L pots
bushy plants, density 7/m²
Species to include:
5% Alchemilla mollis
5% Anementhele lessoniana
5% Brunnera Silver Spear
5% Liriope muscari
5% Epimedium x versicolor
5% Geranium renardii
5% Geranium spessart
5% Tiarella cordifolia
5% Hakenochloa macra
5% Luzula nivea
2.5% Dryopteris felix mas
2.5% Dryopteris cristata the King
2.5% Galanthus nivalis
2.5% Narcissus Tete a Tete
Shrubs
40% of total area - 10L pots,
Bushy, well formed plants, density 5/m²
10% Rosa 'The Fairy'
5% Skimmia japonica Rubella
5% Viburnum davidii
5% Osmanthus x burkwoodii
10% Sarcococca hookeriana var. Humilis
5% Viburnum × bodnantense 'Dawn'

**Ornamental Herbaceous, groundcover and bulbs** Sunny areas
Planted in groups of 3,5 and 7. Topsoil depth to 450mm to BS 3882
Mulch all areas with 40mm blue slate chippings to 40mm depth.
60% of total area - 2L pots
bushy plants, density 7/m²
Species to include:
5% Agastache Blue Fortune
5% Aster x frikartii Monch
5% Agapanthus Cambridge Blue
5% Nepeta racemosa 'Walker's Low'
5% Achillea ptarmica 'The Pearl'
5% Geranium Patricia
5% Sanguisorba canadensis
5% Astrantia Roma
5% Echinacea Sundown
5% Iris Caesars Brother
2.5% Calamagrostis Karl Foerster
2.5% Matteucia struthiopteris
2.5% Narcissus Avalanche
2.5% Muscari armeniacum

Shrubs
40% of total area - 10L pots,
Bushy, well formed plants, density 5/m²
10% Rosa 'Little White Pet'
5% Hebe Pascal
5% Hydrangea Limelight
5% Philadelphus Belle Etoile
5% Abelia x grandiflora
10% Viburnum carlesii

**Bulbs for naturalising in grass**

Crocus (Spring Flowering):
20% Crocus biflorus 'Blue Pearl', 20% Crocus etruscus 'Zwanenburg', 20% Crocus chrysanthus 'Cream Beauty
Crocus (Autumn Flowering):
20% Crocus speciosus, 20% Crocus speciosus 'Albus'
Plant in drifts at 150 per m2

Narcissus for short grass:
50% Narcissus pseudonarcissus, 25% Narcissus 'Minnow', 25% Narcissus 'Tête-à-tête'
Plant in drifts at 60 per m2

Lighting columns/bollards with 4m radius offset indicated

| REV. | DESCRIPTION | APP. | DATE |
|---|---|---|---|
| B | Amended to new layout | NT | 25.03.20 |

Chilmington Green
Ashford, Kent

Land Parcel R

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|---|---|---|---|
| DATE | April 2019 | DRAWN | KK |
| SCALE | 1:500@A1 | CHECKED | NT |
| STATUS | Planning | APPROVED | NT |
| DWG. NO | D0358_P052b | | |

Additional Areas REV C