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BREACH HOUSE

Estate Management Plan - October 2023

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CONTENTS

1.0	Introduction	1
1.1	Purpose and scope of Document	
1.2	Site Description	
2.0	Proposal	2
2.1	Design Intention	
2.2	Aims and Objectives	
3.0	Landscape Management Components	
3.1	Landscape Components	3
3.2	General	4
3.3	Trees	5
3.4	Copse/Woodlands	7
3.5	Sutton Lane	10
3.6	Boundary Hedgerow	12
3.7	Shrubs/Hedges	13
3.8	Species Rich Meadow/Grasses	15
3.9	Pond	17
3.10	Wetland Area/Riparian Corridor	19
3.11	Grazing Areas	20
3.12	Structures, Fences and Gates	21
4.0	Maintenance Schedule	22

1. INTRODUCTION

1.1 Purpose and scope of Document

The Landscape Management Plan has been prepared by Studio 31 to inform the management and successful implementation of the proposed landscaping at Breach House, on Sutton Lane south of Market Bosworth

The purpose of this document is to outline the long-term design intention for the site, setting out soft landscape management aims and objectives for specific landscape components. Also providing a maintenance schedule which sets out the frequency and timings of the activities to be carried out.

1.2 Site Description

The site currently consists of two fields with a collection of single storey agricultural buildings at the entrance. It is currently planted with long meadow grass with roughly mown strips along the edges. The boundaries vary, consisting of maintained field boundary hedges, hedgerow trees and riparian habitat associated with Sutton Brook.

Sutton Lane runs along the north east boundary, which consists of a gated single track lane. This extends northwards in the direction of the historic town of Market Bosworth, which was historically used as a drovers way for moving cattle to the market. The lane is framed with an avenue of mature oak trees, that form a distinct landscape character to the local area.

The site is bounded by Sutton Brook, which is a small river to the south, as well as a small drainage stream to the west. A network of drainage ditches are evident within the wider landscape

In all directions the site is surrounded by open countryside, with characteristic agricultural land, rolling hedge lined fields and pockets of woodland evident. A small copse is located on site to the south east, which adds to the tree cover found throughout the wider landscape.

2. PROPOSAL

2.1 Design Intention

The landscape proposal for Breach House is a soft approach driven by the existing ecology, topography and context. Using typical and traditional materials and natural forms to blend seamlessly with the surrounding context. Habitats are enhanced and reflect those typically found surrounding farmsteads and stable buildings; areas of grazing land, scrub, gappy hedgerows, species rich grassland and woodland blocks. The design links to the heritage of not only the site, but also the wider landscape.

The intent will be to create a strong and locally relevant narrative between the proposed dwelling and the historic barn on site, as well as Sutton Lane. Choreographed views will celebrate the new architectural form, and reflect the local narrative of current views onto local architecture. There will be improved meadow management to enhance the existing low species rich grasslands, as well as additional tree and hedge planting to future proof and strengthen the local landscape character, and improve biodiversity with habitat creation. The design will engage with the site, as well as the local, historic hydrology so as to enhance and connect the aquatic ecology and feed into the architectural processes.

2.2 Aims and Objectives

Providing an uplifted landscape

Implementing a landscape scheme that will accompany the newly proposed development as well as aid it to blend into its surroundings that are rich in heritage. This will help to naturalise the area, assist the practicality of using the site for grazing cows, as well as soften the hard landscape elements throughout the site.

Maintain and enhance biodiversity and heritage

Protecting and enhancing the site's existing retained trees, through sustainable landscape management to promote healthy, diverse habitat structures and encourage the establishment of desirable plant species. The planting is selected to reflect the existing heritage of the area as well as enhance the long term development of the flora on site.

Ensure the successful implementation of the landscape design

Provide a design framework and maintenance schedule that allows the soft landscaping to establish alongside the landscape and management practices. Monitoring the landscape changes and responding to the site as management practices influence features and components of the site.

3. LANDSCAPE MANAGEMENT COMPONENTS

3.1 Landscape Components

The landscape management plan categorises existing and proposed features into separate landscape components that require specific management and maintenance practices for the holistic enhancement of the site. The landscape features subject to this landscape management plan include the following components:

- General Trees
- Copse/Woodlands
- Sutton Lane
- Boundary Hedgerow
- Shrubs/Hedges
- Planting Beds
- Species Rich Meadow/Grasses
- Pond
- Wetland Areas/Riparian Corridor
- Grazing Areas
- Structures, Fences and Gates

The following information includes a description of the retained and proposed features and specific management aims and objectives.

3. LANDSCAPE MANAGEMENT COMPONENTS

3.2

General

- Avoid disturbance to soil that may damage the soil structure.
- Avoid damage to existing trees/hedges
- All arisings will be cleared to a designated composting area. Any suspected diseased material should be assessed by qualified arboriculturalist, and incinerated on site or removed by qualified specialist, as instructed following assessment.
- Felled trees are to remain on site within the scrub area to encourage wildlife.
- Watering should only be carried out when necessary, wetting the full depth of the topsoil and avoiding disturbance and damage to soil and plants.
- All planting beds to have mulch layer in order to prevent weed development
- All trees are to have tree shelter protection and stabilisation support systems placed on installation
- Annual inspections and pruning on all tree/hedge/shrubs

3. LANDSCAPE MANAGEMENT COMPONENTS

3.3 General Trees

All existing trees have been assessed in respect of BS 5837:2012, 'This British Standard gives recommendations and guidance on the relationship between trees and design, demolition and construction processes. It sets out the principles and procedures to be applied to achieve a harmonious and sustainable relationship between trees and structures.' Existing trees will be retained where possible.

Proposed tree selection for the site has been based on continuing the character of the local area and heritage with UK native as well as local native tree species. A range of standard sizes have been selected in order to create instant visual impact through varying heights within the copse and tree spinneys near the proposed building, and more juvenile stock for the wider landscape woodland areas so as to enhance the establishment of the trees to the new surroundings.

Any existing trees that are dying should be left as standing deadwood where possible, or laying on the ground for them to gradually rot down. Where overhanging branches provide a safety hazard, the tree should be monolithed where possible, which should be done to BS 3998 2010 standards.

Aim

Existing trees will be retained where possible and maintained to a good healthy standard, in accordance to BS 3998 2010. This will ensure continued contribution to the existing landscape structure, amenity value, biodiversity, ecosystem function and screening, as well as, ensuring trees are safe to site users, which is particularly important along Sutton Lane.

Newly planted trees will enhance existing biodiversity and ecosystem function, creating focal points in key areas, and providing a visual amenity with varying vertical structure through a range of maturities and heights across the landscape.

Management Objectives

Existing trees; excessive overhang of any growth encroaching onto roads/pathways/buildings should be pruned as required. All pruning operations and timing should be species appropriate. No pruning should take place during the late winter / early spring sap flow period or within the bird breeding period between March and August.

3. LANDSCAPE MANAGEMENT COMPONENTS

Newly planted trees will require post-planting maintenance for the first 5 years of establishment with the following breakdown:

Standardised Trees - Maintain approximately a 1m weed free diameter around the base of trees by hoeing or hand weeding where necessary. Apply an even layer of mulch to the base of trees to a depth of 5cm to 7.5cm on installation.. Pruning as required and adjustment of stakes, ties, and shelters to avoid chaffing and damage. Regular checks should be carried out to ensure general health of the trees. After strong winds, trees will be checked for loosening or soil disturbance, forking over soil, avoiding damage to roots, and firmly bedding in the tree.

Whips - The smaller trees require less maintenance, with weed clearance on the initial planting and tree shelters applied. Pruning as required and adjustment of canes, ties, and shelters to avoid chaffing and damage. Regular checks should be carried out to ensure general health of the trees. After strong winds, trees will be checked for loosening or soil disturbance, forking over soil, avoiding damage to roots, and firmly bedding in the tree.

Other Management Considerations

Replacement planting of any tree which has died as a result of natural causes out of the control of standard management practices shall be at the discretion of the client. Any suspected diseased material should be assessed by qualified arboriculturalist, and incinerated on site or removed by qualified specialist, as instructed following assessment. Any healthy cut wood should remain on site.

Monitoring

Trees are to be checked annually and after inclement weather; any pruning of dead, damaged or diseased wood should be removed in accordance with good horticultural practices. Pruning cuts are to be made above and sloping away from an outward facing healthy bud, to avoid water sitting or collecting on the cut surface.

3. LANDSCAPE MANAGEMENT COMPONENTS

3.4 **Copse/Woodland Areas**

The existing copse on site provides local character and heritage to the site that is highly significant to the overall design. These areas are to be extended out to increase the tree cover on site, as well as providing additional screening to the proposed building, and connection to the wider landscape.

A new woodland space will also be formed to the east of the site, extending the visual of woodland cover from adjacent landscape. This space will visually connect the tree line on site to the existing ancient woodland adjacent, extending the visual heritage of this significant feature into the site.

Aim

Existing copse trees will be retained where possible and maintain the overall structure to a good healthy standard to ensure continued contribution to the existing characteristics and visual amenity of the copse areas. The varying vertical structure, with breaks in the canopy for ground-cover growth will be maintained in order to preserve it's distinctive character.

The newly planted trees for extending the copse and woodland areas will enhance existing biodiversity and ecosystem function, as well as extending the visual amenity feature that the tree cover brings to the local landscape.

Management Objectives

Creating woodland extensions will require an extensive management plan that will breakdown into the following time-scales:

0-5 years

- Compaction of soils within 5m radius of tree bases to be prevented during the first year of establishment.
- Biodegradable tree guards of suitable size placed around trees on installation. To be inspected annually and after inclement weather for condition.
- Weeding is the priority for 2-3 years after planting. Focus on this until all the trees have grown above the height of competing weeds and started to shade out ground vegetation.

3. LANDSCAPE MANAGEMENT COMPONENTS

- Check trees throughout winter, particularly after wet and windy spells and straighten tree guards and replace any broken stakes.
- In summer, make sure weeds are not growing inside tree guards. Carefully lift the tube at the base by releasing the cable ties securing the tube to the stake and pull up any weeds.
- Look out for damage by small mammals. If your trees don't seem to be growing in spring, check the base for signs of gnawing. Animals like voles rely on long grass, so mowing between trees and good weed control helps limit damage. You can also install predator perches to encourage aerial predators like owls to the area.

5-10 years

- Begin your coppice rotation if required. You won't be able to harvest usable material in the early years but the first cut will result in multi-stemmed coppice stools forming which will become hugely productive. The cut branches will grow quickly as roots will now be well-established. Watch out for deer and rabbit damage on regrowth in spring.
- Tree guards to be removed at year 5. Dispose of any plastic elements through recycling or reusing.

10+ years

- Start formative pruning, with branch thinning undertaken to remove limbs with unnatural growth forms, or that may compromise the overall tree health. If you plan to thin your woodland in future, only prune the trees you plan to retain so your efforts aren't wasted.

Woodland/copse areas are to be sown with a shade tolerant wildflower mix, as well as a hedgerow/woodland edge mix with shade tolerance, to improve the biodiversity of the woodland/copse floor. Wildflower mix to be cut back annually, outside the bird nesting season.

Where any felling is required on site, deadwood is to be utilised in the woodland/copse areas, to form standing dead wood or log piles for additional habitat creation.

Other Management Considerations

Replacement planting of any tree which has died as a result of natural causes out of the control of standard management practices shall be at the discretion of the client.

3. LANDSCAPE MANAGEMENT COMPONENTS

Monitoring

Woodland/copse areas are to be checked annually for invasive species, as well as for any damage or ill health amongst the trees, with appropriate action taken to remove if found.

Copse areas need to be inspected for maintaining gaps in the canopy so as to ensure that sunlight can reach the understorey and ground-cover planting. As well as this, ensuring a three storey woodland complex of canopy is maintained, with vertical structure consisting of canopy, understorey and ground cover.

3. LANDSCAPE MANAGEMENT COMPONENTS

3.5 **Sutton Lane**

Sutton Lane is lined with a historic oak avenue that provides significant character to the area. The majority of these trees are well established and categorised as over mature. This makes successional planting very important to establish. The area is also a popular walking destination for the public, so the safety of the existing trees is of particular significance.

Aim

Existing trees will be retained where possible and maintained to a good healthy standard to ensure continued contribution to the existing landscape structure, amenity value, biodiversity, ecosystem function and screening, as well as, ensuring trees are healthy and safe to site users.

Newly planted trees will provide successional growth to ensure the continued visual amenity and long term heritage character of the lane.

Management Objectives

Existing trees; excessive overhang of any growth encroaching onto roads should be pruned as required, by qualified tree surgeon. All pruning operations and timing should be species appropriate. No pruning should take place during the late winter / early spring sap flow period or within the bird breeding period between March and August.

Newly planted trees will be installed as whips for a higher chance of establishment and will require post-planting maintenance as seen in the tree management, seen on page 5/6, section 3.3.

Weed clearance on the initial planting and tree shelters applied with cane support. Pruning as required and adjustment of stakes, ties, and shelters to avoid chaffing and damage. Regular checks should be carried out to ensure general health of the trees. After strong winds, trees will be checked for loosening or soil disturbance, forking over soil, avoiding damage to roots, and firmly bedding in the tree.

The verges are to be mown annually, late in the summer after flowering in order to promote natural succession and establishment of wildflowers.

3. LANDSCAPE MANAGEMENT COMPONENTS

Other Management Considerations

Replacement planting of any tree which has died as a result of natural causes out of the control of standard management practices shall be at the discretion of the client. Any suspected diseased material should be assessed by qualified arboriculturalist, and incinerated on site or removed by qualified specialist, as instructed following assessment, and any healthy cut wood should remain on site.

Hedgerow along Sutton Lane to be managed in the same manner as the boundary hedging seen on page 12, section 3.6.

Monitoring

Existing trees are to be checked twice annually and newly planted trees annually, as well as after inclement weather; any pruning of dead, damaged or diseased wood should be removed in accordance with good horticultural practices. Pruning cuts are to be made above and sloping away from an outward facing healthy bud, to avoid water sitting or collecting on the cut surface.

3. LANDSCAPE MANAGEMENT COMPONENTS

3.6 **Boundary Hedgerow**

Boundary hedging exists along the perimeters of both fields currently, that is significant to the heritage character to the site, as well as providing important local habitat to the site.

Aim

To restore and enhance the existing hedgerows, conserving the typical rural vernacular, and provide continued screening of the site, with choreographed views of the proposed design from Sutton Lane in particular. The hedgerows are vital habitat and also act as a green corridor, providing foraging and nesting opportunities for local fauna.

Management Objectives

Boundary hedgerows will be managed on a rotational basis, to prevent long lengths of open views onto the site from the roadway in particular, as well as any overhang into undesirable areas. Selected hedgerow lengths are to be cut to rejuvenate the hedge to a healthy standard through rotational coppicing. Therefore no more than 1/3rd of the total mass in any one year. Hedgerows will be cut during the winter months during frost free periods and outside of the bird nesting season of March to August. The pruning management plan will encourage tall, wide, and bushy features, with cutting to only take place to one side each year, preventing any excessive hedgerow cutting. Any pruning is to be undertaken in accordance to BS 3998 2010 standards.

Any new hedging/replacement hedging is to be laid traditionally, left to grow untrimmed, and laid within the first 10 years. The process of hedge-laying will encourage denser growth and can create a living 'stock proof fence', and should be undertaken by qualified professionals.

Other Management Considerations

Avoid damage to mature trees during hedgerow cutting to ensure their healthy persistence within the landscape.

A minimum of 1m adjacent to the hedgerows will be managed as 'undisturbed ground'.

Monitoring

Boundary hedgerows are to be informally monitored to determine sections for management, standard trees within the hedgerow should be monitored as per tree management practices.

3. LANDSCAPE MANAGEMENT COMPONENTS

3.7 New Shrubs and Hedges

New hedging installed along the historic hedge line as well as proposed shrub planting within the formal planting borders providing year round interest as well as choreographed screening directly around the proposed dwelling.

Aim

To reinstate the heritage value of the ancient hedge-line, as well as provide character screening to the front of the proposed dwelling, softening it within the wider landscape. The shrubs will provide evergreen structure and year round interest through the formal planting scheme, as well as ornamental value.

Management Objectives

Planting of the new hedgerow is to take place between October and March, in which frozen or waterlogged ground is avoided. The ground is to be prepared with a 1.5m wide strip prior to planting, forming optimal soil conditions, as well as limiting direct competition to the hedgerow. The base of the hedgerow is to be maintained as weed free until established, with a hedgerow base specific seed mix sown within the 1.5m strip. Distances between the specimen planting will range between 30-60cm (dependant on root ball size), and whips are to be planted in a staggered double row formation, with 50cm distance between rows, with 5 whips per metre.

All new hedges and shrubs shall be pruned to remove deadwood, overhanging/ tangled and damaged branches annually. Gaps of 50cm between the ground and canopy is to be maintained within the annual pruning where appropriate. Winter flowering shrubs shall be pruned in spring. Shrubs flowering in March-July shall be pruned immediately after the flowering period and shrubs flowering in July-October shall be cut back to old wood in winter. Shrubs that require spring pruning to provide seasonal colour shall be pruned in March and shrubs that require seasonal pruning to promote continual flowering will be pruned appropriately. Hedges are to be maintained at a height to the discretion of the client and trimmed on either side to maintain a neat and tidy appearance. Any pruning should be undertaken in accordance to BS 3998 2010 standards.

Any new hedging/replacement hedging required to be laid traditionally, left to grow untrimmed, and laid within the first 10 years. The process of hedge-laying should be done by qualified professionals. This should be done rotationally, every 10 years following.

3. LANDSCAPE MANAGEMENT COMPONENTS

Other Management Considerations

Avoid damage to mature trees during hedgerow cutting to ensure their healthy persistence within the landscape.

Failed specimens to be replaced during establishment, with any fertilisers prohibited within adjacent grassland areas. Gaps formed in the hedgerow are to be infill planted with native woody species where required.

Monitoring

New hedging and shrubs should be part of the same monitoring schedule as the general trees - refer to page 5/6 section 3.3.

3. LANDSCAPE MANAGEMENT COMPONENTS

3.8 Wildflower/Grass Meadows

Areas of wild grass/wildflower development for amenity value, as well as reflecting the wider landscape. The wildflower areas will be seeded from nearby SSSI Kendalls meadow. The mowing schedule will relate to the grass mix and frequency of use of the area.

Aim

To ensure the continued health and establishment of the grass areas and maintain healthy and suitable grass areas, appropriate to function and use.

To create wildflower meadow spaces that successfully reflects the heritage character of nearby SSSI Kendalls Meadow and is maintained in accordance to the management plan for the SSSI area.

Management Objectives

To be managed in accordance to the same management plan set for Kendalls Meadow SSSI, which is managed as a traditional hay meadow. The following guidelines apply:

- Long grass should be cut annually from mid July-September, depending on the weather conditions. Alternating between earlier and later cuts can be beneficial.
- The cut is to be done using a tractor mounted drum or disc mower, and spread out to dry. The arisings are to be turned once a day to speed up the drying process as well as help loosen any seeds still attached. Once dry, the arisings are to be removed so as to not alter the nutrient levels locally.
- Leaving unmown strips along the edges of the meadows can provide important food source for insects, in particular butterflies and bees, which can be rotated each year so as to not encourage the area to be swamped with competitive grasses.
- Any movement of livestock to graze newly mown grass areas, should be delayed for a few weeks for new grass growth to develop, in order to be ready for grazing. Aftermath grazing aids in helping seeds bury for germination, as well as shortening grass growth to aid light allowance for wildflower development.
- Aim to reduce height of grass areas from grazing to 2-10cm before the end of winter, ensuring that it does not reach a point where livestock movement starts to imprint on the ground, particularly after wet weather.

3. LANDSCAPE MANAGEMENT COMPONENTS

- If autumn and winter is relatively dry, light grazing can continue until March. In normal year, livestock should be removed by the end of February to encourage early wildflower growth.

The livestock movement will be rotational over sections of the meadows, and will need to be monitored carefully, for areas to recover in accordance to the management guidelines set above.

When applying new seed, scarification to a depth of 25mm and over-seeding with seed translocation from the donor meadow, to help bolster the species assemblance.

Species diversity within the meadows will be increased to 9-15 per m², and increase wildflower ratio to account for 30% of the sward. Undesirable species will be reduced within the sward, such as creeping thistle and broad-headed dock, by reducing nutrient levels in the sward. This is to be achieved through a low intensity rotational grazing regime, as well as removing grass cutting arisings when required. The meadows will be rotated with grazing livestock, with minimal of numbers between 6-8 cows. Approximately 1/3rd of the meadows will be rested and hay cropped in the season, whilst the other 2/3rds will be rotationally grazed.

Other Management Considerations

Avoid damage to mature trees during grass cutting to ensure their healthy persistence within the landscape.

Yellow rattle will be sown, with its benefit of being semi-parasitic towards grasses, reducing the grass growth, and so helping to encourage the wildflower ratio where appropriate.

Monitoring

Yearly informal observations of species establishment, species presence and abundance.

3. LANDSCAPE MANAGEMENT COMPONENTS

3.9

Pond

The proposed pond just off the driveway in the entrance space of the site will provide visual amenity feature within the meadows, as well as, providing an additional habitat for local flora and fauna. The pond will be created with a gently sloping bank that leads to shelves and undulations, this will provide differing water depths for the successful establishment of aquatic plants, including a reed-bed to help improve quality of water.

Aim

The pond will provide amenity and ecological value to the site. The pond edges will be planted with native submerged and emergent aquatic plants that help to create an additional habitat on site.

The topography of the pond will be excavated to have both permanent and seasonal pools of varying heights, with undulating draw-down zones, and shallow slopes.

Management Objectives

The pond will be managed on a rotational basis to prevent disturbance to habitats at the same stage, and retain silty, shaded areas at any given time. The pond itself will require little maintenance, though the area surrounding will be managed to maintain a semi-natural buffer around the banks to protect its ecological value.

The ponds will be kept clear of invasive non-native species, with non-desirable species such as duckweed controlled. As well as this, the pond will be cleared of leaf litter and other debris between the months of November and February. The surrounding area within 10m of the proposed pond will consist of semi-natural habitats such as grassland and hedgerows.

Marginal and submerged planting within the pond are to be native species, of value to native pond fauna. The banks of the pond are to be sown with wetland meadow mix, with annual cutting to take place in summer months, when water levels are low, with less chance of disturbing amphibious species. The aquatic planting will only require the dead to be removed as when is necessary post monitoring.

3. LANDSCAPE MANAGEMENT COMPONENTS

Other Management Considerations

The ponds will not have fish introduced to them, as they eat all the invertebrates that develop in water before emerging (damselfly, dragonfly, flies, etc.).

The land directly around the pond will not be densely stocked with livestock, ensuring water quality is maintained. Deterrences as required to be installed.

The pond should only ever be a maximum of 50% shaded by surrounding tree canopy/hedgerows.

Monitoring

Little formal monitoring is required, periodic observational monitoring to ensure prevention of non-native invasive species establishing.

3. LANDSCAPE MANAGEMENT COMPONENTS

3.10 **Wetland Area/Riparian Corridor**

The attenuation basin will provide natural drainage for the surrounding area that will not only aid in the water management on site, but also help control the movement of water in the wider landscape, reducing risks of flooding, as well as reduce the amount of surface water drainage going into the brook.

Aim

The existing brook and riparian corridor around the site is to be maintained in order to protect the existing habitats and the associated local species of fauna and flora.

Management Objectives

To create more marginal habitat, the brook in wider places can have some appropriate diameter tree branches/boughs pinned to the banks alternatively which can help create some flow variation as well as potential shelter for varied species.

Where sections are wider and mostly a silt bed and wood has been pinned, you can also add replacement bed gravels that match the size variation % of the gravel areas found in the brook. Any bought in gravels should be 'washed river gravels' but not gravels that have been put through a crusher (like gravel chippings) as these will lock together and not be rolled and moved by the watercourse during higher brook levels.

Other Management Considerations

Allow water pathways after heavy rain to naturally flow over the land to the wetland areas, as the nutrients and silts will be filtered out as it passes through vegetation and soils.

Monitoring

Little formal monitoring is required, periodic observational monitoring to ensure prevention of non-native invasive species establishing.

3. LANDSCAPE MANAGEMENT COMPONENTS

3.11 **Grazing Areas**

The land outside the formal garden space is primarily to be used as grazing land for cattle. This will work in a rotational process on both meadows. The trees will provide pockets of shade in the grazing areas.

Aim

To maintain continued establishment of grasslands suitable for grazing, with the rotational process preventing the grassland areas being overgrazed, but instead allows successional growth to occur.

Management Objectives

The cows grazing on the land will be kept to low numbers (between 6 and 8) and be maintained within rotational areas with grazing boundaries defined by electronic tags, and so no additional fencing is required. It also allows for responsive management of the meadows, ensuring that they do not become overgrazed. The lack of physical fencing enhances the visual amenity of the meadows and reduces the hard landscaping required in the more naturalistic parts of the site.

1/3 of the meadow area will be rested each year to maximise biodiversity potential within the rotational grazing regime. This will be cut for hay once in late summer after wildflowers have flowered and seeded.

Other Management Considerations

The newly planted trees within the grazing areas should have hard timber shelters built around them to ensure the cows cannot reach them in their early establishment years.

Monitoring.

Informal regular monitoring of grass areas to ensure an appropriate length is maintained, in order to make plan for rotational movement of cows.

3. LANDSCAPE MANAGEMENT COMPONENTS

3.12 Structures, Fencing and Furniture

Cleft paling type fencing that is used around the maintained existing barn and surrounding hard surfaces. This will section this area off from the rest of the naturalistic scheme on the site, as well as assisting in preventing the cows from venturing into the area.

Water features and external furniture will be maintained to the manufacturers guidelines and specifications.

Aim

To ensure all structures, fencing and gates on site are maintained to a functional, clean standard free from hazards, or damage. Performing as intended, safely comfortably for all users, providing secure enclosures to the areas required.

Management Objectives

All structures shall be inspected regularly. If the inspection does pose an immediate risk to health and safety of users, repair shall be made immediately.

Fencing shall be inspected annually, taking care to inspect; footings, all fixtures and fittings. Posts should be upright and firm, footings intact and metal and paint work show no signs of defect and the entire structure should be free of deficiency, weakness, limitation or failing. Record all defects and carry out making good, as required within seven days by an appropriate contractor.

Other Management Considerations

During periods after inclement weather all structures should be inspected for damage, debris or defect.

If a fenced buffer/woodland zone along the brook is adopted to control livestock, this would allow any old fencing materials along the bank to be removed for a more natural corridor to develop and ease of access for any minor management actions.

Monitoring

Structures, fencing, gates and any other landscape structures shall be monitored annually in Spring.

4. MAINTENANCE SCHEDULE

COMPONENT	KEY MAINTENANCE OPERATION	FREQUENCY	TIMING (inclusive)
General			
	Weeding; around the base of trees and planting beds, and any other area prone to weeds by method of hoeing or hand weeding. Mulching of beds and around the base of trees will greatly reduce this, with monthly inspections required to keep on top of it.	Monthly	April-September
	Mulching; apply an even layer of mulch to the base of standardised trees and general planting beds to a depth of 5cm to 7.5cm on installation. Then to be monitored as part of the monthly maintenance	Once. (Replace after 5 years if necessary) Inspect - every 2-3 years	April-September
	Watering; during the first five years during establishment water trees to field capacity when required. Taking into account climatic and soil conditions in order to maintain good establishment, health and avoid failure. Using a hose and/or irrigation system.	As required If required	April-September October-March
	Fallen leaf clearance; to be swept, cleared and disposed of appropriately either on site or off site composting and/or green waste.	Monthly	November-February
	Pest and Disease Control, the use of pesticides and/or herbicides should be avoided where possible. When the use of pesticides is unavoidable application should follow the Pesticides Regulations 1997, the Health and Safety at Work Act 1974 and COSHH Regulations. Following manufacturers guidance, good health and safety practices and carried out by an appropriate, trained and/or certified contractor.	If required	April-August (unless otherwise stated)
	Planting; any replacement planting shall be carried out at the optimum time for the plant type and/or species. All planting will be carried out to good horticultural standards, making good and areas of disturbed soil or debris.	Trees/Shrubs Herbaceous Grass	November-Dec. November-March September-October

4. MAINTENANCE SCHEDULE

COMPONENT	KEY MAINTENANCE OPERATION	FREQUENCY	TIMING (inclusive)
Trees			
	Remedial tree surgery to existing trees, remove any dead, damaged, diseased or dangerous branches. All works should be carried out by an Arboricultural Association approved contractor in accordance with BS 3998.	Annually	November-February
	Remedial tree pruning to newly planted trees, remove any dead, damaged or diseased branches.	Annually	November-February
	Tree shelters to be installed around tree whips and spiral guards around standardised trees on installation, to be removed before they start to disintegrate, usually at the 5 year mark. Bamboo canes applied to whips and tree stakes for standardised trees on installation, to be removed once the tree can stand unsupported without bending or shifting in the ground, usually 2-3 years after installation	As Necessary	As Necessary
	Check, adjust and replace tree stakes, ties or guards to newly planted trees to ensure healthy growth. Inspect after adverse weather conditions when necessary.	Annually As Necessary	November-February
	Watering newly planted trees, generally in summer months or drier periods to ensure healthy establishment. Advised care during dry periods for ideal tree conditioning is the following: 7 days a week in the first 6 months, then 4 times a week the following 3 years and 2 times a week for the 2 years following that. This is based on being in the summer months, and then in any unseasonably warm weather or where there has been a lack of rain. This would only be required for the standardised trees. Whips in the wider landscape will only need watering if there is a particularly long dry spell and you feel watering is necessary. If so saturate the ground to ensure water soaks deep into the soil.	As Necessary	April - August As Necessary - Daily in dry periods
	Weeding, maintain a 1m diameter around standardised trees clear of grass and weeds for the first 2-3 years, whilst whips to be cleared on installation and maintained as required. Mulching newly planted trees upon planting in order to reduce soil water loss and suppress weeds, to a depth of 5cm to 7.5cm. Check annually and replace as deemed necessary Monitor monthly for weed development.	Annually As Necessary	January-March

4. MAINTENANCE SCHEDULE

COMPONENT	KEY MAINTENANCE OPERATION	FREQUENCY	TIMING (inclusive)
Woodlands/Copse			
	* The tree maintenance schedule on page 23 applies to the copse management with some additional focuses as seen below.		
	Copse (Existing and new) requires annual inspection for spacing of canopy to ensure that light can still reach the understorey and ground-level planting. If thinning becomes a requirement, seek the assistance of a trained agriculturalist. Any works required to be in winter months.	Annually	January - March
	Remove any weeds developing within the tree shelters, as well as maintaining 1m diameter weed free from the base of the trees. This needs to be maintained for the first 5 years.	Monthly	March-August
	Coppicing to begin after 5 years, where required. To be done in accordance with BS 3998 2010 standards. Inspect spring growth for animal damage once done.	Annually	January-February
	Cutback wildflower planting annually, to around 15cm in height, ensuring it is after the plants have seeded and outside bird nesting season.	Annually	September-October
	Annual inspection for invasive species and tree form/damage required, with any resulting actions required to be undertaken to remove if found	Annually	January-March

4. MAINTENANCE SCHEDULE

COMPONENT	KEY MAINTENANCE OPERATION	FREQUENCY	TIMING (inclusive)
Sutton Lane			
	* The tree maintenance schedule on page 23 applies to the Sutton lane management with some additional focuses as seen below.		
	Wire tree guards used for trees along Sutton Lane for protection against roaming deer. To be inspected annually for stability, as well as after adverse weather.	Annually As Necessary	December-February As Necessary - after adverse weather
	Existing trees along Sutton Lane require inspections from the ground more regularly than trees elsewhere on site due to the increased engagement with the public. Inspections are to identify any potential hazards that could become a danger to the public. To be done twice-annually as well as after adverse weather. All trees are over-mature and so the hazards are more likely. Any hazards spotted should then be inspected by trained arboriculturalist and any recommended works to be undertaken in accordance to the findings.	Twice-annually As Necessary	January-December As Necessary - after adverse weather
	Cutback wildflower planting annually, to around 15cm in height, ensuring it is after the plants have seeded and outside bird nesting season.	Annually	September-October
	Mow verges annually late in summer, once flowering is finished.	Annually	August-September
	*Boundary hedging to be maintained in accordance with boundary hedgerow maintenance schedule seen on page 26.		

4. MAINTENANCE SCHEDULE

COMPONENT	KEY MAINTENANCE OPERATION	FREQUENCY	TIMING (inclusive)
Boundary Hedge			
	Remedial tree surgery to existing boundary hedging, remove any dead, damaged, diseased or dangerous branches. All works should be carried out in accordance with BS 3998 2010. Annually inspect the boundary hedging for problematic branch growth, die-back, and signs of disease.	Annually As Necessary	June (after flowering) and August
	Rotational cut back for rejuvenation no more than every two years, with no more than 1/3rd cut in any one year. Cutting should only take place on one side of the hedge in any one year.	Every 2 years max	September-January
	Traditional hedgerow laying to be started 8-10 years into establishment of new hedging. This is to be done rotationally every 10 years. Recommended to be undertaken by trained professionals.	8-10 years	September-January

4. MAINTENANCE SCHEDULE

COMPONENT	KEY MAINTENANCE OPERATION	FREQUENCY	TIMING (inclusive)
Shrubs and Hedges			
	Maintenance trimming of new hedging using an electric or petrol hedge trimmer, a flail may be the most efficient way to cut extensive runs. Works should be delayed until outside the nesting season, March to August, if there are any signs that indicate nesting.	Annually As Necessary	June (after flowering) and August
	Watering newly planted hedges and shrubs, generally in summer months or drier periods to ensure healthy establishment. For optimum growth, this should be done within the tree watering plan (see page 23).	As Necessary	June - August As Necessary - Daily in dry periods
	Maintain weed free base of the hedging until established, following general weeding maintenance (see page 22).	Monthly	April-September
	Shrubs to be annually inspected and have the appropriate seasonal pruning undertaken. Winter flowering shrubs to be pruned in spring. Shrubs flowering in March-July to be pruned immediately after the flowering period and shrubs flowering in July-October shall be cut back to old wood in winter. Shrubs that require spring pruning to provide seasonal colour shall be pruned in March and shrubs that require seasonal pruning to promote continual flowering will be pruned appropriately.	Annually	As Necessary
	Traditional hedgerow laying to be started 8-10 years into establishment of new hedging. This is to be done rotationally every 10 years. Recommended to be undertaken by trained professionals.	8-10 years	September-January

4. MAINTENANCE SCHEDULE

COMPONENT	KEY MAINTENANCE OPERATION	FREQUENCY	TIMING (inclusive)
Wildflower/Grasses			
	Mow wildflower meadow grass areas to a height of 15cm annually once the flowers have seeded, between July and September. This is to be done using a tractor mounted drum or disc mower. Alternating between early cuts (after mid July) and later cuts (August-September) can be beneficial.	Annually	July-September
	Leave arisings to dry for 3-5 days, turning it over daily in order to encourage the loosening of seeds and quicken the drying process. Once dried remove arisings to designated compost areas on site	Annually	July-September
	Aftermath grazing can take place a few weeks post mowing, in order to allow grasses to establish. Aim to reduce height of grass to 2-10cm, ensuring the livestock do not start to imprint on the ground.	Annually	July - March
	Inspect wildflower/grass area annually for invasive species, as well as the wildflower levels, with appropriate action required undertaken appropriately	Annually	May-June
	* Timings of grazing will be open to interpretation, with rotational grazing areas and more focused wildflower areas changing, leaving time for any given area to recover. The above is guidelines for ideal conditions.		

4. MAINTENANCE SCHEDULE

COMPONENT	KEY MAINTENANCE OPERATION	FREQUENCY	TIMING (inclusive)
Ponds			
	Mowing of banks of pond with ride-on-mower or tractor to a height of no greater than 100mm, areas to be mowed in rotation to allow some natural succession to occur. To occur in the dry of summer, where water levels are at the lowest, but after flowers have seeded.	Annually	August
	Aquatic planting to be inspected, weeded and dead material removed.	Annually	March-October
	Water quality checked for contaminants to ensure safety	Annually	January-December
	Annual inspections for non-native or non-desirable species, with appropriate actions to remove undertaken	Annually	April-July

4. MAINTENANCE SCHEDULE

COMPONENT	KEY MAINTENANCE OPERATION	FREQUENCY	TIMING (inclusive)
Wetland Areas/ Riparian Corridor			
	Pin appropriate diameter branches/boughs to the banks alternatively in the wider areas of the brook, providing potential marginal habitat for varied species.	As Necessary	As Necessary
	Where appropriate and required, add replacement gravel beds in areas of the brook that are wider, with mostly silt bed and wood has been pinned. Make sure the gravel is appropriately sized to match those found in the brook and should be washed river gravel.	As Necessary	As Necessary
	Annually inspect for any non-native species developing, as well as any problematic areas.	Annually	January-December

4. MAINTENANCE SCHEDULE

COMPONENT	KEY MAINTENANCE OPERATION	FREQUENCY	TIMING (inclusive)
Grazing Areas			
	Timber tree guards (in areas that the cows are grazing) to be inspected for damage annually, as well as after any adverse weather, and any necessary action taken as soon as is possible	Annually As Necessary	January-December
	Inspections of the grass to ensure meadows are not over grazed	Weekly	January - December

4. MAINTENANCE SCHEDULE

COMPONENT	KEY MAINTENANCE OPERATION	FREQUENCY	TIMING (inclusive)
Structures/Fencing/Furniture			
	All furniture and water features to be checked annually, or if stated otherwise by manufacturers guidelines and specifications, for defects or damage.	Annually	January - December
	Fencing is to be inspected annually, making sure to inspect the footings, fixtures, stability and paint work. This is to also be done as necessary after extreme weather conditions. Any work required is to be done as soon as is possible	Annually	January-March As Necessary

4. MAINTENANCE SCHEDULE

TASK	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	COMMENTS
GENERAL													
Watering													Monitored Regularly and Adjusted if Necessary
Weeding													As necessary
Pest & Disease Control													As necessary
Mulching (Monitoring)													Mulched on installation of planting
Planting													If Required
TREES													
Inspection													As necessary
Pruning													
Tree/Stakes Stability													Additional Inspections After Adverse Weather
Mulching/Weeding													
Watering Standardised													Monitored Regularly and Adjusted if Necessary
Watering Whips													As Necessary During Adversely Dry Weather
WOODLAND/COPSE													
Inspection													As necessary
Pruning													
Tree/Stakes Stability													Additional Inspections After Adverse Weather
Meadow Cut Back													
Watering Standardised													Monitored Regularly and Adjusted if Necessary
Watering Whips													As Necessary During Adversely Dry Weather
SUTTON LANE													
Inspection													As necessary
Pruning													
Tree/Stakes Stability													Additional Inspections After Adverse Weather
Mulching/Weeding													
Watering Standardised													Monitored Regularly and Adjusted if Necessary
Watering Whips													As Necessary During Adversely Dry Weather
BOUNDARY HEDGING													
Inspection													As necessary
Pruning													
Hedge/Stakes Stability													Additional Inspections After Adverse Weather
Watering Whips													As Necessary During Adversely Dry Weather
SHRUBS/HEDGES													
Inspection													As necessary
Pruning													
Hedge/Stakes Stability													Additional Inspections After Adverse Weather
Mulching/Weeding													
Watering Rootball Hedging													Monitored Regularly and Adjusted if Necessary
Watering Whips													As Necessary During Adversely Dry Weather
WILDFLOWER MEADOW/GRASSES													
Inspection													As necessary
Meadow Cut Back													
Pest/Disease Control													As necessary
POND													
Inspection													As necessary
Mowing/Cutting Back													
Check Water Quality													As necessary
Cutting Back/Dead Heading													
WETLAND AREA/RIPARIAN CORRIDOR													
Inspection													As necessary
GRAZING AREAS													
Inspection													
STRUCTURES													
Inspection													
Rake/Remove Litter													
Treat Worn/Damaged Timber													

	Action
	Inspection