LANDSCAPING SPECIFICATION



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Proposal : Demolition of Class Q Consented Agricultural Buildings and Erection of Three Dwellings, Associated Hard and Soft Landscaping and Creation of a Re-wilding Area at Witteman Nurseries South Drove, Spalding. Lincs. PE11 3BD

September 2023

Project No JDA/2023/720

Overview

The site's physical constraints and boundaries are indicated on the associated Landscaping Drawing and the Topographic Survey drawing.

We have chosen to plant a limited number of indigenous specimen trees only in strategic locations within the site. This form and quantum of planting is considered both sufficient and appropriate given the nature of the proposed development. The combination of different yet complimentary forms of hard surfacing is also deemed appropriate.

Existing hedgerows will be maintained and strengthened and gaps infilled with new indigenous hedgerow planting where required for strengthening. Hedgerows to be cut on a three year rotation cycle to maximise pollen, nectar and fruit supplies.

Note :
All hedgerow wildflower mixes to be of local provenance and to be sown in strips at hedgerow bases and managed with alternate year cutting and clearing.

Parking and maneuvering areas have been shown with a permeable surface. The driveway is existing and formed will well drained consolidated hardcore. A gravel finish will be provided at completion.

Landscape Management Plan
CONTENTS

1. LANDSCAPE SPECIFICATION
2. LANDSCAPE MANAGEMENT PLAN

1.0 Landscape Specification

DRAWINGS AND OTHER DOCUMENTS.

Items to which the contractor should refer and which make up the contract documents are :- This Landscape Specification – Landscape Proposal Drawing attached - Drawing No JDA/2023/750/SITE.001

The Contractor should note that he is fully responsible for ensuring that the Landscape Works meet the full requirements necessary to comply with Planning Permission and should allow in his tender accordingly.

General

- All landscape proposals must be referred to by the Structural Engineer during sub and superstructure designs.
- All planting to be implemented in accordance with horticultural best practice guidelines.
- No species, variety, size or position to be amended without the Clients prior approval.
- Before trees are planted, the Landscape Contractor shall ascertain the location of drains from the site manager, and shall if necessary make minor adjustments to tree positions to ensure that they are planted at least 1.5m from drains. They should however be planted no closer to houses/garages than is shown on the drawing, and if shown located in shrub beds, the shape of the latter should be adjusted if necessary to accommodate the revised tree position.
- If planting conditions are particularly poor e.g., waterlogged/frozen ground or poor soils, the Site Manager must be notified. All works will halt until conditions are considered acceptable.
- All planting must be mulched to a depth of 75mm and in accordance with horticultural best practice guidelines ensuring plants are not buried.
- If planting is required outside the October-March season, bare root shrubs will be replaced by pot grown plants, and trees will be replaced by a containerised equivalent to be approved by the project manager.

2 GENERAL INFORMATION AND SCOPE OF WORKS.

2.1 SCOPE OF WORKS :

2.1.1 The landscape work involves the supply, spreading and cultivation of topsoil application of fertilisers and weed killers; planting trees; hedging plants; shrubs; perennials and climbers.

3.00 TOPSOIL AND GROWING MEDIA

3.1 GRADING SUBSOIL

General: Grade to smooth flowing contours to achieve specified finished levels of topsoil.
Areas of thicker topsoil: Excavate locally.

3.2 SUBSOIL SURFACE PREPARATION

- General: Excavate and/ or place fill to required profiles and levels, as section D20.
- Loosening:
- Light and non-cohesive subsoils: When ground conditions are reasonably dry, loosen thoroughly to a depth of 300 mm by ripping.
- Stiff clay and cohesive subsoils: When ground conditions are reasonably dry, loosen thoroughly to a depth of 450 mm by ripping.
- Rock and chalk subgrades: Lightly scarify to promote free drainage.
- Stones: Immediately before spreading topsoil, remove stones larger than 50 mm.
- Remove Arisings, contaminants and debris.

3.3 TOPSOIL ANALYSIS

Not required

3.4 Blank

3.7 COMPOST FOR ALL PLANTING AREAS

Standard: In accordance with PAS 100.
Supplier: Local source.
Product reference: Peat-free compost, contractor's choice.
Type: Sanitized and stabilized compost.
Horticultural parameters:

- pH (1:5 water extract): 7.0-8.7.
- Electrical conductivity (maximum, 1:5 water extract): 200 mS/m.
- Moisture content (m/m of fresh weight): 35-55%.
- Organic matter (minimum): 25%.
- Grading (air dried samples): 99% passing 25 mm screen, and 90% a 10 mm screen mesh aperture.
- Carbon:Nitrogen ratio (maximum): 20:1.

- Texture: Friable.
- Objectionable Odour: None.
- Composting Association certification: Required.
- Submit: Declaration of analysis.
- Additional analyses: Not required.

- Samples: Supply 5 kg sample before ordering.
- Application rate: As per tree pit drawing.
- Timing: Apply prior to cultivation.

3.8 PEAT - Peat or products containing peat: Do not use.

3.9 CONTAMINATION

General: Do not use topsoil contaminated with subsoil, rubbish or other materials that are:

- Corrosive, explosive or flammable.
- Hazardous to human or animal life.
- Detrimental to healthy plant growth.

Subsoil: In areas to receive topsoil, do not use subsoil contaminated with the above materials.

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4.0 MATERIALS AND GENERAL WORKMANSHIP.

4.1 SEASON AND WEATHER

Landscape operations involve living materials, which include topsoil. All work should be carried out at an appropriate season and in weather conditions suitable for the operation. In exceptional circumstances work may be carried out in adverse conditions only if permission has been given by The Employers Agent and appropriate precautions taken.

No planting shall take place in frosty weather, during periods of drought or when the ground is water-logged. The Employers Agent shall be responsible for all damage caused by frost or inclement weather which can in any way be attributed to failure on his part to take reasonable precautions against same.

4.2 MATERIALS

All materials, plants and other landscape items should be the best of their respective kinds and in accordance with the details provided elsewhere in this specification.

4.3 POLLUTION

Any ground fouled with diesel oil or other chemicals should be excavated and replaced with suitable, approved topsoil.

4.4 CLIMATIC CONDITIONS

Carry out the work while the soil and weather conditions are suitable for the relevant operations. Transplant only during the following periods :

Deciduous trees and shrubs – Late October to late March
Conifers and evergreens – Early or late spring
Containerised, pot grown and root bailed plants – At any time if ground and weather conditions are favourable.

5.00 TIMES OF YEAR FOR PLANTING
Deciduous trees and shrubs: Late October to late March.
Conifers and evergreens: September/ October or April/ May.

6.0 MACHINES AND TOOLS
All soils where able should be cultivated with a compact tractor and a Rotadairon stone burier.
All cultivated areas should be graded-leveled-formed with a seed bed harrow.
Use hand tools around trees, plants and in confined spaces where it is impracticable to use machinery.

7.00 VARIATIONS IN GROUND WATER LEVEL
Give notice: If levels encountered are significantly different from levels in the site investigation report or previously measured.

8.00 DROUGHT CONDITIONS
Water supply is, or is likely to be restricted by emergency legislation:
Inform Employers Agent without delay and ascertain availability and additional cost of second class water from a sewage works or other approved source.
If planting has not been carried out, do not do so until instructed.
If planting has been carried out, obtain instructions on water supply.

9.00 SETTING OUT
Where alterations are needed, obtain approval with Employers Agent before starting work.

10.00 CHEMICALS

Use only where specified or approved and then only products on the current list of the Agricultural Chemicals Approval Scheme.
Where work is near water, drainage ditches or land drains comply with the Ministry of Agriculture, Fisheries & Food "Code of Practice for the use of Herbicides on weeds in water courses and lakes" - - only use herbicide for spot treatment for invasive weeds.
Observe all precautions recommended by the manufacturer and remove containers from site immediately they have been emptied or are no longer required.

11.00 SITE CLEARANCE GENERALLY
General: Remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil.
Stones: Remove those with any dimension exceeding 50 mm.
Contamination: Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
Vegetation: Clear scrub to ground level
Large roots: Grub up and dispose of without undue disturbance of soil and adjacent areas.

12.00 STORAGE COMPOUND

Plants should be stored in accordance with 4.4 of this specification and protected from accidental damage by others.
Water will be provided after practical completion by the client, subject to availability of supply.

13.00 PROPOSED SERVICES
The Contractor is responsible for coordinating the landscape works with the installation of new services and the position of existing services. Any damage caused to landscape works and a result of install of services will be made good at the Contractor's expense.
The Contractor should take all necessary precautions when undertaking cultivation and planting operations to avoid damage to any services. Slight adjustment to planting stations may be required but any major repositioning should only be undertaken after approval from the Employers Agent.

14.00 CONTRACT PERIOD
The landscape work will be executed during the contractor or the next available planting season or as directed by the Employers Agent.
In any event, work should only be carried out while the soil and weather conditions are suitable for the relevant operation.

15.00 DEFECTS LIABILITY PERIOD
The Contractor shall be responsible for the Landscape Works against any defects due to faulty workmanship or materials for a period to be agreed.

16.00 PLANTING

16.10 TREES/PLANTS – GENERAL
Source – Obtain from approved source(s) with soil and climatic conditions similar to those prevailing on site.
Adequately and carefully pack and protect against mechanical damage, extremes of temperature and drying out.

17.00 INSPECTION
Site Manager responsibility

18.00 SUBSTITUTES
The tender must be based on plants, which are available. If specified plants are unobtainable, alternatives may be submitted with the tender, stating price and how they differ from the specification. Such substitutions may not be acceptable and submission of further alternatives may be required.
Obtain approval before making any substitution.

19.00 STORAGE
Plants which are not to be planted on day of delivery to site to be stored as follows or by other approved methods:
Root balled plants : place together and cover root balls with sand or wet straw, (not peat).
Bare rooted plants : Heel in to prepared trenches, cover with soil and water thoroughly.

20.00 SURPLUS MATERIAL
Surplus material, arising from the landscape works including subsoil, stones, debris, wrapping material and pruning's to be removed from site.

21.00 PLANTING TREES – NURSERY STOCK TREES
SIZES – To BS 3936:Part 1, size designation as for Planting Plan.

ROOT BALLED TREES-PLANTING
Plant trees upright, unless otherwise instructed.
Firm back-filling material around root ball in 150mm layers, taking care not to disturb the root ball, and heel in firmly around root collar.
Water tree thoroughly immediately after back-filling.

22.00 STAKING
STAKES – 75 x 75mm square section or 75mm diameter round section softwood, pressure impregnated to BS 4072, straight, free of projections and pointed at one end.
Replace any stakes which are split and remove any snags or burrs which may cause chafing of trees.

23.00 TIES – Should be rot-resistant material and should include a buffer to prevent chafing and a buckle to allow for adjustment. All ties to be nailed in position to prevent slippage.

23.10 DOUBLE STAKING ROOT BALLED NURSERY STOCK – Drive stakes vertically at least 150mm into the bottom of the pit on either side of the tree position until firm. Height of stake above ground to be one-third height of tree. Consolidate material around stakes during backfilling. Firmly fix cross bar on windward side of tree and as close as possible to the stem. Secure tree firmly but not rigidly to the cross bar with a tie of an approved type.

24.00 PREPARATION OF PLANTING BEDS (INC. TREE & HEDGE PLANTING).
Supply and apply at a rate of 75g/m2 in accordance with manufacturer's instructions and allow the required period of time to elapse as recommended by the manufacturer, before cultivation.

GENERAL FERTILISER – Supply and apply a general fertiliser at 75g/m2, evenly over all the planting areas immediately before cultivation.

25.00 CULTIVATION –Break up any compacted soils to full depth using a compact tractor and tyres prior to planting. Cultivate top 300mm of all planting areas by using a Compact Tractor and Rotodairon stone burier and/or double digging in restricted areas. Level and firm surface with seed bed harrow and/or rakes.
Remove undesirable material brought to the surface including stones and clay balls larger than 25mm in any dimension, roots, tufts or grass and foreign matter.

26.00 PLANTING-GENERAL PLANTING INSTRUCTIONS
Before planting, remove any non-perishable containers and carefully prune any badly damaged roots.
Plant upright or well balanced with best side to front. Carefully return excavated, top-soil, packing around evenly spread roots or root ball and heel well in.

Water plants thoroughly immediately after planting, use a fine rose.

Immediately after planting shrubs carefully cut back any damaged, dead or diseased branches and remove any weak, thin or malformed growth. Where and to the extent appropriate for the species, cut back to encourage growth.
After planting, fork and/or rake soil to a fine tilth with approved cambers and no hollows.

27.00 Blank

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32.00 TREE PLANTING - THIS IS THE DEVELOPERS COMPLETE STANDARD LIST FOR TREES- REFER TO LAYOUT PLAN FOR DETAILS OF SPECIES SELECTED FOR THIS DEVELOPMENT

1. Acer campestre Field Maple Ac.ca 8-10cmg CG
2. Betula pendula Silver Birch Be.pe 8-10cmg CG
3. Malus sylvestris Crab Apple Ma.sy 8-10cmg CG
4. Prunus avium Wild Cherry Pr.pa 8-10cmg CG
5. Sorbus acuparia Rowan So.ac 8-10cmg CG
6. Pyrus sp. Pear Py.sp 8-10cmg CG
7. Fagus sylvatica Beech Fa.sy 8-10cmg CG
8. Populus tremula Aspen Po.tr 8-10cmg CG
9. Quercus robur Oak Qu.ro 8-10cmg CG
10. Sorbus aria Whitebeam So.ar 8-10cmg CG
11. Acer davidii (Pere David's Maple)
12. Acer rubrum (Red Maple)
13. Crataegus Laevigata (Paul's Scarlet)
14. Malus sylvestris _(Wild Crab Apple)
15. Prunus avium (Wild Cherry)_
16. Pinus sylvestris (Scots Pine)
17. Quercus ilex (Evergreen Oak)
18. Quercus robur (English Oak)
19. Sorbus aucuparia 'Joseph Rock'
20. Tilia Cordata - Small Leaved Lime - 8-10cmg CG
21. PWB Pear 'Worcester Black' 8-10cmg CG
22. Carpinus Betulis Frans Fontaine 12-14cm girth contained specimens
23. Tilia cordata x mongolica " Harvest Gold". 12-14cm girth containerised root stock.
24. AJG Apple. 'James Grieve'_. 8-10cmg CG

33.00 NEW FRUIT TREES -
See above planting schedule

34.00 ROOT BARRIERS
To be used where trees are to be planted close to dwellings - refer to Site Layout

JDA/2023/750/SITE.001 and Engineers foundation design details.

35.00 GRAVEL MARGINS
Not applicable.

36.00 BARK MULCH
Only Melcourt Ornamental Bark Nuggets to be used unless others specified.
Supply and spread bark mulch to a litre, shrub and hedge planting area to a minimum depth of 50mm.

37.00 Blank

38.00 MAINTENANCE

38.10 PLANTING – MAINTAINING / MAKING GOOD DEFECTS.

38.20 WATERING (Before practical completion): During establishment of planting ensure that sufficient water is applied to maintain healthy growth.

38.30 CLEANLINESS: Remove soil from all hard surfaces and leave the works in a clean and tidy condition at Practical Completion.

38.40 FAILURES OF PLANTING: Post Practical Completion maintenance of the planting is to be carried out by the Contractor as specified in this section. Any trees 1 shrubs 1 plants which are dead, dying or otherwise defective at the end of the Defects Liability Period will be regarded as defects due to materials or workmanship not in accordance with the Contract. They must be replaced by approved equivalent tree / shrubs / plants at the next suitable planting season unless otherwise instructed this will not apply if the defects are caused by malicious damage after Practical Completion.

38.50 PLANTING MAINTENANCE OPERATIONS

During the Defects Liability Period, carry out maintenance of the planted areas as follows:

Make visits at approximately fortnightly intervals during the growing season or as necessary to fulfill the requirements of this specification.

Keep all beds clear of weeds by hand or chemical means and use of approved herbicides - - only use herbicide for spot treatment for invasive weeds.

Once during the Period, in March or April, apply a 15.15:16 – N:P:K or approved similar Straight Agricultural or slow-release type fertiliser to the planting areas.

Prune plants at appropriate time to remove dead or dying and diseased wood and suckers to promote healthy growth and natural shape.

Undertake formative pruning to hedge specimens to enable development of close-knit hedge.
Note :
All hedgerow wildflower mixes to be of local provenance and to be sown in strips at hedgerow bases and managed with alternate year cutting and clearing.

Regularly check condition of stakes and ties. Replace broken or missing items. Adjust ties if necessary to prevent rubbing of bark. Cut back any damaged bark.

Ensure that sufficient water is applied to maintain healthy growth. Suggest to Employers Agent when watering may be required and when instructed carry out using a fine rose or sprinkler until full depth of top soil is saturated. Allow four wanderings minimum.

At the end of the 12 months Defects Liability period, apply final top-up of bark mulch to bring depth back to minimum of 50mrvl.

39.00 Blank

40.0 GENERAL

All plants shall conform to BS 3936 and be in accordance with the National Plan Specification. Supplying nurseries shall be registered under the HTA Nursery Certification Scheme. All plants shall be packed and transported in accordance with the Code of Practice for Plant Handling as produced by CPSE. Planting shall not be carried out when the ground is waterlogged, frost bound or during periods of cold drying winds. All bare root stock shall be root dipped in an approved water-retained polymer. All stock to be of native provenance. If topsoil depths are inadequate the contractor should inform the contract administrator.

41.00 PLANNING CONDITION COMPLIANCE
The soft landscaping scheme shall be carried out as approved no later than the first planting season following the occupation of the dwelling to which it relates or the completion of development, whichever is the earlier. The management plan shall be implemented in accordance with the details contained therein.

Any trees, shrubs or hedges forming part of the approved landscaping that die, are removed, become diseased or unfit for purpose [in the opinion of the LPA] within five years of the implementation of the landscaping scheme shall be replaced during the next available planting season by the Developers, or their successors in title with an equivalent size, number and species being replaced. Any replacement trees, shrubs or hedgerows dying within five years of planting shall themselves be replaced with an equivalent size, number and species.

Thereafter the planting scheme shall be carried out in accordance with the approved details at the first available planting season.

John Dickie C. Build E MCABE

Landscaping designs



2.0 Landscape Management Plan

Protecting/ maintaining to practical completion

Maintenance

1. Duration: Carry out the operations in the following clauses from completion of planting until: the end of the rectification period

2. Frequency of maintenance visits: fortnightly during growing season.

Failures of planting

1. General: Plants/ trees/ shrubs that have failed to thrive (unless due to theft or malicious damage after completion) during period stated in clause 710, will be regarded as defects due to materials or workmanship not in accordance with the Contract. Replace with equivalent plants/ trees/shrubs.

2. Replacements: To match size of adjacent or nearby plants of same species or match original

specification, whichever is the greater.

3. Timing of making good: During the next suitable planting season

Cleanliness

1. Soil and arisings: Remove from hard surfaces and grassed areas.

2. General: Leave the works in a clean tidy condition at Completion and after any maintenance operations.

Planting maintenance

1. For 12 months from practical completion

2. Monthly maintenance record sheets shall be submitted to the main contractor for circulation to the client's team. A client's representative will inspect and sign off the works as being completes and acceptable, any maintenance operations that fail shall be re-undertaken by additional herbicide or hand weeding.

TREES:

3. Maintain a 1.2m diameter weed free area around each tree in accordance with clause 790 with herbicide treatment or hand weeding if necessary.

4. Treat against pests and diseases;

5. Application of fertiliser in accordance with clause 755 in April and August;

6. Adjustment guys, refirming and replacing stakes and ties. Replace broken or missing items, adjust if necessary to allow for growth and prevent rubbing of bark;

7. Refirm plants, guy angle irons and stakes after heavy winds, frost or other disturbances;

8. Watering to ensure moisture levels are maintained appropriate for optimum growth of trees.

9. Remove any vandalised trees

10. Remove any dead or dying trees and replace with original specification during the next available planting season.

SHRUBS:

11. Maintain shrub beds by hand weeding and or herbicide treatment to ensure weed free beds at all times - with all arisings removed from site ;

12. Remove litter and deleterious material during every site visit

13. Top up bark mulch levels in accordance with clause 790 to ensure full depth on mulch is retained;

14. Application of fertiliser in accordance with clause 755 in April and August;

15. Treat against pests and disease;

16. Planted areas: Fork over beds as necessary to keep soil loose, with gentle cambers and no hollows. Take care not to reduce depth or effect of mulch;

17. Refirm plants after heavy winds, frost or other disturbances;

18. Prune plants in accordance with best practice and appropriate to species, remove arisings;

19. Watering to ensure moisture levels are maintained appropriate for optimum growth.

20. Remove any vandalised plants

21. Remove any dead or dying trees and replace with original specification during the next available planting season.

HEDGEROW

22. Maintain hedgerow by hand weeding and or herbicide treatment to ensure weed free hedge at all times - with all arisings removed from site;

23. Remove litter and deleterious material during every site visit;

24. Top up bark mulch levels in accordance with clause 790 to ensure full depth on mulch is retained;

25. Application of fertiliser in accordance with clause 755 in April and August;

26. Treat against pests and disease;

27. Adjust and refirm supporting fence to hedgerow;

28. Planted areas: Fork over beds as necessary to keep soil loose, with gentle cambers and no hollows. Take care not to reduce depth or effect of mulch;

29. Refirm plants after heavy winds, frost or other disturbances;

30. Prune plants in accordance with best practice and appropriate to species, remove arisings;

31. Watering to ensure moisture levels are maintained appropriate for optimum growth.

32. Remove any vandalised plants

33. Remove any dead or dying trees and replace with original specification during the next available planting season.

Contents

1.0 Introduction

2.0 Site Management Considerations

3.0 Management Operations (including Maintenance Schedule)

4.0 Monitoring and Review

Appendix A: Summary of Relevant Legislation

1.0 Introduction

Purpose of the Management Plan
This Management Plan has been produced by John Dickie Associates on behalf of Mrs. J. Titterton-Fox

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Scope of the Management Plan

This long term Management Plan provides information on managing landscape elements within the Site boundary toenhance amenity and biodiversity value and strengthen its connectivity to the wider landscape.

This Management Plan covers all landscape areas within the Site.

The Management Plan should be read in conjunction with the following drawing ;

JDA/2022/820/SITE.001

2.0. Site Location

The site is located as shown on the Site Location Plan

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3.0 Development/ Project Proposals
Refer to Design and Access Statement

4.0. Responsibility for Site Management

The developer and the main contractor

Management Objectives

The long-term management objectives of this Plan are:

- To safeguard and enhance the biological and physical integrity of the Site
- To provide continuity and connectivity of the site with the wider countryside
- To balance both wildlife conservation and public amenity interests carefully due to close proximity to residentialproperties.
- To ensure all amenity areas are maintained to a high standard to provide an attractive setting to the developmentand useable space for the residents
- To maintain access within the Site and to provide connections to the wider network of streets and footpaths
- To successfully establish proposed landscape features including trees, shrub planting and SuDS features; and
- To comply with legal obligations and constraints.

5.0. Land Designations and Protection

The land is not 'designated'

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6.0. Ecology

Scoped out of this document

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7.0 Health and Safety

The developer will retain ultimate responsibility for the health and safety of the Site and will review health and safety as part of its regular inspections of the Site. The Site will be subject to informal inspections and a formal annual inspection. Whenever the Site is visited, any deficiencies in safety provision will be noted and acted upon through appropriate risk management procedures.

The Site will be managed to comply with all relevant health and safety legislation, approved codes of practice (ACOP's) and Health and Safety Executive (HSE) guidance. The landowner will be responsible for ensuring that risk assessments areundertaken for the site as required under the Management of Health and Safety at Work Regulations 1999, and for monitoring and reviewing the effectiveness of control measures implemented as a result of the risk assessment to ensure their effectiveness.

They will also be responsible for ensuring that accidents and incidents which occur on the Site are reported to the relevantenforcing authority as required by the Reporting of Injuries, Disease and Dangerous Occurrences Regulations (RIDDOR) 2013.

The health and safety regime for any work undertaken on the Site will follow the guidelines as laid down in the HSE publications, including HSG65 'Managing for Health and Safety and HSG268 'How to Control Risks at Work'.

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8.0. Management Operations

This section describes the management operations required for the landscape elements proposed, as shown on theLandscape Plans and listed below

- Existing trees
- Tree planting
- Hedges
- Ornamental/ native shrub planting
- Amenity grass
- Footpaths
- Fencing
- Cycle stands
- Bins

The management operations are described over the following pages and summarised within the management operationsschedule at the end of this section.

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9.0. Inspections

The Site will be inspected regularly to confirm the Site is being managed appropriately.

An annual health and safety inspection will be undertaken to identify any health and safety hazards. Any hazards will bemade safe as far as is practicable. Health and safety inspections will ensure any hazards are identified and remedial measures are actioned.

Results from the health and safety inspection, as well as any remedial measures, will be compiled and presented within anannual report which will be used in the review of the management plan

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10.0. Management Operations

Cleaning

- A general cleanse of the Site will be carried out on a fortnightly basis.
- All litter will be removed from the Site and disposed of in an authorised manner.
- Fly-tipping may occur from time to time and this will be removed as soon as possible in order to discouragereoccurrences.

Constraints

- Care must be taken during cleansing to check for wildlife, which may be hiding in or under items. Any wildlife foundwill be returned to suitable cover.

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11.0. Existing Retained Trees

Existing retained trees will be maintained to provide an attractive setting to the site and provide habitat for local wildlife.Management of existing retained trees will include thinning and improvement through coppicing and pruning, where required. The following specification is applicable to all arboricultural works:

An Arboriculturist must be consulted prior to undertaking any major tree works within the Site boundary. An ecologistshould also be consulted if any signs of bat roosting suitability are present.

Wood under 250 mm diameter collected from thinning, brashing, or coppicing will, wherever possible, be chipped andused on site for mulching, either by blowing directly back into planting areas or by storing on site for future use.

Trees for thinning will be cut to a level stump length of 150 mm for treatment with stump killer. A minimum of 50% of the stump surface will be scored over and treated to stop re-growth. Future growth of stumps will be monitored and additional cuts and applications of stump killer will be made over the following two years as required.

Any deadwood found on site will be stacked and kept onsite where possible as it is of value to invertebrates.

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12.0. Constraints

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13.0. Inspections

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14.0. Tree Planting

Where trees are planted in grass, during the first five years of establishment a mulch composted wood chip or bark mulch will be laid around the base of all young plants to suppress weed growth and will be maintained to a depth of 65mm.

Where trees are staked, the stakes and ties will be checked monthly and it is anticipated that they will need adjusting atleast twice annually. Any broken or damaged stakes will be replaced and ties re-fixed at a slightly lower position, allowing for growth since planting.

Remove stakes as necessary, when the tree is suitably established, approximately in year 3 to 5. Newly planted trees may require re-firming during the first three years. To reduce excessive competition, a weed free area will be retained around any trees less than 3m in height and will be maintained to a diameter of 0.5m around the base of the trees using glyphosate spray twice a year. Once trees attain aheight of 3m, the maintenance of a weed free base and formative pruning can be discontinued. However, crown pruningis desirable.

Young trees will require formative pruning to maintain a desirable shape as well as to maintain health and vigour.

Any dead or severely damaged trees will be felled and replaced accordingly in the first five years. Deciduous species willbe replaced when dormant in early November to late March whilst coniferous/evergreen species may be replaced between October and April.

Newly planted tree may require watering, particularly through the summer months, this should be carried out as required.

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15.0. Inspections

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16.0. Hedges

Hedge planting is proposed to provide screening and to provide defined boundaries to the communal gardens. It is alsoproposed to enhance the biodiversity and amenity value of the Site.

Establishing new hedges

Management operations during the establishment phase (until branches of adjacent plants fully merge together) will comprise of weed control, watering (if required) and formative 'facing up' of the hedgerow to establish dense branchgrowth. New planting will be re-firmed as required.

Any required protective fencing or spiral guards will be checked and repaired or replaced as required. Once hedge isestablished protective fencing or spiral guards will be removed, this is anticipated to be in year 5.

During the first five years of establishment, between April and October monthly inspections of hedgerow will be undertaken and weeds will be removed by hand weeding and if necessary, herbicide (glyphosate) spot application. Anyplant failures will be replaced. Deciduous species will be replaced when dormant in early November to late March.

Conifers and evergreen species will be replaced in September/ October or April/ May.

The first cut to newly planted hedgerows is recommended within years 2 to 3 (dependent on growth) and will consist of'facing up' either side of the hedge. All hedge cuts must be undertaken using appropriate hand or power tools. Mechanical methods of management, where appropriate, will be used in favour of machinery.

General

The hedge will be cut in an 'A' shape to maintain a wide base for bird nesting and roosting. The 'A' shape profile of thehedge should be maintained annually by cutting the current season's growth.

If possible, only one side will be cut annually. Cutting every 2 years rather than annually will create a bushier hedge forwildlife nesting/refuge and allows for berry production in the alternate years.

Hedgerows can be cut between September to February to avoid bird nesting season. The later hedges are cut the biggerthe advantage they provide to foraging wildlife from providing berries and fruits.

Additional hedgerow cutting may be required from a health and safety perspective should there be a good growingseason (although this is unlikely within the first few years of establishment of new hedgerows, but this will be monitored).

Constraints

Any hedgerow management will be carried out outside of the bird nesting season (between March and August). Should any works be required within the bird nesting season an assessment will be undertaken by a suitably qualified ecologistbefore any works commence.

Ornamental/Native Shrub Planting

A mixture of native and ornamental planting is proposed within the Site to add amenity value and visual interest. Management of shrub planting will focus on maintaining a neat and tidy appearance, which will also encourage plant growth.

During the first five years of establishment, a mulch composted wood chip or bark mulch will be laid around the base of all young plants to suppress weed growth and will be maintained to a depth of 65mm. Between April and September frequent inspections of these areas will be undertaken, removing weeds wherever necessary by hand pulling to assist the successful establishment of plants.

Pruning of shrubs will be undertaken to clear deadwood, promote healthy growth and produce desired growth of flowers, fruit, foliage or winter colour as appropriate. Dead, broken, damaged, diseased

branches will be removed. Pruning willalso include for clearing out crossing branches and branches growing toward the middle of the plant. Pruning will be carried out between December and February.

Any plants subject to vandalism or storm damage should be pruned straight away.

Any damaged, failing or dead shrubs will be replaced within the first five years. Deciduous species will be replaced whendormant in early November to late March. Conifers, evergreen and herbaceous species will be replaced in September/October or April/ May.

Weed control will include spot treatment using selective herbicide of noxious weeds such as docks, thistles, nettles, ragwort and willowherb.

Constraints

Where the pruning is limited to the extent of the current year's growth, work can be carried out at any time of year.Watering will be carried out as required.

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17.0. Bulb Planting

Not applicable

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18.0 Fencing – 2m high Hedgehog Friendly Close Boarded





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19.0. Schedule of Management Operations

Operation	Frequency	Years	Time of year											
			J	F	M	A	M	J	J	A	S	O	N	D
Inspections														
Monthly site inspection for any damage and to review generalcondition of the site and all landscape elements	Monthly													
Undertake a health and safety inspection to review and identifyhazards.	Yearly	1-10												
Cleaning														
Cleanse the whole site	Fortnightly	1-10												
Remove fly-tipping as soon as possible	As req.	1-10												
Existing Trees														
Selective thinning, coppicing and pruning as required to maintain visualamenity and biodiversity objectives.	Every 3years	1-10												

Monitor stumps left from tree felling and if required, cut any re-growth and re-apply stump killer as required.	Yearly	1-10												
Instruct a trained arboriculturist toundertake a tree hazard and condition survey of mature trees	Every 3years	1-10												
Tree Planting														
Replenish bark mulch as required todepth of 65mm	Twice Yearly	1-5												
Check stakes and ties, (adjust at least twice annually). Replace any damaged or missing stakes and ties.	Monthly	1-5												
Remove stakes and ties	Year 5	5												
Re-firm newly planted trees asrequired.	Yearly	1-5												
Glyphosate spot spray around baseof trees any vegetation within 0.5m.	Twice yearly	1-5												
Prune to maintain health and vigour	Yearly	5-10												

Replace failed or damageddeciduous trees.	Yearly	1-5												
Replace failed or damaged coniferous/evergreen trees.	Yearly	1-5												
Water new planting	As req.	1-5												
Assessment of condition and structure of new tree planting.	Yearly	1-10												
Hedges														
Weed control. weeds will be removed by hand weeding and ifnecessary, herbicide (glyphosate)spot application	Monthly	1-5												
Water new planting	As req.	1-5												

Check protective fencing or spiralguards and repair/replace as required.	Twice Yearly	1-5												
Remove fencing or spiral guards.	Year 5	5												
Replace failed or damageddeciduous species.	Yearly	1-5												
Replace failed or damaged coniferous/evergreen species.	Yearly	1-5												
Re-firm new planting as required.	Yearly	1-5												
Pruning and Facing up either side ofhedge.	yearly	3-10												
Ornamental and Native Shrubs														
Replenish bark mulch as required todepth of 65mm	Twice Yearly	1-5												
Weed control. weeds will beremoved by hand weeding	Monthly													
Prune to maintain health andseasonal foliage.	Yearly	1-10												
Replace failed or damaged plants	Yearly	1-5												
Ornamental Grasses														
Replenish bark mulch as required todepth of 65mm	Twice Yearly	1-5												
Replace failed or damaged plants	Yearly	1-5												
Cut back deciduous grasses to ground level with arisings removed	Yearly	1-5												
from site.														
Remove brown tips and dead leaves around base of small evergreen grasses with arisings removed from site.	Yearly	1-5												
Prune large evergreen species to maintain health and seasonal foliage.	Yearly	5-10												
Amenity Grass Blank														

Wildflower Meadow														
Cut wildflower meadow sward to a height of 150mm, leave arisings in situ for24hrs then remove from site	Yearly	1-10												
Swales and Rainwater Gardens Blank														
Footpaths Blank														
Fencing Blank														
Bins Blank														
Benches Blank														
Cycle Stands and Shelters														

NOTE Glyphosate formulations containing the surfactant Polyethoxylated tallow amine (POEA) should not be used withinclose proximity to waterbodies or other wetland habitats as it can cause high amphibian larvae mortality.

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20.0. Monitoring and Review

Monitoring

The developer will undertake the following:

- An annual site meeting and review;
- Quarterly (initially) formal site inspections; and
- Ad hoc unannounced inspections: to be made as frequently as possible to review condition of entrances, the boundaries of the Site etc.

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21.0. Review

The Management Plan will be reviewed on an annual basis by the developer to ensure that the Plan is meeting theoriginal management aims and objectives and responding to the developing needs of the Site. Following the end of the first five-year period of this management programme, the Management Plan will be re-assessed and updated.

Appendix A: Summary of Relevant Legislation

The following legal obligations, among others must be considered in carrying out any managementoperations:

Legislation	Obligations
Health and Safety Legislation	
The Health and Safety at Work Act 1974	All operations carried out on the Site must only be undertaken by trained personnel, using methods and equipment approved by the Health and Safety Executive (HSE).
Occupiers Liability Act 1984	Management organisation must ensure that every reasonable care is taken to remove any risks to both legitimate visitors and to any trespassers. In compliance it will be necessary: To make sure that all footpaths and any other structures are safe.To remove any hazardous objects; and To conduct an annual safety audit in order to identify any further hazards.
Environmental Legislation	
Conservation of Habitats and Species Regulations (as amended) (2012)	The Habitat Regulations assign a greater level of protection to a variety of native species of animals and plants listed, which are known as European Protected Species (EPS).
Wildlife and Countryside Act 1981	There is an obligation to comply with legislation for UK species protected (including amphibians, reptiles and bats) under this Act.
Environmental Protection Act 1990	There is an obligation to keep the Site free from litter and refuse.
Countryside and Rights of Way Act 2000	Imposes a new right of access on foot to registered common land and other areas of 'open countryside' which under certain circumstances allows access without being confined to footpaths.

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22.0. PLANNING CONSENT COMPLIANCE

The soft landscaping scheme shall be carried out as approved no later than the first planting season following the occupation of the dwelling to which it relates or the completion of development, whichever is the earlier. The management plan shall be implemented in accordance with the details contained therein.

Any trees, shrubs or hedges forming part of the approved landscaping that die, are removed, become diseased or unfit for purpose [in the opinion of the LPA] within five years of the implementation of the landscaping scheme shall be replaced during the next available planting season by the Developers, or their successors in title with an equivalent size, number and species being replaced. Any replacement trees, shrubs or hedgerows dying within five years of planting shall themselves be replaced with an equivalent size, number and species.
Thereafter the planting scheme shall be carried out in accordance with the approved details at the first available planting season.

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23.0. Insurances and Certification

The appointed maintenance contractor must provide details of all necessary insurances and certification to carry-out the works specified in this management plan. It is the responsibility of the appointing authority to ensure that all submitted insurances and certificates are up to date and provide the appropriate level of cover for the specified works.

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