# Land off Teversham Road, Fulbourn

# Landscape Management and Maintenance Plan

## Revision A v2

# September 2020

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Revision A: Prepared to address comments in Greater Cambridge Consultancy Unit Trees and Hedgerows Consultation Response Note Ref: S/3290/19/RM

## 1. Introduction

This Landscape Management and Maintenance Plan (LMMP) has been prepared in relation to the proposed residential development on land to the east of Teversham Road, Fulbourn (Outline Planning Application S/0202/17/OL approved by Cambridge City Council on 26<sup>th</sup> October 2017).

A Reserved Matters application (RMA) S/3290/19/RM by Castlefield International Limited, was submitted to Cambridge City Council on 20<sup>th</sup> September 2019 for:

Approval of matters reserved for appearance landscaping layout and scale following outline planning permission S/0202/17/OL for the development of 110 dwellings with areas of landscaping and public open space and associated infrastructure works. The outline was screened and confirmed not too be EIA development.

The RMA application is subject to an Agreement pursuant to Section 106 of the Town and Country Planning Act 1990 (25<sup>th</sup> October 2017)<sup>1</sup>. This sets out requirements for the maintenance of the proposed areas of open space and LEAP (Landscaped and Equipped Play Area), which have informed this LMMP.

This LMMP sets out the management and maintenance prescriptions for all landscape infrastructure including retained features, proposed hard and soft landscape elements (including play areas and streetscape) as shown on the Illustrative Landscape Masterplan (Figure 1). The Landscape Masterplan and more detailed planting plans also include proposals relating to private gardens. Areas which will be within private residential ownership are not included in this LMMP.

A Landscape and Biodiversity Management Plan (LBMP) (Revision A, March 2020) has been prepared by Landscape Science Consultancy Limited. The LBMP sets out long term management prescriptions for all retained and proposed habitats and provides targeted prescriptions for the conservation and management of habitats and protected species across the site.

The purpose of this LMMP is to:

- Set out the principal management liabilities and responsibilities associated with the Site:
- Provide an overall site management plan which incorporates the long term management prescriptions and monitoring set out in the LBMP;
- Describe the management aims and objectives and prescriptions for the landscape and public realm including hard landscape features;
- Set out a typical annual maintenance schedule;
- Describe requirements for monitoring and review.

<sup>1</sup> South Cambridgeshire District Council- And -Cambridgeshire County Council- And -Castlefield International Limited. Agreement Made Pursuant To Section 106 Town And Country Planning Act 1990 In Respect Of Land At Teversham Road, Fulbourn Application Reference S/0202/17/0l Hogan Lovells Ref: 2/Dmw/Cd/157124.000002

The areas of open space, the main landscape infrastructure planting and selected internal areas within the residential development will be managed by a Management Company as described in the S.106 Agreement. Highways and associated streetscape are to be constructed to adoptable standards although at this stage there is no formal agreement in relation to adoption by the local Highway Authority.

The LMMP includes prescriptions which will be applicable to the site for up to 25 years. The management prescriptions include both annual and cyclical or periodic operations, and suggested frequencies for inspections, monitoring and repeat surveys. The LMMP includes prescriptions drawn from the LBMP. Establishment maintenance prescriptions and recommended timeframes are also included for landscape features and habitats to be created as part of the proposals.



Figure 1: Illustrative Landscape Masterplan

# 2. Site Description

The Site occupies 6.85 hectares on the north western fringe of the village of Fulbourn in South Cambridgeshire, approximately 8km south east of Cambridge. The Design and Access Statement (DAS) and baseline surveys submitted in support of the application describe the Site's existing features and surroundings, which comprise undeveloped land formed chiefly of grassland, woodland, areas of scrub and ruderal vegetation. A chalk stream flows through the central part of the site from the railway to the rear of properties on Cow Lane. The south western section of the Site includes an area known as The Pump House Garden, which includes grassland, mature woodland and a pond. There is a larger area of retained woodland in the north western part of the site. Much of the Site is bordered to the west, south and east by existing residential or commercial development.

There are no statutory landscape or nature conservation designations covering the land. The Pump House Garden is located within the Fulbourn Conservation Area. There are no Public Rights of Way (PRoW) or permissive routes across the Site.

A Tree Condition Survey was undertaken in 2014 and updated in 2019 in support of the application<sup>2</sup>. This details proposals for tree retention, protection and management during construction and tree removals. There is statutory tree protection covering parts of the site in the form of a Tree Preservation Order (TPO) (County of Cambridge Tree Preservation Order Number 8 of 1963, Fulbourn). The TPO covers tree within two Areas, A6 and A7, and certain off-site trees as groups, G12, G13 and G14, as recorded in the Tree Survey.

The ecology of the existing site is described in detail in the various surveys prepared as part of the planning application. The LBMP includes strategies for the conservation, translocation, enhancement and management of habitat and protected species, with specific strategies for grassland, reptiles and the chalk stream.

<sup>&</sup>lt;sup>2</sup> Land off Teversham Road, Fulbourn Tree Survey to BS5837 (Forbes Laird Arboricultural Consultancy September 2014)

# 3. The Proposed Development and Green Infrastructure

The proposals include residential development of 110 dwellings with associated landscape infrastructure and access, as shown on the Landscape Masterplan.

#### 3.1 Proposed layout

The proposed layout can be described as three development parcels arranged within a series of linked green spaces which incorporate the existing chalk streams and other retained landscape elements. A central meadow and linear park flows through the development and across the chalk stream to link all areas of the proposed development. The landscape setting to the scheme seeks to retain and enhance existing landscape elements, through planting and management. These include woodland and grassland to the north, as a buffer between the existing development and the railway line, and the chalk stream corridor, which offers a transitional space into the Pump House garden to the south. The Meadow Park west of the chalk stream will retain a more natural feel, while the eastern part includes a LEAP and opportunities for play and recreation. Perimeter planting will establish a buffer between the proposed development, surrounding existing development on Cow Lane and the railway line. A series of pedestrian paths and raised walkways and cycle paths will offer access across the Meadow and Linear Parks and green space areas and links to Teversham Road (see Figure 1).

## 3.2 Design Concept Principles

The DAS presents a series of Design Concept Principles which draw on existing Design Guides and focus on the enhancement of existing landscape features:

Key spaces and landscape design principles

- The central open green space incorporates and enhances the existing natural features, hedgerows and chalk waterways with a 'loop' of paths to provide improved pedestrian access / amenity.
- Amenity paths are to be low impact 'no-dig' solutions using permeable aggregate surface without edging to soften their appearance and mitigate impact on retained tree roots.
- Wooden 'boardwalk (or bridges)' to cross existing chalk waterways and new SuDS ditches and basins.
- Streetscapes will combine public landscape and private landscape frontages
  of hedges and mixed shrubs with intermittent trees to contribute to the
  richness of the rural style greenery.

The design approach also highlights the importance of maintaining and enhancing existing rural landscape views out from the village over the Green Belt.

The proposals are underpinned by a number of key considerations, among which are:

- Acknowledging the local historic village character inbuilt grain and appearance with informally aligned buildings and soft planted edges at the interface of the countryside avoiding forming perimeter building blocks;
- To improve pedestrian and cycling permeability through the Site and connecting to the village core;
- Integrated design, landscape and surface water attenuation approach, integrating into the existing chalk stream network and Pump House pond;
- To improve and enhance existing natural features within the Site and hence the ecology;
- Provide a new central meadow park for village community integration and involvement;
- Providing a green buffer between the Development and existing built up areas:
- Sensitive treatment of public realm to include tall trees, hedges and boundary walls typical of Fulbourn.

#### 3.3 Character areas

The DAS identifies a series of broad Character Areas which have been taken forward through the Landscape Design Strategy and Masterplan (see Figure 1). These Character Areas and associated Landscape Typologies have been used as the basis for structuring management objectives and prescriptions set out in section 6 of this LMMP. The Character Areas can be summarised as follows:

## 3.3.1 Northern boundary planting

Proposals include buffer planting along the railway line boundary as an extension to the existing area of woodland, using native trees and shrubs, to reinforce the physical and visual separation from the railway line. It is anticipated that there will be no public access to this area or to the existing woodland.

#### 3.3.2 Meadow Park and Chalk stream

Meadow Park provides a landscape link across the chalk stream to connect the eastern and western parts of the site. The western field of Meadow Park is one of the principal reptile and grassland receptor sites. The eastern field adjoins Linear Park and incorporates the LEAP. The grassland, scrub and trees in Meadow Park will be managed appropriately to enhance their ecological value while offering access for quiet enjoyment by residents and visitors.

#### 3.3.3 Play area (LEAP)

A local equipped play area (LEAP) will be located in Meadow Park at the heart of the development as part of the public open space. The LEAP will feature a range of traditional and bespoke natural play equipment suitable for a wide age range. Variation in landscape levels will enhance the natural play experience. The play area will include areas of ornamental shrub planting for year round interest. To the west, an area of native tree and shrub planting will form a buffer with the east bank of the

chalk stream, which will feature marginal and aquatic planting which will enhance visual amenity for play area users. The LEAP will include areas of appropriate safety surfacing and timber decking for ease of access.

#### 3.3.4 Linear Park

Linear Park extends east from Meadow Park. The park offers recreational opportunities but will also be managed to enhance the existing ecological value of this area. Linear Park includes areas of meadow grassland, shrub and herbaceous planting and lawn, together with seating and informal play areas featuring natural play elements such as boulders and stepping stones to offer wider opportunities for informal recreation. The park also includes tree planting using native species for biodiversity, shade and visual amenity.

## 3.3.5 Perimeter planting areas

Proposed buffer planting of native trees and shrubs will reinforce the existing perimeter planting to enhance visual and noise buffering functions. A proposed mown path will offer access primarily for maintenance purposes. The eastern Site boundary will be further reinforced by a belt of mixed native planting with ecological and visual amenity value, including species such as dog rose (*Rosa canina*) and guelder rose (*Viburnum opulus*).

## 3.3.6 Pump House garden

The Pump House garden will offer an area of public open space. The garden will benefit from restoration sympathetic to its location within the Fulbourn Conservation Area, enhanced management of the retained trees, pond and existing planting, and improved access, including a new footway and cycle path, seating and boardwalk. Existing paths will be retained and improved and the existing timber bridge will be restored. New seating areas will be installed to offer opportunities for quiet recreation. The areas around the pond will be overseeded with Wildflower meadow. A raised deck will enable pedestrian access from Cow Lane.

#### 3.4 Hard and soft landscape plans

The overall landscape setting to the development is shown on the Illustrative Landscape Masterplan (Figure 1). The hard and soft landscape proposals are shown on a series of drawings prepared by Chris Blandford Associates (Appendix A). The principal plans are:

Illustrative Landscape Masterplan	TRF-CBA-1-GF-M2-L-1000 P4
Hard Landscape Strategy Sheet 1	TRF-CBA-1-GF-M2-L-1010 P6
Hard Landscape Strategy Sheet 2	TRF-CBA-1-GF-M2-L-1011 P6
Detail Plan of LEAP	TRF-CBA-1-GF-M2-L-2000 P4
Detail Plan Pump House Garden	TRF-CBA-1-GF-M2-L-2001 P1
Planting Strategy - Sheet 1	TRF-CBA-1-GF-M2-L-4000 P8
Planting Strategy - Sheet 2	TRF-CBA-1-GF-M2-L-4001 P8

Planting Key Plan	TRF-CBA-1-GF-M2-L-4010 P3
Planting Schedule	TRF-CBA-1-GF-M2-L-4011 P5
Planting Plan - Sheet 1 of 6	TRF-CBA-1-GF-M2-L-4012 P4
Planting Plan - Sheet 2 of 6	TRF-CBA-1-GF-M2-L-4013 P4
Planting Plan - Sheet 3 of 6	TRF-CBA-1-GF-M2-L-4014 P4
Planting Plan - Sheet 4 of 6	TRF-CBA-1-GF-M2-L-4015 P4
Planting Plan - Sheet 5 of 6	TRF-CBA-1-GF-M2-L-4016 P5
Planting Plan - Sheet 6 of 6	TRF-CBA-1-GF-M2-L-4017 P5
Hard Landscape Outline Details	TRF-CBA-1-GF-M2-L-8000 P3
Hard Landscape Outline Details: Boundary	TRF-CBA-1-GF-M2-L-8001 P2
Treatments	
Play Feature	TRF-CBA-1-GF-M2-L-8300 P2
Soft Landscape Details	TRF-CBA-1-GF-M2-L-8500 P3

These plans detail planting layouts and mixes, hard landscape and other elements such as boundary treatments and street furniture. The plans should form the principal point of reference if replacement planting is to be carried out, or if hard landscape elements or furniture are to be repaired or replaced.

## 3.5 Landscape typologies

The principal landscape components are shown on the Planting and Hard Landscape Detail Plans included in Appendix A to this LMMP. These are summarised below:

## 3.5.1 Existing woodland and trees

Woodland comprises the existing areas in the north parts of the site adjacent to the railway line and a smaller area off Teversham Road. Existing trees comprise chiefly trees at the Site boundaries, along the chalk stream corridor and a substantial number of trees in the Pump House garden, including specimens on the island in the centre of the pond.

#### 3.5.2 Specimen tree planting

Tree planting, using primarily native species, is proposed throughout the development, but principally within Meadow Park, Linear Park and LEAP and along pedestrian footways. Some ornamental species will be used where year round interest and variety is required.

## 3.5.3 Native buffer planting

Buffer planting will feature mainly at sections of the northern Site perimeter to reinforce the boundary with the railway line and around the eastern and south eastern boundaries to form a buffer to properties in Coxes Drove and Cow Lane. Sections of the chalk stream, including an area west of the LEAP, and areas around the bio retention basins proposed in the eastern part of the Site, will also be planted partly to help control access. The buffer comprises a mix of native tree and shrub species.

#### 3.5.4 Native plant mix

A native plant mix will be planted along an extensive stretch of the Site's eastern boundary to enhance the planted buffer and provide wildlife habitat. The mix will also feature in sections of the Pump House garden as part of the landscape setting to the footpath network. The mix comprises native small tree and shrub species, with many species typical of chalk scrub such as dogwood (*Cornus sanguinea*), spindle (*Euonymus europaeus*), dogrose (*Rosa canina*) and guelder rose (*Viburnum opulus*).

#### 3.5.5 Bioretention basins

New Sustainable Drainage (SuDS) features include bioretention basins, mainly along the southern site perimeters which will be turfed with a suitable mix (Flora aqua) of 70% wildflowers and 30% grasses to aid drainage and provide habitat for wildlife. These are likely to be seasonally wet.

#### 3.5.6 Chalk Stream

Proposals for the restoration of the chalk stream in the form of management and enhancement during the construction phase are described in the Chalk Stream Habitat Restoration Scheme which forms part of the LBMP. This describes proposed works to enhance the stream which will be undertaken as part of the construction works. Stretches of the chalk stream will be enhanced through selective removal of trees and scrub, works to the stream embankments and marginal/aquatic planting to enrich bankside vegetation, enhance biodiversity and visual appeal and, where appropriate, provide a buffering function to control access to the water's edge.

## 3.5.7 Pump House Gardens

The Pump House Gardens are predominantly a formal area of close planted broadleaf and coniferous trees around an ornamental pond. The existing planting includes a number of conifer trees including leyland cypress, yew and Scot's pine as well as sycamore and holly. A mature lime avenue lies to the south of this area. Other ornamental species such as cherry laurel are also present within the stand. Areas of more recent planting are located to the south including laburnum and cherry.

#### 3.5.8 Linear Park: planting and lawns

The Linear Park includes areas of meadow and mixed shrub and herbaceous planting and lawns. Proposed planting includes ornamental shrubs (e.g lavender (Lavandula intermedia 'Grosso', rose (Rosa 'Canary Bird') and spindle), groundcover (e.g Pachysandra) and herbaceous planting including Kniphophia, Verbena and Allium providing height and year round interest. The linear park includes areas of lawn for informal recreation (Lindum Festival Landscape Turf LT7). Mixed ornamental and native species hedge planting encloses the LEAP.

#### 3.5.9 Road verges

A species rich lawn turf will be used on road verges and around built form (WFT-Species-Rich-26), within the development parcels and along the access roads.

#### 3.5.10 Retained and translocated grassland and reptile receptor sites

The scheme incorporates areas of retained existing vegetation and translocated grassland, identified as of particular value in the ecology surveys undertaken in support of the proposals. The proposed locations for the translocated grassland and reptile translocation sites, together with areas of retained grassland, are shown on Figure 4 of the LBMP (included as Figure 2 in this LMMP). The main areas of retained landscape are located in the western field of Meadow Park, south of the existing woodland and west of the chalk stream, and along the southern perimeters of the site. There are also areas of retained grass within the Pump House Garden.

## 3.5.11 Hard surfaces

Hard landscape will feature a range of surfaces associated with vehicular, cycle and pedestrian access throughout the proposed development. Prescriptions for hard landscape are set out on a site-wide basis.

#### 3.5.12 Structures and furniture

The proposals include a range of structures and furniture within the public realm, including railings, fencing and gates, bridges, decking, seating and play equipment. Prescriptions for structures and furniture are set out on a site-wide basis.

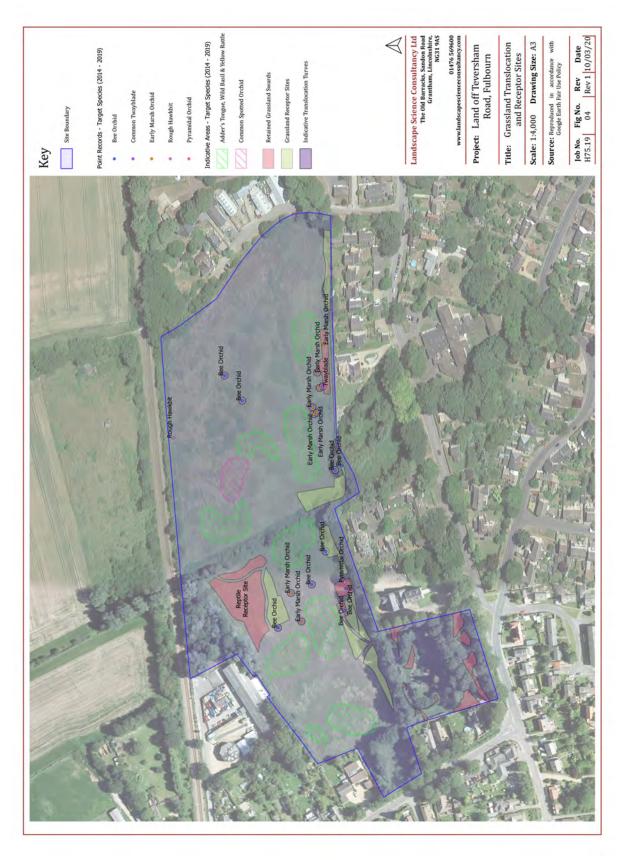
There are two bridges over the stream; a road bridge and footbridge.

## 3.5.13 LEAP

Play equipment includes traditional and natural play structures and equipment.

## 3.5.14 Private front gardens

Private front gardens will feature hedging, shrubs and herbaceous planting and lawn. These are outside the scope of this LMMP and it is anticipated that private garden areas will be managed by homeowners.



LMMP Figure 2: Grassland Translocation and Receptor Sites (LBMP Figure 4)

# 4. Management Responsibilities and Liabilities

The landscape infrastructure and open space associated with the scheme will be the responsibility of a Management Company, funded by a maintenance service charge payable by residents. The highway and associated streetscape has been constructed to adoptable standards and may be adopted by the relevant highway authority. A clear definition of responsibilities and consistency in maintenance regimes is considered essential to the efficient management of the estate. All private gardens will be the responsibility of individual property owners. There are no areas of shared semi private space.

The prescriptions set out in this LMMP should, therefore, be adopted by all bodies with management responsibilities for elements of the scheme.

The principal duties, responsibilities and liabilities on the Management Company/ Highway Authority/ and/or landowner are described below:

- The Environmental Protection Act 1990 imposes duties under section 89(1) and (2) on certain landowners and occupiers to keep specified land clear of litter and refuse, and on local authorities and the Secretary of State to keep clean public highways for which they are responsible. Duties and responsibilities are described in the Act and in the supporting DEFRA Code of Practice on Litter and Refuse (April 2006).
- Compliance with the Wildlife and Countryside Act (1981), The Conservation of Habitats and Species Regulations 2010 and subsequent legislation is required in relation to protected species and the control of invasive non-native species (see also The Weeds Act 1959). The proposals include measures to encourage wildlife through the retention and creation of a diversity of habitats, which are detailed in the LBMP. The success of these measures will be monitored in accordance with the measures programmes set out in the LBMP. Regular monitoring should also be undertaken to identify the presence of non-native invasive species listed under the 1959 Weeds Act and Wildlife and Countryside Act 1981, in order to implement measures to eradicate before species can spread to other areas of the site. Potential impacts on protected species and sites should be identified prior to land management works and advice sought from a suitably qualified professional ecologist where required.
- All nesting birds are protected under the Wildlife and Countryside Act 1981.
   Management operations with the potential to cause harm to nesting birds should not be carried out during the nesting season (mid-February to end August).
- All mature trees should be subject to a full tree condition survey every five years. In high risk locations it may be appropriate to reduce the interval between inspections to e.g. 3 years. Annual safety inspections should also be undertaken and management implemented in accordance with the recommendations of the condition survey and safety inspections. Risk based

assessments will also be undertaken as required in accordance with the tree condition survey and in response to reports of damage or risk of failure.

- Oak processionary moth (OPM) is prevalent in the local area. Particular attention is drawn to the need for regular inspections for the presence of OPM. Guidance on the timing and frequency of inspections is provided by Forest Research Council<sup>3</sup>.
- Where trees are subject to tree preservation orders, Conservation Areas or tree planning conditions, suitable permission will be sought from the Local Authority, prior to works.
- Compliance with the Environment Act (1990) and other legislation governing the use of chemicals and pollution control.
- Biosecurity: trees, shrubs and other plants in the UK are under threat from an increasing number of pests and diseases. Where replacement plants are required, procurement should be in accordance with relevant current legislation, regulations and biosecurity recommendations and guidelines regarding the supply and procurement of plant material. Published guidance relevant to plant supply and in general to the arboriculture, horticulture and forestry sectors on the risks associated with, and management of, pests and pathogens is available from a range of sources including the Landscape Institute and the Arboricultural Association. All plant material should be regularly monitored for signs of pests or diseases, which should be reported immediately to the Site Manager.

<sup>&</sup>lt;sup>3</sup> https://www.forestresearch.gov.uk/tools-and-resources/pest-and-disease-resources/oak-processionary-moth-thaumetopoea-processionea/opm-manual-5-surveying-trees-and-timing-of-control-measures/

# 5. Vision and Management Aims

The vision set out in the DAS for the proposed development includes emphasis on the creation of a sustainable development which embraces the history and landscape character of the local area:

Our vision is to create a sustainable neighbourhood of Fulbourn, which is in keeping with the landscape and built character of the area, well connected to and integrated with the village. The history of the Site as fenland has been translated into the creation of an attractive meadow park as a setting for housing with a genuine sense of place. The network of linked open spaces will provide extensive recreational opportunities for both new and existing residents of Fulbourn and become a shared community asset. The development will contribute to meeting local needs for family housing, including affordable homes<sup>4</sup>.

The vision for the landscape specific to this LMMP emphasises sound ecological management of the Site in addition to its residential amenity value:

To create and maintain a high-quality, attractive landscape infrastructure and green space network with a rich diversity of landscape elements and planting, which offers a place of recreation and inspiration for residents and visitors and a haven for wildlife through enhanced management of retained existing and newly created habitats.

## 5.1 Management Aims

## **Green Infrastructure and Asset Value/Visual Amenity**

- Provide a linked landscape infrastructure which flows through the site providing a strong sense of place and a high quality living environment for residents, which enhances the asset value of the residential area and provides associated benefits linked to adaptability to climate change, health and well being;
- Provide access to high quality open spaces and access to nature, whilst minimising access to the more sensitive habitats;
- SuDS features provide an attractive outlook and contribute to the high quality green infrastructure, open space and biodiversity network of the development;
- Existing countryside views north are retained and enhanced.

## **Ecology and biodiversity**

Management will seek to maintain and enhance retained, translocated and created habitats. The LBMP and translocation strategies set out management principles and outline prescriptions which are consistent with this overall management aim. These principles inform all management, including the prescriptions set out in this LMMP, and are set out in full in the LBMP. Briefly, they comprise:

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<sup>&</sup>lt;sup>4</sup> DAS

- Retention of grassland sward or grassland translocation and re-establishment of sward (subject to identified constraints as listed in the LBMP);
- Retention and restoration of wooded habitats, hedgerows and tree lines where compatible with other ecological requirements;
- Restoration and enhancement of the chalk stream;
- Ecological and amenity enhancement of the Pump House Gardens to combine amenity function; restoration and management of the onsite pond;
- Secure the long-term viability of protected species populations resident on or likely to use the Site;
- · Ensure successful establishment of new planting;
- Address ecological impacts identified by Biodiversity Metric calculations;
- Develop diversity and sustainability in new and existing habitats;
- Provide enhanced habitat for wildlife;
- Monitor habitats and species and allow flexibility in management approach;

#### General

- Maintain and enhance landscape quality;
- Ensure sustainability and effective resource management;
- Ensure all maintenance operations comply with current UK and European legislation in relation to protected species and habitats, including seasonal requirements relating to nesting birds, and non-native invasive species;
- Compliance with all health and safety and security commitments and duties under current legislation;
- Ensure all maintenance operations comply with current UK and European legislation in relation to management, use and application of pesticides and herbicides;
- Continually monitor and review landscape provision and landscape management.

# 6. Management Objectives and Management Prescriptions

This section is set out by Landscape Typologies as outlined in Section 3. It also sets out objectives and prescriptions for the management of hard landscape elements, furniture and general cleansing and litter duties. Management objectives and prescriptions are set out for each Typology, i.e.

- Brief description of the landscape typology or feature
- Management Objective
- Management Prescription

Management objectives and prescriptions are informed by the overall vision and management aims and by the recommendations set out in the LBMP for existing and newly created habitats, which should be read in conjunction with this LMMP.

Where new landscapes are created, recommended timeframes for establishment maintenance post-construction are given in each prescription, although these should be subject to review by the site landscape manager and project ecologist, in line with the monitoring requirements set out in the LBMP and re-stated in this LMMP. For each new soft landscape element an establishment maintenance prescription is included.

The sections below combines management objectives and prescriptions drawn directly for the LBMP for retained, translocated and created habitats, with additional sections and clauses to ensure this LMMP addresses all aspects of the management and maintenance of the hard and soft landscape, including hard surfaces, play area, structures and furniture.

The prescriptions in the LBMP reference a Contracts Manager. At this stage it is not clear whether the Management Company will manage the site with an in house team or through a management/maintenance contract. In the clauses below the term Site Manager is used instead of Contracts Manager.

## 6.1 Existing woodland and trees

#### **Description**

A small area of semi-natural broad-leaved woodland is present along the northern boundary of the Site. The plant community here comprises abundant ash and common hawthorn with occasional birch, bearberry, white poplar, dogwood and elder.

The ground layer is dominated by rank ruderals such as ivy and common nettle; adder's tongue fern also occurs widely in the ground flora.

The woodland stand is dense and unmanaged with little light penetration. In time, it is likely that the sward beneath the trees will become depleted of vegetation with a reduction in diversity. It is also likely that the adder's tongue fern will be lost from the ground layer.

The ecotone between the woodland and the adjacent grassland provides a degree of ecological value, although this is limited by the density of bramble and other scrub cover.

There is little in the way of mature deadwood in the ground layer, reflecting the age and character of the woodland.

## Management Objective

To manage the retained tree population in order to retain mature tree cover as a setting to the development. Management of the woodland will seek to enhance the ecological value of the woodland through the deployment of traditional woodland management techniques. Thinning and coppicing will be carried out in order to create a more open woodland structure with cuttings and brash used to create refugia and hibernation piles.

## **Management Prescriptions**

#### Retained Woodland

- Rotational coppicing of the scrub layer will be carried out every eight years between November to February inclusive (Years 3, 11 & 19). No more than 15% of the total woodland area will be coppiced each year:
  - Trees and shrubs to be coppiced will be marked by the Site Manager (under the advice of the Project Ecologist where appropriate) and treated as specified. Trees and shrubs will be selected with regard to providing maximum structural diversity, particularly where homogenous stands occur. Mature trees will be left in situ. No trees with bat roosting potential will be removed without prior inspections by the Project Ecologist.
  - > Trees and shrubs identified for coppicing will be cut as near to the ground as possible leaving a clean, sloping face. Single stems will be cut at one point near ground level. Multiple stems will be removed individually by a cut as near as possible to the main timber/stool.
- Use arisings to supplement brash piles within the site or remove from site, under the advice of the Project Ecologist (brash piles will strictly not contain grass arisings).
- Annual safety inspections for trees on the edge of the woodland (assumes no public access to the woodland). Full tree condition surveys for all trees within the public realm every five years;

#### Retained trees

- Allow the natural growth and spread of trees/shrubs with minimal management, where this does not conflict with access or safety requirements;
- Only when necessary (i.e. for reasons of access, safety or removal of dead/diseased/damaged branches), trees/shrubs will be pruned during January or February, wherever possible, to reduce the removal of berry crops

- trees/shrubs must be pruned during September to February inclusive to avoid the bird nesting season;
- Pruning of trees/shrubs will be undertaken to current best practice arboricultural methods (BS 3998:2012) ensuring clean and neat cut faces with no jagged ends, tears or scars;
- No herbicide spraying will be undertaken below the drip line of trees/shrubs;
- Dead/diseased/damaged trees/shrubs will be replaced as directed by the Site Manager;
- Should any trees require removal, a pre-commencement inspection for roosting bats and nesting birds will be undertaken by the Project Ecologist in accordance with Best Industry Practice;
- Use arisings to supplement brash piles within the site or remove from site, under the advice of the Project Ecologist (brash piles will strictly not contain grass arisings);
- The amenity management of trees would not conflict with the wider biodiversity management goals for the site; therefore, trees in low occupancy areas such as the retained woodland to the north should be identified as least priority, where deadwood and hazard features would be of benefit to flora and fauna;
- Annual safety inspections for trees and full tree condition surveys for all trees within the public realm every five years and seasonal OPM inspections of mature oak;

## 6.2 Specimen tree planting

#### Description

Specimen tree planting will be carried out within the areas of pubic open space, site perimeters, streetscape and the Pump House Garden. Species include larger 'landmark' trees in key locations of oak, lime, beech and hornbeam and smaller to medium sized trees including Field maple, alder and crab apple. Individual trees will be planted as containerised or root balled trees, with the majority supplied as extra heavy standard (EHS 14-16 or 16-18 cms girth) with individual staking and irrigation systems.

#### Management Objective

Specimen tree planting will provide the principal landscape structural elements to the landscape infrastructure. The use of native species will enhance the ecological value within both the open spaces and throughout the development parcels.

## **Management Prescriptions**

#### Establishment Maintenance (Years 1 to 5)

Maintenance of any guying systems or staking as required; check and repair
or replace stakes and ties as required to ensure healthy growth; refirm trees
loosened by wind or frost;

- Irrigation as required to ensure successful establishment (minimum once a
  week April-end October; once a month November-end March). Irrigation
  requirements (volumes) will vary depending on soil conditions, levels of
  rainfall and species. As a general rule it is recommended that in excess of 50
  litres is allowed per EHS tree, but this should be reviewed with the Site
  Manager as conditions require;
- Formative pruning as required, principally of street trees to ensure strong leader and a balanced head;
- Maintain weed-free 700mm mulched circle in grassed areas at 50mm depth and/or check and maintain mulch mats;
- Replacement of losses to ensure 100% establishment by Year 5.

#### Annual post establishment maintenance

- Allow the natural growth and spread of trees/shrubs with minimal management, where this does not conflict with access or safety requirements;
- Only when necessary (i.e. for reasons of access, safety or removal of dead/diseased/damaged branches), trees/shrubs will be pruned during January or February, wherever possible, to reduce the removal of berry crops

   trees/shrubs must be pruned during September to February inclusive to avoid the bird nesting season;
- Pruning of trees/shrubs will be undertaken to current best practice arboricultural methods (BS 3998:2012) ensuring clean and neat cut faces with no jagged ends, tears or scars;
- No herbicide spraying will be undertaken below the drip line of trees/shrubs;
- Dead/diseased/damaged trees/shrubs will be replaced as directed by the Site Manager;
- Should any trees require removal, a pre-commencement inspection for roosting bats and nesting birds will be undertaken by the Project Ecologist in accordance with Best Industry Practice;
- Use arisings to supplement brash piles within the Site or remove from Site, under the advice of the Project Ecologist (brash piles will strictly not contain grass arisings).

## 6.3 Native buffer planting

## Description

The native buffer planting comprises a mix of woodland trees (oak and beech) together with yew and a mix of woodland understorey species (hawthorn, field maple, blackthorn and goat willow). This mix is used mainly to supplement and reinforce existing boundary trees and scrub on the site perimeters where these about existing residential development and the railway. The native plant mix (see below) is used to create a scrub woodland edge in many locations, principally on the site eastern boundary.

#### Management Objectives

- To create dense wooded buffer planting to reinforce the screening and buffer between the site and neighbouring developments;
- To provide a range of microhabitats providing cover, nesting, hibernacula and foraging for a range of wildlife.

#### Management Prescriptions

#### Establishment maintenance (Year 1 to 5)

- Check tree and shrub guards at each maintenance visit and replace as necessary; remove guards once plants established;
- Replacement of losses during Years 1 to 5;
- Maintain in a weed free condition and top up mulch as required;
- Irrigation as required to ensure establishment. Allowance of up to 5 litres per tree/shrub;
- Annual pruning as required to encourage healthy plant growth.

#### Post Establishment Maintenance

- Monitor performance of tree and shrub guards and remove when no longer required;
- Maintain tree screen at all times but review whether to selectively coppice understorey species to maintain the density of the buffer;

#### 6.4 Native plant mix

#### Description

The native plant mix comprises a mix of typical chalkland scrub species including Guelder rose, wild privet, spindle, dogwood, hawthorn, hazel, dog rose, holly, blackthorn and grey willow. This mix is used mainly on the site eastern perimeters and within the Pump House Garden as a woodland edge mix to the native buffer planting.

#### Management Objectives

- To create dense low level structure to provide connectivity, good bird nesting habitat and shelter for wildlife;
- To provide a range of microhabitats providing cover and foraging for a range of wildlife.

## **Management Prescriptions**

#### Establishment maintenance (Year 1 to 5)

- Check tree and shrub guards at each maintenance visit and replace as necessary; remove guards once plants established;
- Replacement of losses during Years 1 to 5;
- Maintain in a weed free condition and top up mulch as required;

- Irrigation as required to ensure establishment. Allowance of up to 5 litres per tree/shrub;
- Annual pruning as required to encourage healthy plant growth.

#### Post Establishment Maintenance

- Monitor performance of tree and shrub guards and remove when no longer required;
- New shrub planting will be allowed to attain natural growth and spread with minimal management where this does not conflict with access or safety requirements;
- Scrub encroachment into retained and created grassland swards will be controlled through the mowing regimes prescribed for these habitat types.

## 6.5 Native Hedges and scrub

## Description

There are areas of retained and proposed hedgerows and scrub, principally along the site perimeters.

## Management Objective

The retained hedgerows and scrub, will be managed to promote good form and canopy growth as structural landscape elements and to maintain food sources for wild birds and shelter for wildlife which enhances wider habitat connectivity.

#### Management Prescription

## Establishment Phase (Years 1 to 5)

- Maintain hedge line in a weed free condition;
- Remove protective guards when these constrain growth;
- Irrigation as required to ensure establishment. Allowance of up to 5 litres per tree/shrub:
- Trim as necessary to promote strong growth until hedges reach desired height (1.5 to 2 metres);
- Replacement of losses during Years 1 to 5.

#### Post Establishment

- The management regime will require cutting every other year, removing the first or second year's growth only;
- Where hedgerows and scrub restrict access along footpaths, roads or other areas of public access, these features will be cut annually to maintain access, removing the first or second year's growth only;
- Hedgerows will be cut during January or February wherever possible to reduce the removal of berry crops - hedgerows must be cut during September to February inclusive to avoid the bird nesting season;

- Cutting of hedgerows will be undertaken to current best practice arboricultural methods (BS 3998:2012) ensuring clean and neat cut faces with no jagged ends, tears or scars;
- Dead/diseased/damaged shrubs will be replaced as directed by the Site Manager;
- No herbicide spraying of grass or weeds will be undertaken under hedgerows, to allow an understorey to develop;
- Hedgerows and sections of linear scrub adjacent to the chalk stream will be managed to form compact, well-structured shapes to a height of 3-5m and width of 2-3m – no herbicides to again be used;
- Use arisings to supplement brash piles within the site or remove from site, under the advice of the Project Ecologist (brash piles will strictly not contain grass arisings).

#### 6.6 Meadow Grassland

The areas of retained habitat, including the translocated grassland are located mainly on the site perimeters and the western field of Meadow Park (see Figure 2). Opportunities to retain other areas of grassland will be explored during the construction phase and are discussed in the LBMP. In addition a number meadow strips will be created as shown on the Landscape Masterplan.

## Management Objective

The areas of created, retained and translocated meadow grassland will be managed to ensure that the chalk and neutral grassland indicator species identified in the ecology surveys survive and thrive. Meadow management will be monitored by the Project Ecologist.

#### **Management Prescriptions**

## New Meadow Grassland: Establishment

 Establishment maintenance prescriptions for translocated and new areas of meadow grassland are described in the LBMP as these will be completed during the construction phase. The regimes below would be applicable to all meadow grasslands, post year 1 (Establishment).

## Retained/translocated and new meadow grassland Post Establishment

- Each year, a single cut in late July (not before the 15th July) and a single cut in early September (not after the 15th September) with all arisings removed, from Year 2 onwards;
- Cutting bar set to a height of no less than 150 mm (to avoid adverse impacts to reptiles and small mammals);
- Arisings removed from Site or located within an appropriate area designated by the Site Manager;
- Maintain a swathe cut of more frequently mown (monthly) along surfaced path edges and around elements such as the play area;

- If weeds become too dominant within the sward, a further cut in April to be undertaken with all arisings removed, subject to the advice of the Project Ecologist;
- Watering of translocated grassland will be carried out as advised by the Project Ecologist during periods of dry weather in the x2 years following translocation (Years 2 & 3).

## 6.7 Bioretention basins

## Description

The Bioretention basins are located along the northern and southern site perimeters to the east of the Chalk Stream. These basins will be dry for much of the year but will provide flood capacity when required. The basins will be turfed with a wetland meadow (Flora aqua turf).

## Management Objectives

To ensure that the retention basins function efficiently at all times as part of the SuDS network. The basins will form part of a network of wetland habitats providing breeding habitat for amphibians and wetland birds and foraging habitat for a range of species including bats, birds, reptiles and amphibians and will provide attractive corridors as part of the open space network and green infrastructure.

#### **Management Prescriptions**

#### **Establishment**

 Establishment maintenance prescriptions for translocated and new areas of meadow grassland are described in the LBMP as these will be completed during the construction phase. The regimes below would be applicable to all meadow grasslands, post year 1 (Establishment).

#### Post Establishment

- Each year, a single cut in late July (not before the 15th July) and a single cut in early September (not after the 15th September) with all arisings removed, from Year 2 onwards;
- Cutting bar set to a height of no less than 15cm (to avoid adverse impacts to reptiles and small mammals);
- Arisings removed from Site or located within an appropriate area designated by the Site Manager;
- If weeds become too dominant within the sward, a further single cut in early April (not after 15th April) to be undertaken with all arisings removed, subject to the advice of the Project Ecologist.

#### 6.8 Ditches

## Description

There are two retained ditches (D1 and D2). Ditch D1 runs along the eastern site boundary. Ditch D2 runs west from the chalk stream along the southern boundary of the south western land parcel.

#### **Management Objectives**

 To ensure that the ditches continue to function efficiently whilst providing wildlife habitat;

## **Management Prescriptions**

- Supplementary planting and sediment control will be implemented, if required, under the advice of the Project Ecologist following the prescribed monitoring visits (Years 5, 10, 15, 20 & 25);
- Vegetation clearance will be undertaken, if required, on a five yearly basis commencing in Year 5. The extent of the clearance will be determined by the Site Manager under the advice of the Project Ecologist to ensure an appropriate ratio of open water to aquatic vegetation;
- Sediment and vegetation control will be undertaken between September to mid-January. Arisings will to be left onsite for 48 hours before removal from Site.

#### 6.9 Chalk Stream

## Description

The chalk stream drains northwards through the centre of the Site linking through the network of off-site linear field drainage ditches to Caudle Ditch which in turn drains towards Teversham Fen. The stream is flanked by trees and shrubs which are likely to represent remnants of historic unmanaged hedgerows. Some mature hawthorn shrubs are present, especially along the eastern boundary, whilst much of the western boundary is represented by younger specimens and bramble scrub. A mature willow is present to the southern end of the Site alongside other trees.

During the construction phase works will be carried out to open up the stream through the thinning out of the existing dense scrub and the selective retention of trees and groups of shrubs of ecological value. The stream will also be widened in selected locations with banks re-graded to create a more naturalised channel. Aquatic and marginal planting will be carried out to the eastern and western banks on the main section of stream through the heart of the site, as described in the LBMP.

#### Management Objective

The principal objective will be to continue to manage the stream corridor to maximise the biodiversity value of this valuable chalk steam habitat. Management will be informed by periodic monitoring by the Project Ecologist, in line with the prescription below. The stream will also provide an attractive feature as part of the wider landscape infrastructure. A key objective of management will be to monitor the condition of the stream for the presence of invasive non-native species such as New Zealand pygmyweed and also to prevent a loss of diversity due to other invasive species and garden escapes.

#### **Management Prescriptions**

- Undertake remedial action as appropriate to encourage the stream to develop
  a natural appearance with variations of flow, depth and width through
  installation of additional flow deflectors and gravel and removal of silt if
  required. Interventions will be under the advice of the Project Ecologist
  following the prescribed monitoring visits (Years 5, 10, 15, 20 & 25);
- Supplementary planting and sediment control will be implemented as deemed appropriate by the Project Ecologist, based on the findings of the prescribed monitoring visits;
- Pruning of woody scrub species on and adjacent to the stream banks as deemed appropriate by the Project Ecologist following the prescribed monitoring visits, in order to control shading of the bankside and aquatic vegetation;
- Annual management of encroaching bramble scrub as well as aquatic vegetation as advised by the Project Ecologist, to maintain a diverse flora and to ensure that rank species such as reedmace and common reed do not become established;
- Sediment and vegetation control will be undertaken between September to mid-January. Arisings will to be left onsite for 48 hours before removal from Site.

## 6.10 Linear Park: Planting and lawn

#### Description

Linear Park includes beds of herbaceous plants and lower growing ornamental shrubs, mainly lavender and ground cover species including pachysandra, groundcover rose and vinca minor. The herbaceous planting includes dramatic species such as *Kniphophia* (Red hot poker) and *Allium* bulbs, with species such as salvia and betony which will provide good cover. This planting, although more ornamental in character, will have a semi natural character and includes many species which will attract pollinators. The planting will be punctuated with occasional specimen shrubs and trees. The proposed lawns are enclosed by the planted areas. An ornamental flowering hedge of *Ligustrum* and *Physocarpus* encloses the LEAP at the western end of the park.

#### Management Objective

The planting will be managed to create colourful, species rich plantings which are attractive to a range of insects and birds. To maintain the lawns in a healthy and attractive condition with 90% grass cover.

## Management Prescriptions

#### All Planting: Establishment maintenance

- Irrigation as necessary to ensure establishment. Allowance of up to 5 litres per shrub;
- Maintain beds and hedges in a weed free condition;
- Top up mulches as necessary;
- Replace losses (Years 1 to 5).

## Planting: Annual maintenance

- Irrigation as required to ensure successful establishment (minimum once a week April-end October; once a month November-end March);
- Weeding as necessary to maintain in largely weed free condition and prevent invasion by grasses which will suppress herbaceous plants
- Pruning of lavender in late summer to remove flowering stems appropriate to individual shrub species to promote healthy growth, good cover and desirable ornamental features including flowering, fruiting, autumn colour and stem colour (avoid siding up with hedge trimmers);
- Manage multi-stem shrub specimens in accordance with species requirements to maintain good structure;
- Light trimming back as necessary of excess growth overhanging footways where this impedes access;
- Monitor growth of herbaceous plants and lift, thin, divide as necessary to maintain diversity of species;
- Leave flowering stems over winter to provide food source for birds;
- Apply non peat compost or manure in winter to enrich soils in winter

## Lawns: Annual Maintenance

- Lawns to be maintained at heights of between 25 mm and 60 mm (cut roughly fortnightly throughout the growing season:- mid-March to mid-October); reform edges abutting hard surfaces; remove arisings;
- Monitor condition and cover to maintain a predominantly grass sward free from disease, fungal growth, discoloration, scorch or wilt, with 90% cover;
- Aerate areas of poor cover, reinstate worn areas with turf of quality and appearance to match existing and overseed bare patches, as required;
- Clip around all posts, etc. which are surrounded by grass;
- Reform edges to hard surfaces and remove arisings.

#### Hedge: Annual maintenance

- Once hedges achieve desired height lightly trim in late summer after main flowering periods to maintain hedge shape;
- Additional trim in autumn if necessary;
- Hand weed hedge lines taking particular care to remove species such as bind weed which will climb through the hedge;
- Top up mulch at hedge bases as necessary.

## 6.11 Pump House Garden Pond

## Description

The pond has a continuous stone edging which is damaged in places, especially where trees such as yew have established. The water level is lower than designed with little clear water and dense suspended sediment beneath floating aquatic duckweed. Iris is present as an occasional aquatic marginal.

The Pump House Garden pond will be restored through the clearance of the dense vegetation. The existing timber bridge to the island will be restored. The banks to the pond will be opened up to create lawn and meadow areas.

## Management Objectives

The management objectives for the pond will combine biodiversity aims to enhance the diversity of habitats with areas for quiet enjoyment and recreation for residents.

## **Management Prescriptions**

- Supplementary planting and sediment control will be implemented, if required, under the advice of the Project Ecologist following the prescribed monitoring visits (Years 5, 10, 15, 20 & 25);
- Vegetation clearance will be undertaken, if required, on a five yearly basis commencing in Year 5. The extent of the clearance will be determined by the Project Ecologist following prescribed monitoring visits to ensure an appropriate ratio of open water to aquatic vegetation;
- Sediment and vegetation control will be undertaken between September to mid-January. Arisings will to be left onsite for 48 hours before removal from Site.

## 6.12 Road verges and buildings (species rich lawn turf)

#### Description

The road verges within the residential areas are to be turfed with a species rich lawn turf mixture. This combines grasses with low growing wildflower species such as daisy, birdsfoot trefoil, black medick, but also some taller growing species such as knapweed and Common sorrel.

#### Management Objective

The species rich verges will in the main be managed through regular mowing which allows the flowering of the lower growing species such as daisy and birdsfoot trefoil. In selected locations cutting frequencies may be reduced to allow flowering of the taller meadow species. The verges will be managed to ensure retention of 90% ground cover.

#### **Management Prescriptions**

- Verges to be maintained at heights of between 40 mm and 70 mm (cut roughly fortnightly throughout the growing season:- mid-March to mid-October); re-form edges abutting hard surfaces; remove arisings;
- In selected locations, reduce cutting frequencies to allow flowering of taller species. Cut in late summer and remove arisings;
- Monitor condition and cover to maintain a predominantly grass sward free from disease, fungal growth, discoloration, scorch or wilt, with 90% cover;
- Monitor for evidence of compaction for instance due to unauthorised vehicle access or parking and relieve compaction if required. Where necessary install temporary fencing to prevent unauthorised access and overseed;
- Clip round all posts, etc. which are surrounded by grass;
- Reform edges to hard surfaces and remove arisings.

#### 6.13 Artificial Wildlife Habitats

#### **Description**

Artificial wildlife habitats include features such as hibernacula, bat and bird boxes which have been installed throughout the park. The location of these features are shown on Figure 9 of the LBMP (excludes features on houses which will be in private ownership and therefore outside the scope of this LMMP).

These features provide good opportunities for engagement of the local community in construction, installation and monitoring use.

#### **Management Objective**

To maximise the use of the artificial habitats by target species.

#### **Management Prescription**

- All bird, bat and insect boxes installed on trees, as well as hedgehog houses installed under hedgerows, will be subject to inspections by the Project Ecologist following the prescribed monitoring visits (Years 1 to 5 & 10).
- Any boxes which are identified as damaged or missing will inspected internally and then replaced under the direction of the Project Ecologist to the same or equivalent specification and quality.
- Monitoring of wildlife enhancements will not include bat and bird boxes on houses, as these would be privately owned.

#### 6.14 Hard surfaces

#### Description

Hard surfaces within the residential areas and wider open space include tarmac roads, various permeable paviers, breedon gravel paths, decking and safety surfacing within the play area

## Management Objective

To maintain a high quality, safe and accessible pedestrian and vehicular network for all users.

#### Management Prescription

#### Roads and Paving

- Street cleansing in accordance with local authority prescribed frequencies;
- Monitoring of condition of street and footway networks and repairs as required to maintain a safe and accessible network;
- Monitoring and removal of weed growth, in particular in block paved areas to ensure continued permeability (levels of weed growth will be influenced by levels of use and frequency of cleansing).

#### Breedon Gravel Paths and Boardwalks

- Monitor condition of gravel paths and car park and take measures to alleviate compaction and rutting and top up as necessary to ensure paths remain accessible at all times;
- Regular checks of the boardwalks, including the supporting structures and fencing, and repairs as required;
- Occasional cleansing (sweeping) of boardwalks may be required to prevent moss build up.

## 6.15 Structures and furniture

#### Description

There are two bridges over the stream; a road bridge and a footbridge.

Other structures and furniture include cycle stands and storage, signage, boundary treatments (timber fencing and gates) and lighting.

#### Management Objective

• To maintain all structures and furniture in a safe and serviceable condition, fit for purpose.

#### **Management Prescriptions**

- The road and foot bridges will be checked in accordance with the requirements of Operation and Maintenance (O&M) Manuals for the relevant structure;
- Weekly checks of all other minor structures and furniture;
- Cleansing as required (anticipate this will be twice per annum) suggest in late spring and early autumn;
- Replacement of any furniture damaged beyond repair with identical specification, or similar, if no longer available;
- Check fence lines and gates and repair as necessary.

## 6.16 LEAP (play equipment)

#### Management Objective

The proposed play areas consist of a combination of traditional and natural play elements. It is anticipated that operational manuals detailing maintenance checks and inspection requirements will be issued as part of detailed design and construction. The principal management objective will be to maintain the equipment and features in a good and usable condition in accordance with any operational and maintenance guidance issued in association with design, installation and manufacturers' recommendations.

## **Management Prescriptions**

- Daily inspections and checks of all elements in accordance with maintenance guidance;
- Regular (daily in most cases) sweeping of play surfacing;
- Annual Inspections by Rospa approved Inspectors;
- Check safety surfacing and repair as necessary.

## 6.17 Litter and cleansing

## Description

Street cleansing will be the responsibility of the highway authority in accordance with requirements of the Environmental Protection Act. Litter picking within the open spaces and public realm which do not fall within the remit of the local authority shall be the responsibility of the Management Company.

## Management Objective

 To ensure the open spaces and public realm are managed in a safe, serviceable and attractive condition with no litter build up.

#### **Management Prescriptions**

- Any evidence of fly tipping to be removed or reported to the Local Authority for removal within 24 hours (depending on location);
- Litter picking on a weekly rotation during summer months (April to September) and every two weeks during winter months. Site Manager to monitor evidence of litter build up and increase or decrease frequencies as necessary;
- Leaf clearance from main amenity landscape areas and streetscape during October through to end November;
- Clearance of ice and snow from principal routes as required.

## 6.18 Inspections, Surveys and Monitoring

#### Description

Inspections and monitoring regimes as prescribed above are intended to monitor the condition and quality of the landscape, the effectiveness of on-going maintenance regimes and to ensure the site and individual elements remain in a safe and serviceable condition. The management prescription below provides an overview of the recommended Inspections and Monitoring and those responsible for each task.

## Management Prescription

- Tree Condition Survey 2020/21 and every 3 to 5 years Arboricultural Contractor;
- Tree Safety Inspections Annual Site Manager with Arboricultural Contractor;
- Inspections for Oak processionary moth seasonal as provided in current best practice guidance by Forest Research Council. Generally spring/early summer for evidence of new nests and emergence of caterpillars;
- Management Prescriptions and Maintenance Tasks Reviews Annual Site Manager;
- Ecology Monitoring of habitats and species in accordance with the prescriptions set out in the LBMP and this LMMP. Five yearly Ecology Monitoring Reports are to be prepared, which will inform updates to the LBMP and this LMMP;

Updated surveys and monitoring reports will be added as Appendices to this LMMP in order to inform future updates and revisions.

# 7. Typical Annual Maintenance Schedule

Landscape Type	Component	Operation	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Турс														
Retained Woodland and Trees		Thinning/coppicing and works to												
Woodland		individual trees												i
Proposed	Street Trees	Irrigation if required												
Trees	and Specimen	Weed control												
	Trees	Remove sucker growth												
		Annual Inspections												
		Formative Pruning												
Pond, Chalk	Waterbodies	Inspections and debris removal												
Stream and		Weed management												
Ditches		Monitor and remove invasive sp.												
	Marginal &	Lift & divide, replace												
	aquatic	Remove dead & dying foliage												1
	planting	Monitor and remove invasive sp.												1
	Scrub	Management												
	De-silting	Management												
Bioretention	Meadow	Cutting												·
basins	Scrub	Management												1
Landscape Planting	Linear Park	Irrigation if required												1
	Planting	Weed control												1
		Lift & divide, replace												
		Top up bark mulch												1
		Pruning (to suit species)												
		Trimming back from path edges												
	Native tree and	Check stakes and ties												
	shrub planting	Management –												
		Thinning/coppicing												ĺ
	Meadow	Cutting												1
	grassland													ĺ
	Lawns	Cutting (every 2 weeks)												
		Aeration and repairs												
	Verges	Cutting												1
Hard Surfaces	Streetscape	Sweeping and cleansing												
	and Public	Weed control - paving												
	realm	Leaf clearance												
		Snow and ice clearance												

Landscape Type	Component	Operation	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Gravel Paths	Repairs												
	Boardwalks	Checks and sweeping												
Structures and furniture		Inspections (weekly)												
		Cleansing												
		Check fence lines (monthly)												
Play Area		Daily Checks												
		Sweeping												
		Rospa Inspection												
Litter picking &	cleansing	Summer months - weekly												
		Winter months – every 2 weeks												
Inspections	Trees	Annual safety inspection												
and surveys		Five-year condition survey												
		Oak processionary moth												
	Translocation Sites	Biannual ecology monitoring												
	Site	Management Reviews												
	Site													

# 8. Monitoring and Review

This LMMP and the prescriptions will be subject to annual review by the Site Manager and, where necessary, in association with specialist advisors involved in site monitoring (principally arboriculturalist and project ecologist). At this annual review any changes to prescriptions and frequencies should be recorded. The LMMP should be subject to full review at Practical Completion and updated as necessary to reflect as built works. Suggested frequencies for inspections, surveys and monitoring are described in the main body of the document. It is recommended that a full update of the LMMP is prepared every five years. This five yearly review will be co-ordinated with the programme of five yearly Monitoring Reviews and Reports to be prepared for the LBMP. The LMMP update will be informed by the recommended five-year tree condition survey, ecological monitoring and LBMP update and any other updated surveys.

Appendix A: Hard and Soft Landscape Plans

