Cantia Arboricultural Services

Woodland Management Plan

CAS/2017/118

For

James Westrope

Blue Moon Paddock, Woodfield Lane,

Essendon, AL9 6JJ.

Boyd Saunders

Dip Arb L4- Tech Arbor A

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1.0 Introduction

1.1.1 Cantia Arboricultural Services were instructed to undertake a tree survey and provide a woodland management plan for the site known as Blue Moon Paddock, Woodfield Lane, Essendon, AL9 6JJ.

1.1.2 A detailed survey was undertaken by Boyd Saunders in March 2017.

1.2 Aim of Report

1.2.1 This report provides recommendations for the management of the woodland whilst adhering to the principles of the UK Woodland Assurance Scheme and the recommendations for good practice provided by the forestry commission.

1.2.2 The fundamental objectives of this plan are to preserve, improve and enhance the ecological elements of the woodland by increasing biodiversity and visual amenity.

1.2.3 This is an arboricultural report and no such reliance must be given to any comments relating to buildings, engineering, soil or ecological issues.

1.3 Documentation

1.3.1 The following documentation has been made available

- Flood Risk Assessment
- Phase 1 Habitat Survey
- Bs5837 Arboricultural Report
- Planning Proposal

1.4 Vision

1.4.1 The vision is to support, enhance and increase the current high canopy woodland whilst also introducing native understory species creating a diverse and robust mix of all age

classes. The overall aim is to maintain and enhance the visual, cultural, ecological value and character of the landscape whilst encouraging a diversity of habitat and increasing ecotone potential. This will be implemented through a woodland management plan lasting twenty years with reviews every quarter (5 years). Initially in the first 1-2 years the woodland will require high intervention to clear some areas of invasive & undesirable species (predominantly Bramble, Horse Chestnut & Turkey Oak). Existing native specimen trees will be safeguarded and managed wherever possible through minimal intervention to allow natural degeneration and increase longevity. This will be followed by extensive planting of native species aimed at increasing habitat potential and promoting a diverse and robust primary producing trophic layer. After this period management will be via minimal intervention and gentle refinement.

2.0 Site Description

2.1.1 The site of the woodland is a plot occupying approximately 1.33 hectares of land situated to the northern edge of Woodfield Lane, Essendon, AL9 6JJ.

2.1.2 The North Eastern section of the plot currently accommodates an old stable and barn which have fallen into disrepair and become dilapidated.

2.1.3 A single lane unmade track along the Eastern boundary provides access to the outbuildings with the entrance being on Woodfield Lane.

2.1.4 The Northern and Eastern sections of the plot are broadly open with occasional trees and saplings set in grassland and bramble patches.

2.1.5 The Southern and Western section of the plot accommodates areas of patchy woodland with groups of mature trees alongside open areas with an understory of self-sown saplings and patchy grass areas.

2.1.6 The site is bordered to the East by Chestnut Farm and plays an integral part of the local woodland corridor network.

2.2 Woodland Composition / Tree Discussion

2.2.1 Two management compartments have been identified based on differing compositions of woodland/species type.

Compartment A

An area of semi-improved grassland and scrub dominated by Perennial Ryegrass (*Lolium perenne*), Tussock Grass and Bramble (*Rubus fruticosus*). Sporadic saplings and semi mature trees are present throughout compartment A, notably self-sown Ash (*Fraxinus excelsior)* and Goat Willow (*Salix caprea*). The Northern boundary hosts a row of approximately 11 Goat Willows which provide screening.

Compartment B

An area of relatively open woodland containing a diverse mix of young, early-mature, mature and over mature trees dominated by early-mature and mature English Oak (*Quercus robur*) and early-mature, mature and over-mature Horse Chestnut (*Aesculus hippocaastanum*). Also present are several young and one mature Turkey Oak (*Quercus cerris*), as well as occasional Goat Willow (*Salix caprea*), Silver Birch (*Betula pendula*) and Ash (*Fraxinus excelsior*).

2.3 History of Management

2.3.1 No information regarding management has been disclosed and therefore it is assumed that there has been no structured arboricultural management for many years.

2.4 Designations

2.4.1 The site lies within the Metropolitan Green Belt and the West End to Brickendon Wooded Slopes Landscape Character Area as designated in the Welwyn Hatfield District Plan 2005.

2.4.2 The site lies within Chestnut Farm Meadows Local Wildlife Site (Ref: 70/080), identified on the basis of its grassland interest (species rich acid/neutral grassland). It is clear however from detailed site assessment that it is the woodland character of this site which is of the most ecological significance.

2.5 Habitat

2.5.1 A phase 1 ecological survey was carried out. The proposed woodland management operations are focused on improving woodland habitat within wooded areas, planting of native species to increase species diversity and managing open spaces to enhance species and ecotone diversity. All works are to be implemented after full consultation with the appointed ecologist.

2.5.2 With no apparent arboricultural management intervention for many years the site is rich in niche habitats such as standing, lying deadwood, broken trees and branches, tree cavities etc. All of these provide valuable habitat opportunities for a variety of bats, birds and insects. The vision is to retain and enhance these where it is appropriate to do so.

2.5.3 No water course or ponds are currently present within the management compartments.

3.0 Management Objectives

3.1 Wherever possible the principles of management for the site are in accordance with the UK Forestry Standard national policy for woodland.

3.2 The five primary management objectives for the woodland are:

- To conserve and enhance the diversity and numbers of plant and wildlife species.
- To improve and enhance the aesthetic and landscape values of the woodland.
- To maintain and enhance a diverse range of habitat types.
- To manage and maintain all elements of the woodland to ensure the sustainable health and longevity of the woodland.
- To monitor and carry out management to honour the owners duty of care to neighbours and visitors.

4.0 Principles of Management

4.1 The woodland will be regularly monitored and managed through minimal intervention ensuring that the owners' legal obligations/liabilities are met and ensuring the woodland is maintained in a sustainable way through management of natural regeneration and control of invasive species.

4.2 The intention is to provide a woodland containing a diverse range of species and age classes, promoting increased bio-diversity and managed under a continuous cover system, with new planting and the promotion of natural regeneration.

4.3 The ecological diversity of the site is to be enhanced, improving light levels for ground flora, retaining deadwood habitat, installing bat and bird boxes and enhancing the structure of the woodland edge to encourage insect, bird and bat activity.

4.4 Invasive and non-native species are to be removed from the woodland, such as Turkey Oak (*Quecus cerris*), Horse Chestnut (*Aesculus hippocastanum*) and in some instances Bramble (*Rubus fruticosus*).

5.0 Sequence of Management

5.1 Submission of Woodland Management Plan.

5.2 Client to seek quotations from contractors for carrying out the woodland management works. Generic Method Statements and Risk Assessments are to accompany any contractor quotations.

5.3 Contract to be signed with winning contractor ensuring that all works specified are included and carried out in accordance with the Management Plan provided by Cantia Arboricultural Services.

5.4 The winning contractors' site specific Method Statements, Risk Assessments and Work Programme are to be approved by Cantia Arboricultural Services & Local Tree Officer.

5.5 Arboricultural works carried out by contractor.

5.6 Site assessment carried out by Cantia Arboricultural Services to ensure accurate completion.

5.7 The timing of management operations requires careful planning to ensure vegetation clearance works avoids the nesting season (March-August), and that planting is carried out in the dormant period (November-February).

5.8 The site owner has a legal duty of care to ensure that trees to not present a health and safety risk to neighbours and visitors. A programme of periodic tree condition assessment is to be implemented and any relevant tree safety works carried out as required. Trees will also require further assessment after periods of extreme weather.

6.0 Arboricultural Operations

6.1 Compartment A

Removal of non-native/undesirable species – Turkey Oak (*Quercus cerris*) & Horse Chestnut (*Aesculus hippocastanum*)

Control/Removal of Bramble (*Rubus fruticosus*)/ Dense Scrub from designated areas including cultivation of soil to remove roots where this does not fall within RPA of trees.

Plant selected trees (as per planting proposal)

Maintain semi-improved grassland (cut in February & mid-August, cuttings to be removed)

6.2 Compartment B

Review tree stock to determine pruning requirements

Removal of non-native/undesirable species – Turkey Oak (*Quercus cerris*) & Horse Chestnut (*Aesculus hippocastanum*)- Over Mature Horse Chestnut to be retained for habitat benefits.

Control/Removal of Bramble (*Rubus fruticosus*)/ Dense Scrub from designated areas

Clear fallen trees to form habitat piles.

Identify self-sown saplings for retention.

Thin understory removing unwanted species, self-sown saplings of poor physiological form.

Install bird & bat boxes.

Carry out approved planting scheme.

6.3 Health and Safety Works

The site owner has a duty of care to ensure that the trees on the site do not present a risk to site visitors and neighbours. A programme of periodic tree condition assessment is to be put in place, with any recommended tree safety works carried out as required.

7.0 Habitat Improvement

7.1 The following measures will be undertaken to enhance and improve diversity/habitat potential of the site-

- It is envisaged that a variety of bat roost and bird nesting boxes will be installed throughout the management compartments. The current plan involves installing a minimum of 15 bat boxes and 15 bird nesting boxes.
- Where appropriate logs and brushwood resulting from tree work operations will be stacked on site to form habitat piles.
- Standing deadwood and dead branches are to be retained where considered to not pose a significant risk to visitors/neighbours.
- The planting of new native species to the site.

8.0 New Planting

8.1 Natural regeneration of desired species to be promoted by fitting of spiral guards and mulch mats.

8.2 Planting species mix to consist of Crab Apple (*Malus sylvestris*), Sessile Oak (*Quercus patraea*), Downy Birch (*Betula pubescens*), Rowan (*Sorbus aucuparia*), Hazel (*Corylus avellana*), Hawthorn (*Crataegus monogyna*) and Holly (*Ilex aquifolium*), Yew (*Taxus baccata*).

8.3 The proposed species have been selected due to their following benefits to habitat-

Holly (*Ilex aquifolium*)

- Dense cover and nesting opportunities for birds
- Leaf litter used by mammals
- Nectar and pollen for bees /pollinators
- Flowers utilised by butterflies
- Leaves provide food source for certain catepillars
- Berries provide valuable food source for birds and mammals.

Crab Apple (*Malus sylvestris*)

- Leaves provide food for caterpillars

- Flowers provide early pollen source for bees and pollinators
- Fruit is eaten by variety of birds and mammals

Sessile Oak (*Quercus patraea*)

- Supports more wild species than any other native tree
- 280 species of insects and additional associated predators
- Bark provides habitat for lichens, mosses and liverworts
- Cavities in mature trees provide habitat for birds and bats
- Acorns provide food source for birds and mammals
- Flowers and leaf buds provide food source for caterpillars
- Leaf breakdown supports beetles and fungi

Downy Birch (*Betula pubescens*)

- Light open canopy allowing light to woodland floor
- Provides habitat for 300 species of insect
- Seeds are eaten by a variety of small birds

Rowan (*Sorbus aucuparia*)

- Leaves are a food source for a variety of caterpillars
- Flowers are a source of pollen for bees and pollinators
- Berries provide a rich source of food for birds including Blackbirds and Mistle Thrush

Hazel (*Corylus avellana*)

- Provides habitat opportunity for caterpillars
- Associated with Dormouse
- Nuts provide a food source for birds and mammals
- Early flowers supporting bees and pollinators

Hawthorn (*Crataegus monogyna*)

- Provides habitat for 300 species of insect & caterpillar
- Flowers are a food source for Dormouse
- Nectar for bees and pollinators
- Shelter and nesting habitat for small birds

Yew (*Taxus baccata*)

- Dense foliage utilised for nesting by small birds including Firecrest and Goldcrest.
- Fruit is eaten by many birds including Blackbirds, Thrushes and Field Fare.
- Fruit is eaten by small mammals.
- Leaves are eaten by the caterpillar of the Satin Beauty Moth
- Evergreen foliage provides year round shelter

8.4 The selection of whips (Holly, Hawthorn, Hazel, Crab Apple, Downy Birch and Rowan) has been suggested and supplied by The Woodland Trust after a site visit by their Woodland Champion. There will be community involvement with the planting as part of the Centenary Woodland Project to commemorate the centenary of WW1. The Yew (*Taxus baccata*) whips will be purchased independently. Whips will be planted with spiral guards and mulch matting and managed to establishment. Thinning of poor/failed specimens will take place bi-annually in the first quarter of management.

8.5 The Sessile Oaks (*Quercus patraea*) will be purchased independently as 'Select Standards' with a girth of approx. 10-12cm and planted with 2 x stakes/ties, spiral guards and mulch mats. These specimen trees will be managed to establishment and replaced should failure occur during the proposed period of 20 years.

8.6 **Compartment A**

Species Mix

Crab Apple (*Malus sylvestris*)
Sessile Oak (*Quercus patraea*)
Downy Birch (*Betula pubescens*)
Rowan (*Sorbus aucuparia*)

Trees to be planted with mulch mats and spiral guards.

8.7 **Compartment B**

Species Mix

Crab Apple (*Malus sylvestris*)
Sessile Oak (*Quercus patraea*)
Downy Birch (*Betula pubescens*)
Rowan (*Sorbus aucuparia*)
Holly (*Ilex aquifolium*)
Hawthorn (*Crataegus monogyna*)
Hazel (*Corylus avellana*)
Yew (*Taxus baccata*)

Trees to be planted with mulch mats and spiral guards.

8.8 Planting location and numbers as per Planting Plan P/508

9.0 Monitoring and Maintenance

9.1 It is recommended that the site be inspected every two years within the first five year management programme to monitor tree condition, planting establishment and Bramble control.

9.2 The proposal is to carry out management for a minimum period of 20 years. After five years further recommendations for a continued inspection regime can then be given in the findings of the final inspection.

10.0 Work Programme

Activity	Year 1	Year 2	Year 3	Year 4	Year 5
Tree condition assessment	**X**		X		X
Tree safety works after assessment	X		X		X
Removal of non-native species & undesired natural regeneration /thinning understory	X		X		X
Carry out approved planting scheme	X				
Maintain area around planted trees to aid establishment		X	X	X	X
Monitoring visit	X		X		X
Management plan review					X
Install/check & replace Bird nesting / bat boxes	X				X
Identify young trees to be retained and fit spiral guards	X				

11.0 Conclusion

11.1 Young secondary woodland has become established within some areas whilst others remain relatively open. This provides a basic structure to help develop the woodland to be one of diverse habitats and high amenity value.

11.2 Existing areas of open space are to be retained and enhanced to provide opportunities for ruderal species and valuable foraging area for wildlife.

11.3 The proposed management scheme will require a high level of initial input to put management proposals in place. Once initial clearing/thinning operations, tree safety works and planting have been carried out the woodland will continue to develop with minimal management intervention.

11.4 The implementation of this woodland management plan will provide significant ecological benefits to the woodland by increasing its bio-diversity as well as resulting in enhancement of its visual amenities. It will facilitate the effective conservation; maintenance; and enhancement of this part of the designated Landscape Character Area as well as strengthening its wider setting.