08

MAINTENANCE AND MANAGEMENT

Retained Mature Trees

Management Aim

- To prolong the life and enhance the wildlife value of the existing trees.

Management Objectives

- To maintain the health, safety and visual amenity of retained mature trees
- To take care in construction and maintenance operations near these trees
- To enhance their high ecological value

Note: Tree work should be carried out between August and March to avoid the bird nesting season unless the works are essential for public safety, demands and associated bills.

Management Objective	Maintenance Task	Method	Timing
Ensure that trees are safe and healthy	Check the trees. Identify hazards and carry out necessary maintenance work. Keep records up to date	Visual tree assessment with instrumental backup where necessary. Monitoring to be undertaken by a qualified arboriculturist. Tree works to be carried out to BS:3998: 2010 'Recommendations for tree work'	Annual or as necessary following severe weather conditions
Minimise disruption to the root protection area of mature trees	Take care to minimise compaction and heavy works within root protection areas as defined by BS:5837:2012.	Use protective barriers and/ or ground protection during construction works	As required
Preserve habitats for invertebrates, birds and other creatures in, on and around the tree	Identify potential habitats and carry out maintenance only where essential Keep records up to date	Allow deadwood, jagged stumps, splits, fungal growths and holes in tree trunks to remain unless they are creating a safety hazard. Only severe ivy where it is growing into the tree canopy and is likely to cause a hazard	As required

Retained Hedgerows

Management Aim

- Maintain healthy and attractive existing hedges.

Management Objectives

- To maintain the existing hedges at 5m in height on a phased rotational basis, and allow areas not currently the same height to grow up
- Gap up existing hedges where required with species already present within the hedgerow
- To keep free from litter and rubbish
- Control bramble within the existing hedgerows

Management Objective	Maintenance task	Method	Timing
To keep hedges trimmed to the specified shape and height	Qualified horticultural staff to trim regularly to 3.0-4.0m in height	Hedges to be trimmed using hand-held tools according to best horticultural practice - remove arisings to a registered waste disposal facility	April-October Phased rotational cutting
Gap up existing hedgerows where necessary	Check annually in autumn for dead/ diseased and damaged plants and gap up using existing species found within the hedgerow	On instruction from RP 'gap up' hedges with new hedging plants as per planting specifications	October/March
To keep newly planted structure planting free from litter and fly-tipped rubbish	Remover litter and fly-tipped rubbish regularly	Remove by hand to a registered waste disposal facility	Throughout year
Control bramble within the existing hedgerows	Use a selective brush wood killer to treat existing brambles	Brambles to be selectively cut down with new growth treated with a selective brush wood killer	Quarterly

Native Structure Planting

Management Aim

- To establish new areas of native trees and shrubs.

Management Objectives

- To maintain newly planted trees to ensure a good survival rate and development
- To minimise competition from grass and weeds from around newly planted trees and shrubs
- To keep areas free from litter, rubbish and garden waste
- To control and make good damage from pests and disease, including animals

Management Objective	Maintenance Task	Method	Timing
Keep tree/shrub surrounds free from weeds	Visual inspection to check that mulch mats are effective	Hand weed shelters Use of approved herbicides with each transplant to be kept weed-free (0.25m radius around each transplant)	March and June
Keep tree/shrubs protected from animal damage	Visual inspection to check for signs of bark damage. Report to client	On instruction from the client replace shelters and guards as necessary	Monthly
Keep tree and shrub transplants free from pests and diseases.	Qualified horticultural staff to inspect and check on the health of transplants	Deal with individual problems as they arise - keeping the use of pesticides to a minimum	Monthly from March to October
Make good damage caused by vandalism	Visual inspection to check for vandalism. Report to client	On instruction from the client replace shrubs and trees to fill in any gaps	November to March
Keep planted areas clear of litter and fly-tipped rubbish	Remove litter and fly-tipped rubbish	Remove by hand to a registered waste disposal facility	Monthly
Allow transplants to develop into healthy trees and shrubs	Remove shelters from transplants	To avoid damaging plants cut shelters away and remove stakes - take to legal tip	Approx. 5 years after planting
Allow transplants to develop into healthy trees and shrubs	Thinning	Coppice approximately 25% of shrub species, selecting the weakest plants, to allow strongest plants to develop	Approx. 5 years after planting

Grassland

Management Aim

- For grass areas to present a visible indication of high quality and species diversity

Management Objectives

- To maintain meadow grass areas at a specified height
- To control weeds in the meadow grass
- To keep grass areas free from litter and rubbish

Management Objective	Maintenance Task	Method	Timing
Control height of grassland	Cut grass to be cut to 50mm	Mow areas with a power scythe as necessary – arisings should be removed from the Site and composted. Trim around obstacles such as fences, solar strings and posts to the same standard as the surrounding grass area. Clean adjoining path areas after mowing.	Twice annually - late July/ august then again in late autumn/winter
Keep all grass areas free from litter	Litter removal	Handpick and remove to a registered waste disposal facility	Prior to cutting and monthly
Keep weeds under control	Check and report any weed problems to the client	Treat according to the problem using the best horticultural practice	As necessary

New tree planting


09

SUMMARY

9.1 Development of the Belvoir Solar Farm and the implementation of the landscape and ecological enhancements proposed will bring a range of environmental benefits to the Site and its surroundings, as well as social and educational benefits to the local community.

9.2 It is expected that works to deliver the environmental benefits could commence as soon as construction of the solar farm begins. Strengthening of the existing field pattern of the Site through the infilling of hedgerow gaps is intended to take place in the first winter after the erection of the solar panels begins.

9.3 The provision of permissive access routes within the southern parcel would connect to the existing Public Rights of Way on the Site, which in turn increases recreational opportunities locally.

9.4 The proposed permissive footpaths would create a circular walk, with interpretation and information boards at strategically placed locations, such as near the battery storage stations and outdoor classroom seating areas. The interpretation and information boards would encourage a better understanding of the solar farm and the benefits of renewable energy, and the ecological and landscape enhancements which are proposed across the Site.

9.5 The construction of log pile seating and picnic areas will provide destination and meeting points that can be used by local groups and school children as an outdoor classroom, that will enable the solar farm to become both a formal and informal educational resource.

9.6 There are significant opportunities to restore the landscape features of the site previously lost or degraded through historic agricultural practices. Reinforcing field boundaries would enhance and reinforce the landscape structure across the Site, which in turn would be beneficial in terms of strengthening the local landscape character in line with the guidelines for the 'Vale of Belvoir' landscape character type.

9.7 New hedgerow, and hedgerow tree planting centred on native species of local provenance would take place in the first winter after the erection of the solar farm begins.

9.8 The hedgerows would provide an invertebrate food source and foraging route for bats to feed and commute. Careful maintenance and management of the proposed trees and hedgerows over the period of 40 years that the solar farm would be in operation and beyond would ensure they continue to thrive.

9.9 The provision of grassland margins adjacent to the existing and proposed planting would develop new habitats with wildflowers encouraging insects and invertebrates that in themselves would provide a feeding resource for birds and other animals. Such grassland margins can be introduced in a way that would still allow for viable farming to take place.

9.10 The provision of bat roost boxes, bird nest boxes, hedgehog nest boxes, insect hotels, log piles and amphibian and reptile hibernacula features would ensure that the resident populations are accommodated, and further species move into the site. Whilst mammal gates or small gaps at the base of the perimeter fence would allow wildlife to move into and out of the site and maintain connectivity with the wider landscape.

9.11 The local community surrounding Belvoir Solar Farm would benefit from the economic boost that the development would provide in terms of the provision of local initiatives and funds for community-based projects.

9.12 Overall, there would be substantial enhancements to the existing landscape framework of the site, which would strengthen the local landscape character and be beneficial from an ecological perspective, whilst preserving the visual amenity of local residents and visitors.

DESIGN ENVIRONMENT PLANNING ECONOMICS HERITAGE

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