BARRATT AND DAVID WILSON HOMES (YORKSHIRE EAST) LTD

RESIDENTIAL DEVELOPMENT

INGS ROAD, BROUGH

POS LANDSCAPE MANAGEMENT PLAN

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A. INTRODUCTION

This document sets out the management principles and maintenance prescriptions to be adopted for the landscape and habitat management of the landscaped areas of Public Open Space associated with the residential site developed by Barratt and David Wilson Homes Ltd on Ings Lane, Brough.

The areas of Public Open Space include several different areas and / or habitat types. These are as described below:

These broadly fall into the following categories:

- New areas of native hedge planting concentrated predominantly around the boundaries of the site as a transition between the open space and the housing.
- New standard trees planted within the grassed areas associated with the areas of Public Open Space.
- Grassed areas comprising either mown amenity grassland or wildflower areas, the latter being predominantly associated with the native tree and hedge planting within the boundaries of the larger POS.
- Children's play spaces incorporating area of equipped play for Toddler, Juniors and Youths and an associated landscaped space comprising grass, native hedge planting, ornamental shrubs and standard trees.

The details of the landscape proposals for the site can be found on the following approved drawings:

- R/1970/10N Landscape Masterplan
- R/1970/11H POS Masterplan
- R/2133/22A POS Details

A.1 Site Location

The site is situated centrally between the Phases of residential development off Ings Lane, Brough.

A.2 Timing

The operations prescribed within this document will become operational on completion of the Defects Liability Period and standard 12 months maintenance undertaken as part of the construction contract.

At the end of the 12 month maintenance period the POS will be handed over to a Landscape Management Company appointed by Barratt and David Wilson Homes Ltd.

The operations described in this Plan cover an initial 5 year period from commencement. Longer term management will need to be reviewed at the end of this period to ensure that the management principles and objectives are being met.

A.3 The Management Document

The purpose of this Management Plan is two-fold in:

- 1. Setting out the long term aims and objectives for the site so that all stakeholders and relevant parties can understand how it is intended that the POS develop and establish.
- 2. Providing a prescriptive series of timed operations which will form a working document to instruct the appointed Management Company on how the objectives will be achieved.

B. MANAGEMENT OBJECTIVES

B.1 Overarching Management Aim

The objective for the management of the areas of Public Open Space is to ensure that they are maintained as visually acceptable amenity areas (in the context of their situations within a residential development) which serve to provide usable landscaped spaces for the residents and which also maintain / enhance the intrinsic wildlife value of the planting as individual elements in their own right and, holistically, as part of the overall wildlife biodiversity and habitat value of the site and surrounding area.

In order to achieve this overarching aim, the different management objectives relating to the visual, ecological and recreational needs of the site must work in harmony. These are described below.

B.2.1 Visual

The open space shall be managed to provide a visually attractive landscape which, with particular regard to the 'rural edge' on the southern and eastern boundaries, helps to assimilate the residential development into the wider landscape and provides a setting which is in keeping with the landscape character of the area. With regard to the open space located within the centre of the site, the emphasis shall be on providing a well-managed and visually attractive landscape for users of the footpath link, surrounding dwellings and users of the site generally.

B.2.2 Ecological

The native planting shall be managed to ensure that it provides habitat value and wildlife linkages both within the site and into the surrounding area. The new areas of native tree and hedge planting and grassland shall be managed to provide features which add to and enhance the wildlife biodiversity of the area, contribute to the ability for wildlife to move around the site and reinforce links into the surrounding landscape.

B.2.3 Recreational

The equipped play areas and surrounding landscape shall be managed to provide a safe and attractive area of outdoor open space for both formal and informal recreation for younger aged children.

B.3 Best Practice Guidelines

In order to achieve these aims and objectives in a safe, environmentally responsible and sensitive manner there are a series of good practice guidelines which should be observed. Such good practice seeks to minimise the potential for negative impact on the environment and the general public. They are detailed below, in no order of ranking. Reference should also be made to the relevant legislation set out in Appendix 2.

- Ensuring that all operatives are suitably qualified, certified and competent to carry out the specific task or are supervised by such a person.
- Ensuring that all works are carried out in accordance with all relevant legislation; British and European standards; good horticultural and arboricultural practice and that the required risk assessments are undertaken and documented as necessary before carrying out works.
- Ensuring that all operations are carried out at the appropriate times of year during suitable weather and ground conditions to minimise adverse impacts on the existing vegetation and ground conditions.

This includes the following:-

- 1.Making sure that any wildlife surveys / assessments are carried out, as at appropriate times of year and in accordance with all relevant legislation.
- 2.Making sure that pruning and trimming is ONLY undertaken outside the bird nesting season (generally accepted as being 1st March to 31st July but can be longer depending on the species) AND, where feasible, ensuring that the food value of the native vegetation is maximised by aiming to carry out any pruning or trimming in late winter (January or February) or, where ground conditions or other mitigating circumstances prevent this, then as late as possible in the Autumn in order to retain nuts and berries as winter food for the wildlife.
- Ensuring that all tools and equipment are fit for purpose and appropriate for the particular job and site conditions. The use of heavy plant or machinery is to be minimised to reduce trampling of vegetation and ground compaction.
- To minimise the potentially adverse environmental impacts resulting from any management operations on site including minimising the use of herbicides and pesticides.
- Ensuring the safety of all members of the public during operations on site.
 Using interpretative signage to inform the public of operations on site.
 - Using interpretative signage to inform the public of operations on site where necessary and particularly where those operations are considered sensitive or may pose a danger to the public.
- Ensuring that all waste (not retained or re-used on site and including

any arising in connection with the approved use of chemicals) is disposed of in accordance with the relevant Waste Management Regulations.

 Monitoring operations on site and keeping records of what was carried out, when and what observations were noted which may need immediate action or need to feed into future reviews of the management plan.

B.4 Chemical Control

When chemical compounds/herbicides are to be used, the Management Company shall ensure that all operatives have read and follow carefully the instructions on the manufacturer's label.

The Management Company shall also consult the 'Recommendation for Safe Use of Chemical Compounds Used in Agriculture and Food Storage' published by DEFRA, Fisheries and Food: Safety Pesticides and Infestation Control Division, London SW1, and implement recommendations as necessary.

The Management Company shall notify the client when he intends to use chemical compounds/herbicides, allowing not less than seven (7) working days prior to commencement of the Works on site.

The Management Company shall submit the name of the chemical compound/herbicide, its supplier, a breakdown of its constituents, the mode and recommended rate of application and any species susceptibility to the Client / consultant Landscape Architect for their consideration. Approval for the use of a particular chemical compound/herbicide shall, in no way, relieve the Management Company of his contractual obligations.

All chemical compounds/herbicides used shall be kept safe at all times on site. Empty containers must be removed from site and disposed of safely.

C. MANAGEMENT OPERATIONS

The site shall be visited at the appropriate times of year and for a sufficient number of times to ensure that the operations set out below are carried out with the desired outcome stated.

At the time that this plan becomes operational, all new planting will have been maintained by the construction phase Landscape Contractor for a twelve (12) month period. This will have included a Defects Liability Period, under which any failures will have been replaced.

Operational schedules, relating to the work items detailed in the following Section are attached at Appendix 3.

C.1 New Standard Trees

1.1 Maintain an area of 1000 mm in diameter weed-free around each planted tree. Strimmers shall not be used for weed control around trees planted into grass within 500mm of their trunks. All weed control within 500mm of tree trunks shall be carried out by hand or by chemical means or with the protection of a strimmer guard.

Where approved chemical compounds/herbicides are used, the Management Company shall remove and dispose of, off-site, dead surface matter following application and dieback of weed growth within fourteen (14) days, or as directed by the Landscape Architect.

1.2 Check all stakes and ties regularly and replace defective ones as required (excluding vandalism). Adjust, where necessary to allow stem growth and to prevent chaffing.

Tree stakes and ties shall be inspected at the end of Year 3 and, where trees have established sufficiently well, they shall be removed. Where trees are still considered to require support, stakes shall be left in place and reinspected at the end of Year 4. Ideally all stakes shall be removed by the end of Year 5 (to coincide with the end of this Plan period) so that the trees develop sufficiently robust stems and do not rely on support.

- 1.3 Ensure that trees remain firm and well secured after frost heave, strong winds and other ground disturbance. 'Collars' at the base of the trunks created by tree movement shall be broken up by forking and backfilling with topsoil as necessary and refirmed.
- 1.4 Apply a slow release fertiliser to the base of each standard tree in March/April of each year, for the first 3 years, at the following rates:
- 1.5 Prune all dead or damaged branches in accordance with C.4.
- 1.6 Water as specified under watering section C.6.
- 1.7 Replace all failures annually in accordance with clause C.7.

- 1.8 Trees positioned in shrub beds shall have their tree pits maintained as for shrub beds, as specified in clause C.2.
- 1.9 Irrigation pipes shall be inspected on each visit to ensure that they are not blocked and their caps are in place.

C.2 NEW ORNAMENTAL SHRUB PLANTING

2.1 Shrub beds, including staked trees and specimen plants, shall be kept free from weed or grass. Forking or hoeing shall be carried out to remove noxious annual and perennial weed roots entirely from the shrub bed before the formation of seed heads. Removal of weed foliage only shall not be permitted.

All weed material resulting from the operation described above shall be collected from the shrub beds and removed from site by the Management Company.

- 2.2 Where herbaceous material or bulbs are incorporated into shrub beds the use of chemical compounds/herbicides shall not be permitted and only hand cultivations shall be carried out.
- 2.3 Following frosty weather and strong winds, the shrub beds shall be inspected and any plant that has been loosened shall be re-firmed in.
- 2.4 Apply a slow release fertiliser (eg Enmag or similar approved) over each shrub bed at a rate of 25 gms/shrub once a year in Spring (March/April) for the first 3 years.
- 2.5 If required, shrubs shall be pruned once annually to remove all deadwood, broken / damaged or crossing branches and to maintain them clear of footpaths as required. In addition, shrubs which require pruning on order to maintain / maximise their flowering potential or promote bushiness or stem colour shall be pruned at the appropriate time of year for the species (all as specified in C.4).

All arisings shall be carted off-site.

- 2.6 Replace all failures in accordance with clause C.7.
- 2.7 Immediately prior to the end of the 5 year plan period, undertake an assessment of the ornamental shrub planted areas with the Client and the consultant Landscape Architect and agree a policy of thinning / replacement of any over-mature planting as required.

C.3 NEW NATIVE SPECIES PLANTING

NEW NATIVE HEDGE PLANTING

General Maintenance Years 1-4

- 3.1 An area of 300 mm diameter around each transplant shall be kept free from weed growth. All invasive herbaceous scrubby vegetation, (eg Bramble & Nettles) and non-native or highly invasive tree species, shall be cleared and removed from site four (4) times annually.
- 3.2 Transplants shall be firmed in as necessary at each maintenance visit and particularly in Year 1 after planting after cold and frosty conditions before roots have taken hold.
- 3.3 Prune hedgerows to 450 mm in Year 3 to encourage bushiness. In Year 4 trim sides and top to begin formative pruning into an A shaped, dense hedge with a maximum height of 2 metres.

 Prune only out of the bird nesting season (1st March to 31st July).
- 3.4 Ensure all standard trees planted within the hedge are suitably protected and remain undamaged.
- 3.5 Replace all failures in Year 1 in accordance with Section 7.
 - In Years 2-4 replace all failures as required to produce a uniformly vegetated hedge line.
- 3.6 Remove all litter/fly tipping at each maintenance visit
- 3.7 Top up mulch annually in Spring to restrict competition from grasses and herbs during Years 1-4 (See Section 5) to the original depth.
- 3.8 Do not apply fertilisers to the hedgeline or use fertilisers, manure or pesticides within 2 metres of the centre line of the hedge to prevent leaching and the growth of undesirable, competitive ruderal weeds.

General Maintenance Year 5

- 3.9 Generally aim to maintain hedges at a height of not less than 1.8 metres. Prune in Year 5 to establish the desired height and width and maintain the A shape and density of the hedges. Prune outside the bird nesting season (1st March to 31st July) and aim to cut in January or February or, where ground conditions or other mitigating circumstances prevent this, then as late as possible in the Autumn. Avoid winter cutting in order to retain nuts and berries as winter food for the wildlife.

 After Year 5 a cyclical approach to hedge maintenance shall be adopted as
 - After Year 5 a cyclical approach to hedge maintenance shall be adopted as described under *clause 4.5*.
- 3.10 Remove any non-native or competitive plants from the ground layer by hand pulling to avoid disturbance to surrounding ground and plant life and dispose of arisings off site.
- 3.11 Do not apply fertilisers to the hedgeline or use fertilisers, manure or pesticides within 2 metres of the centre line of the hedge to prevent leaching

- and the growth of undesirable, competitive ruderal weeds.
- 3.12 Assess the need for planting to either replace defective or failed plant material or gap up as necessary to produce a consistently uniform hedge line.
- 3.13 Remove all litter/fly tipping at each maintenance visit.
- 3.14 Assess the need for top up mulch depending on the establishment of the hedge and the desire to provide conditions suitable for development of a herbaceous ground layer.

NEW NATIVE SPECIES TREE & SHRUB PLANTING

- 3.15 Planting areas shall be kept free from weed growth. Hand weeding shall be carried out to remove noxious annual and/or perennial weed roots before the formation of seed heads. Bark mulch layer shall be kept topped up to 50mm depth.
 - All weed material resulting from the operation described above shall be collected from the planting beds and removed from site by the Management Company.
- 3.16 Following frosty weather and strong winds, the Management Company shall inspect planting areas and firm any plant that has been loosened.
- 3.17 The Management Company shall apply a slow release fertiliser (eg Enmag or similar approved) over each shrub bed at a rate of 25 gms/shrub once a year in Spring (March/April).
- 3.18 Agree any requirement for annual pruning at the annual walkover to ensure that any species within the areas of native planting do not become overly competitive, overgrown or are dead, damaged or diseased. Undertake any pruning at appropriate times of year to avoid the loss of valuable food sources for fauna. (See Section C.4).
 - All arisings shall be carted off-site.
- 3.19 Inspect rabbit shelters and stakes at every visit and straighten any that have become dislodged. Replace any failed or defective shelters annually as required until shrubs have outgrown them and then remove as required unless they have degraded. Remove from site any discarded stakes once shelters have degraded or are no longer required.
- 3.20 Replace all failures in accordance with clause C.7.

C.4 PRUNING

- 4.1 All pruning work, whether on newly planted material or existing vegetation, shall be carried out in accordance with BS 3998:2010 where applicable. Resultant wounds shall be treated with approved fungicidal sealant.
- 4.2 All pruning of trees shall be carried out between November and March inclusive. The following operations shall be carried out:
 - a) All diseased tissue and any dieback shall be pruned to the nearest bud with clean wood.
 - b) The removal of unsightly 'water shoots' and epicormic growth from standard, selected standard, heavy standard and extra heavy standard trees
 - c) Formative pruning to remove branches that cross, are damaged or have malformed shoots, to maintain a balanced tree crown.
- 4.3 Broken and vandalised branches shall be cut back to the next joint, removing splinter wood, and treated with an approved sealant. If the tree, in the opinion of the consultant Landscape Architect is beyond pruning, it shall be removed by the Management Company, and the ground made good prior to being replaced in the next available season.
- 4.4 Newly planted shrubs shall be pruned once annually, to remove all deadwood, broken, damaged or crossed branches. At the end of Year 3 shrubs shall be pruned as C.4.5 below.
- 4.5 Pruning of existing well established shrub material shall be carried out where indicated on the Contract Drawings and shall conform to the following:
 - a) Shrubs flowering in Winter shall be pruned in Spring.
 - b) Shrubs flowering in March to July shall be pruned immediately after flowering.
 - c) Shrubs flowering July to September shall be cut back to old wood in January to February.
 - d) Rose bushes other than Species Roses shall be pruned in February to encourage basal growths and keep plants in a balanced and compact habit.
 - e) Pruning and removal of branches shall be carried out using sharp, clean implements to give a clean cut with one flat face. Any cuts or wounds over 20 mm in diameter are to be painted with an approved sealant.
 - f) The Management Company shall cut newly planted or existing hedges as indicated on the Contract Drawings and in the Schedule of Quantity. Cutting will be such as to encourage a stable shape and remove current growth rather than old wood.
 - g) All arisings from pruning work shall be removed from site to Management Companys' own tip.

C.5 MULCHING

5.1 All shrub beds and areas of native planting shall be mulched yearly with forest bark mulch (to match the existing specification) after the completion of the early Spring maintenance visit (i.e. March/April) to a depth of 50 mm until full groundcover is achieved.

C.6 WATERING

- C.6.1 New planting shall be watered regularly for the first three (3) years during April, May, June, July and August and should comply with *BS8545:2014 Trees from Nursery to Independence*.
- C.6.2 The following rates are given as a guideline for the volume of water required per visit:

Plant Type	Water Quantity
Trees	30 litres per tree
Specimen Plants	15 litres per plant
Transplants, Shrubs, Hedging and Herbaceous	10 litres per plant
Material	-

(NB 4.5 litres = Approximately 1 gallon)

New trees shall be watered weekly for the first year and fortnightly during Year 2.

From Year 3 onwards watering shall be carried out during periods of dry weather when the temperature ≤25°C for a period of 10 days.

C.6.3 The Landscape Contractor or Management Company shall allow for bringing to site sufficient water carts, hoses or sprinklers to provide adequate water to fulfil the above Specification and shall also be responsible for paying all charges in connection with the supply of water required unless otherwise instructed in writing by the Client or consultant Landscape Architect.

C.7 FAILURE OF PLANT MATERIAL

- 7.1 Replacements during the twelve (12) months following planting will have been carried out by the construction Contractor.
- 7.2 Once the site is handed over to the Management Company they will assume responsibility for replacement failures during the first five (5) years following completion, to achieve eighty (80) per cent or original numbers for native planting, 100% for standard trees and shrub planting to have gaps no bigger than the original spacing.
- 7.3 Replacement plant material required as a result of vandalism shall be identified separately and provided by the Management Company at the rates indicated in the Schedule of Rates (if provided) or as agreed in writing between the Management Company and the consultant Landscape Architect.
- 7.4 All replacement plant material shall conform to the original Specification unless otherwise agreed in writing between the Management Company and the consultant Landscape Architect.
- 7.5 The Management Company shall make good at his own expense all necessary repairs to levels, grassed areas and paving required because of plant replacements.

C.8 GRASSED AREAS

8.1 **General**

8.1.1 Amenity Species Rich Grassland

Grassed areas shall be mown as indicated on the Contract Drawings and in the Schedule of Quantity. Litter shall be collected prior to each cut. The disposal of grass cuttings by the chosen machine shall not result in cut grass being left in rows; rather the mowers shall reduce the cuttings to fine particles to be spread around to decompose rapidly.

Works around newly planted trees shall be carried out by hand-tool rather than mechanically.

The Management Company should note that his price for mowing includes for cutting the grass, trimming grass edges, trimming around the base of trees, manholes, street lights, signposts, up to the edges of paving, fencing and other boundaries etc. to keep the total area in a neat and tidy condition at all times.

In drought conditions mowing operations shall continue only so long as grass growth continues to reach maximum allowable height. In very wet conditions all operations shall cease until conditions allow operations to continue without either damaging the surface levels and contours of the grassed areas or leaving divots from mowing machines. Alterations required to the Aftercare Programme due to special weather conditions shall be agreed with the consultant Landscape Architect in writing.

Grass shall be cut to a height of 25-30mm. Litter shall be collected prior to each cut so that it is not chopped up during the grass cutting operation. The disposal of grass cuttings by the chosen machine shall not result in cut grass being left in rows; rather the mowers shall reduce the cuttings to fine particles to be spread around to decompose rapidly.

8.1.2 Wildflower Meadows generally

To be successful, meadowgrass areas must be carefully managed during the initial twelve to twenty four (12 to 24) month establishment period. The following cutting regime is a guideline and the actual cutting programme adopted will dependant on the growth in each situation, this in turn being directly by soil fertility, rainfall and ground temperature. The aim is to provide suitable conditions for the wildflower seeds to establish without being outcompeted by the grass nurse crop. The cutting regime will differ, depending on whether the sward is established in Autumn or Spring. It should be noted that the detention basins will generally be dry basins and as such will be maintained in accordance with the management prescription for wildflower meadows below.

Spring Establishment:

1st Year:
Deemed to have been carried out by Landscape construction Contractor

1st cut to 4-7 cm approx 6 weeks after sowing if sufficient material has established

2nd cut to 4-7 cm approx May (when sward height exceeds 10 cm)
3rd cut to 4-7 cm in September/October

All cuttings to be removed from site.

2nd & Future Years: 1st cut to 4-7 cm March/April

Final cut to 4-7 cm end September/October.

3rd cut to 4 cm in September

All cuttings to be removed from site.

Autumn Establishment:

1st Year:

1st cut to 4-7 cm in March (if sufficient material)

Deemed to have been carried out by Landscape construction Contractor

2nd cut to 4-7 cm in early May 3rd cut to 4 cm in September All cuttings to be removed from site.

2nd & Future Years: 1st cut to 4-7 cm March/April

Final cut to 4-7 cm end September/October.

All cuttings to be removed from site.

All arisings from any grass maintenance operations shall be removed from the grass surface. Piles of grass clippings shall be left on site in suitable locations away from public access to provide habitat for reptiles. All other arisings shall be removed from site to tip or compost areas on site.

8.3 **Fertiliser** (Amenity grass only)

Apply a fertiliser to the grass areas annually. The fertiliser shall be a compound granular free flowing material and shall supply the ratio of plant nutrients N:P:K at 2:1:1 for Spring Dressings and N:P:K at 1:1:1½ for Autumn Dressings. They shall be spread at a rate of 35gms/m². No fertiliser with the insoluble phosphate representing more than 10% of the total phosphate will be acceptable.

8.4 **Weedkiller** (Amenity grass only)

Supply and apply a suitable selective herbicide to grassed areas, to be applied only on the written instruction of the Landscape Architect. The herbicide shall be approved by the Landscape Architect and applied at the rate and in accordance with the manufacturer's instructions. The Contractor shall only spray during calm conditions, when rain is not imminent and not during drought conditions. Three days shall elapse before recommencement of mowing operations.

8.5 Remedials

The Management Company shall be responsible for remedial works on the grassed areas disturbed by cultivations, planting or other operations carried out by them in the execution of the Works. Where damage has been caused by vandalism or by agents outside the control of the Management Company, the Client shall be informed and a programme of repair agreed.

All remedial / repair work shall be carried out in accordance with good horticultural practice, at the appropriate times of year and ground conditions and using an approved seed mix to match the existing sward.

C.9 EQUIPPED PLAY AREAS

At the end of the initial 12 month maintenance / defects liability period, the Play Area / equipment and safety surfacing shall have been inspected by an independent specialist, approved by the Local Authority and appointed by Shepherds Home, to ensure it complies with NPFA and RoSPA guidelines as required, prior to handover to the Management Company.

The Management Company will carry out the following operations:-

9.1 **Play Equipment**

Play equipment shall be inspected on a daily, weekly and monthly basis in accordance with RoSPA guidelines by suitably qualified playground inspectors.

Any items found to be broken or defective shall be removed and replaced or repaired immediately. Items found to be dangerous shall be inactivated until a repair or replacement can be made.

The Play Area/equipment shall be inspected annually by an independent specialist to ensure the long term safety of the site, equipment and ancillary items. This will also meet legal and insurance responsibilities as well as complying with the requirements of EN 1176 (European Playground Standard).

C.10 SITE FURNITURE AND HARD LANDSCAPE

10.2 Fencing and Gates

Inspect all fences, railings and gates in the equipped Play Spaces, for any necessary repair, on each maintenance visit. Inform the Client of the need for any repair and seek approval as required.

10.3 **Street Furniture**

Inspect all seats, litter bins and raised planters for defects / damage. Report any defect or damage to Client and seek approval for repair / replacement/cleaning as required.

10.4 Hard Footpaths

Footpaths shall be inspected on a regular basis (3 monthly) to ensure it is kept litter free. Litter removal shall include all rubbish, leaves dust and accumulated grit.

Any stains (e.g. Oil spills, graffiti etc.) shall be removed by suitable means avoiding the use of chemicals unless they have environmentally sound credentials.

Where paths run through vegetated areas, a suitably approved residual herbicide shall be applied annually to the path edges to prevent vegetation encroaching over the edges.

Ensure surfaces are maintained in a good state of repair, free from pot holes and ruts or low areas which hold water. Repair as necessary ensuring that repairs are made using material to match the existing surface.

10.5 Safety Surfacing

Sweep the safety surfacing regularly as required to ensure the surfaces remain clean, tidy and free from dirt, debris and loose chippings.

Inspect the safety surfacing annually for any damage and agree a programme of repair as required.

C.11 LITTER

Litter shall be collected and carted off-site during each maintenance visit to be disposed of in accordance with current and relevant Waste Management Regulations.

D ANNUAL WALKOVER & REASSESSMENT OF SCHEDULES OF WORKS

An annual walkover assessment will be made by the Client, Management Company and consultant Landscape Architect and Ecologist in order to:

- Assess the plant replacements
- Assess the general condition of the landscape/habitat types and components
- Assess the need for more detailed survey for protected species/habitats
- Establish whether there are any adjustments needed to the Operational Schedules to meet the management objectives
- Assess the need for any tree works
- Assess the need for any other works directly related to the landscape.

The findings of the annual walkover shall be acted upon as required and as specified. Any recommendations for tree works which constitute a Health & Safety issue shall addressed as a matter of urgency.

Following the annual inspection, the Operational Schedules will be adjusted as necessary. Where necessary, the Management Plan shall be reviewed on an annual basis to ensure that the maintenance operations reflect what is required on site in terms of satisfying the principal aim and objectives.

E REVIEW OF MANAGEMENT PLAN

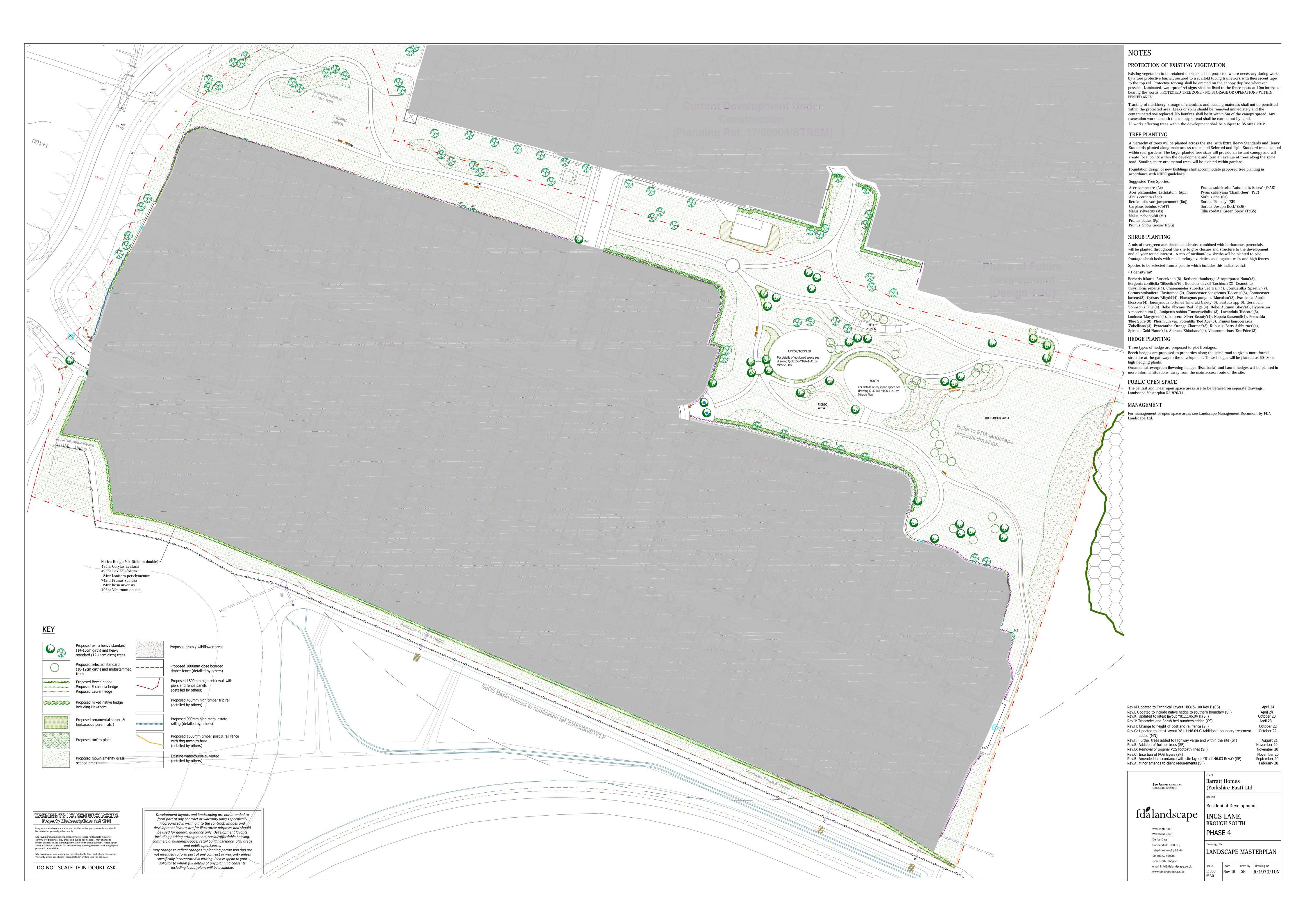
At the end of Year 5, a new Plan should be prepared in conjunction with the Client, the consultant Landscape Architect, consultant Arboriculturist, Ecologist, Management Company and, where required, a representative from the local authority, to respond to the site as it has developed and to review the objectives as required. This should ensure that the objectives, maintenance operations and management regimes are in accordance with all relevant current wildlife legislation, conservation guidelines and local / regional targets.

Where appropriate, specialist advice shall be sought from the consultant Ecologist with regard to the potential for the presence of protected species.

Given that the site and site usage will be more established at that stage, this subsequent Management Plan may take a longer term approach and cover a 10-15 year period.

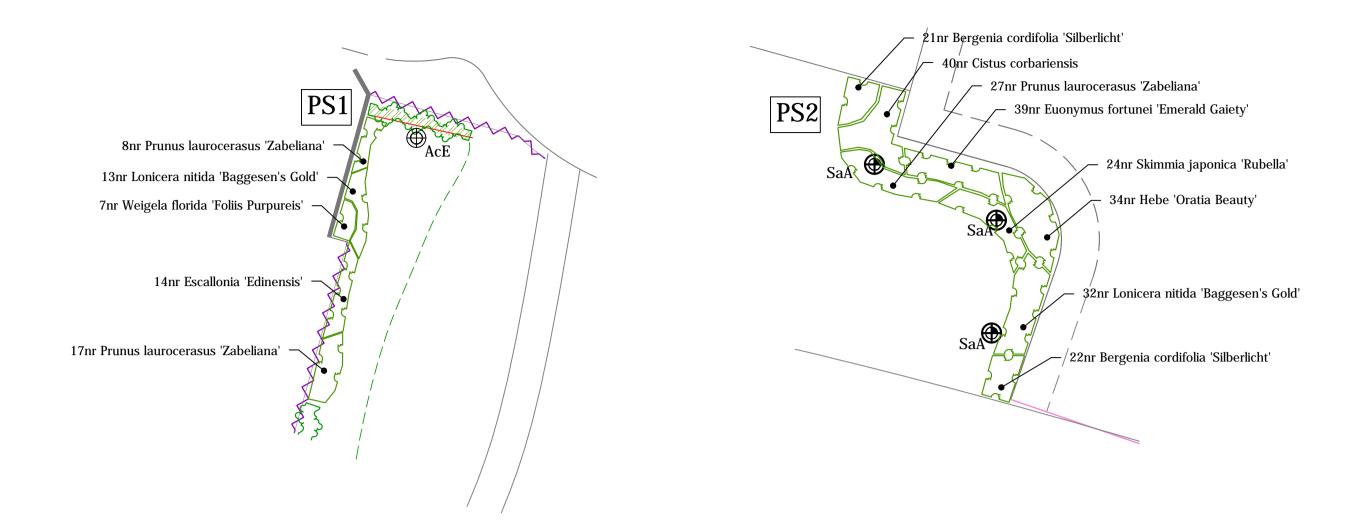
APPENDIX 1:

R/1970/10N Landscape Masterplan R/1970/11H POS Masterplan R/1970/22A POS Details

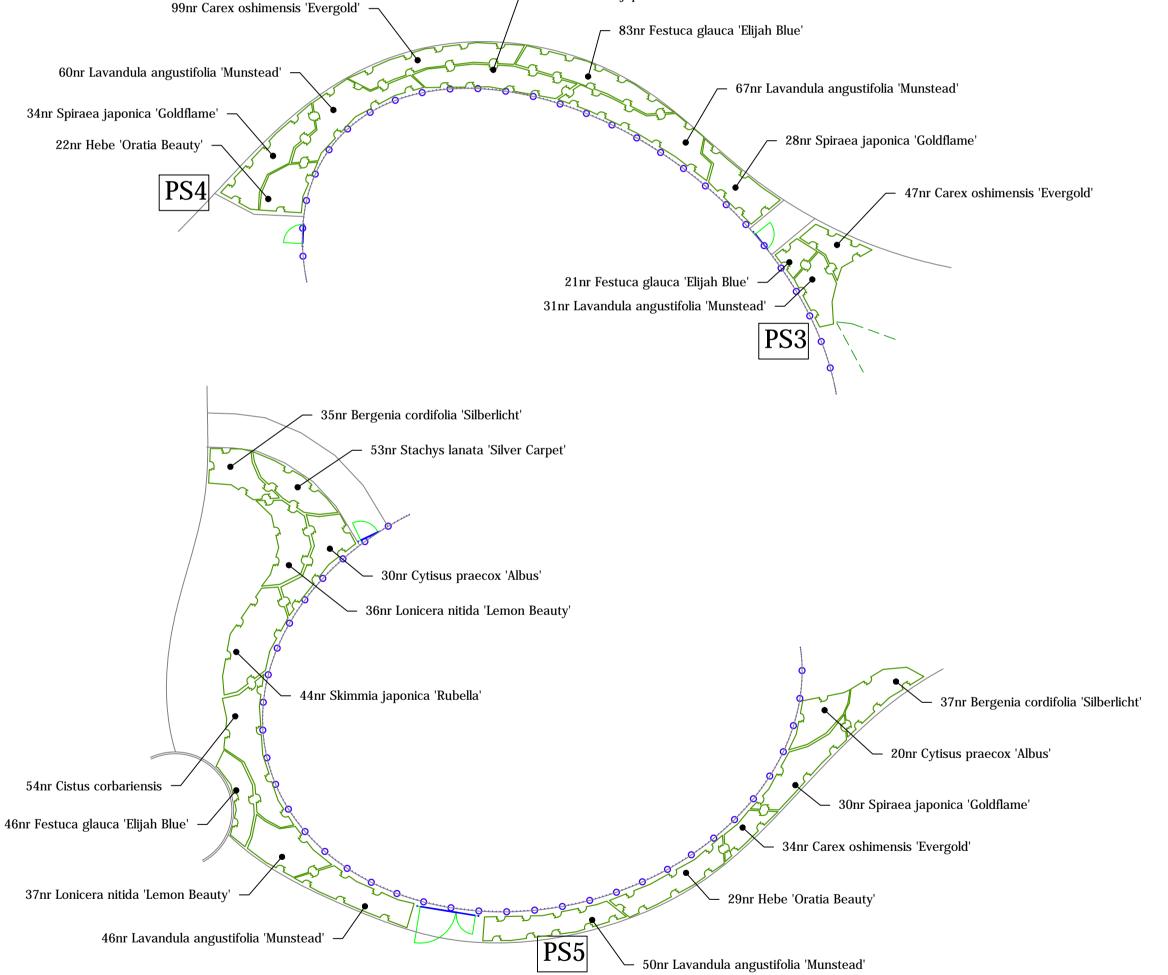


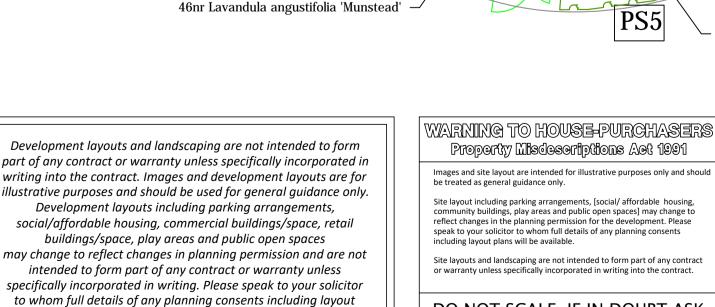


1:200 ORNAMENTAL PLANTING DETAILS



36nr Skimmia japonica 'Rubella'





plans will be available.

Warning to house-purchasers | Property Misdesoriptions Act 1991

Site layout including parking arrangements, [social/ affordable housing, community buildings, play areas and public open spaces] may change to reflect changes in the planning permission for the development. Please speak to your solicitor to whom full details of any planning consents

DO NOT SCALE. IF IN DOUBT ASK.

PLANTING SCHEDULES

NATIVE SPECIES SHRUB PLANTING

	NATIVE SHRUB MIX SCHEDULE									
Nr	Name	Age	Root	Pot/L						
47	Corylus avellana	40-60cm	1/1	В						
35	Ilex aquifolium	40-60cm		С	3L					
12	Lonicera periclymenum	60-80cm		С	3L					
70	Prunus spinosa	40-60cm	1/1	В						
12	Rosa arvensis	30-40cm	1/1	В						
12	Rosa canina	30-40cm	1/1	В						
47	Viburnum opulus	40-60cm	1/1	В						

Native species shall be planted into 450mm depth, good quality clean topsoil incorporating organic compost and slow release fertiliser, over un-compacted sub-grade. Prior to planting all bareroot plant stock shall be dipped into a suitable mychorrizal plant dip in accordance with the manufacturers recommendations. Plants shall be planted in groups of 3-11 of a single species with the taller growing species to the back of the areas of the areas and the lower growing species to the edges of the areas. Planted areas to be mulched after planting with coarse grade forest mulch to a uniform depth of

NATIVE SPECIES HEDGE SCHEDULE

	NATIVE HEDGE SCHEDULE												
Nr	Name	Height/cm	Age	Root	Pol/L								
348	Corylus avellana	60-80cm	1/1	В									
348	Ilex aquifolium	60-80cm		С	3L								
87	Lonicera periclymenum	60-80cm		С	2L								
522	Prunus spinosa	60-80cm	1/1	В									
87	Rosa arvensis	40-60cm		В									
348	Viburnum opulus	40-60cm	1/1	В									

Native species shrub mix to be planted at 5/lm in double staggered rows. To be pit planted into pits large enough to accommodate the root systems without constriction. Pits to be backfilled with a 3:1 topsoil:compost mix.

PLANTING NOTES

All trees to be planted and procured in accordance with BS 8545:2014 and BS 3936:1992 Nursery Stock Part 1. The providing nursery shall demonstrate Plant Healthy Certification and/or an adopted biosecurity policy and plant passport

Aftercare shall be in accordance with the approved Landscape Management Document.

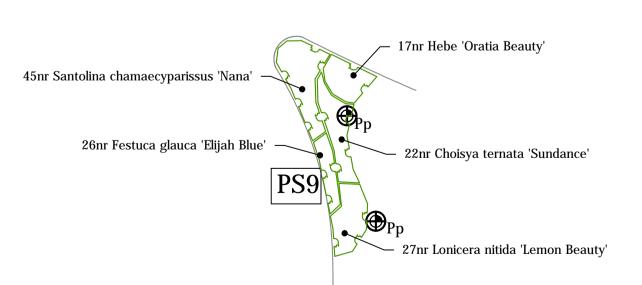
- Where required all existing topsoil and subsoil shall be stripped and stored separately on site. Heaps must not exceed 3m in height and should be used within 12 months in accordance with BS 4425 (Code of practice for general landscape operations).
- Existing topsoil and inert sub soils, shall be analysed in accordance with BS 3882 to determine available nutrients, texture, organic matter content and pH. Where required, existing soils are to be improved in accordance with BS 3882:2015. Subsoils shall conform to BS 8601:2013
- In all instances, where soil is to be retained and relatively undisturbed for the purposes of planting new vegetation on site, then it must be alleviated to avoid compaction, must be tested for pH for specific species suitability, and may require the addition of biochar + compost + organic fertiliser + native soil.
- Imported topsoi and site won soils shall be to British Standards BS 3882 -Multipurpose Grade. Spread to 300mm depth over areas to be planted with trees and shrubs. Remaining minimum rooting depth to be provide by a good quality subsoil to BS 8601:2013, free of building material debris to achieve the following overall rooting depths:

Grass - 450mm Shrubs - 600mm

Trees - 900mm

SEE SEPARATE LANDSCAPE MANAGEMENT PLAN FOR MANAGEMENT SPECIFICATIONS

SEE DRAWING R/1970/11H FOR POS MASTERPLAN, TREE SPECIES LOCATIONS AND NATIVE PLANTING LABELS



TREE SCHEDULE

		NUM	MBERS REQUIR	EED		
SPECIES	Ht in m	3.0-3.5	3.5-4.25	4.25 min	2.5-3.0	
	Girth in cm	- 10-12	12-14	14-16	multistemmed	
Acer campestre 'Elsrijk' (AcE)	1	-	7	-	-	
Acer platanoides (Apl)		4	11	1	_	
Betula pendula (Bp)		7	-	-	23	
Carpinus betulus (Cb)		-	12	7	-	
Corylus avellana (Ca)		-	-	-	19	
Crataegus monogyna (Cm)		-	-	-	16	
Fagus sylvatica (Fs)		-	-	7	-	
Liquidamber styraciflua 'Worple	esdon' (Lw)	-	-	2	-	
Prunus avium (Pa)		6	5	-	-	
Prunus padus (Pp)		3	2	3	-	
Pyrus calleryana 'Red Spire' (Pe	cR)	-	2	2	-	
Quercus robur (Qr)		3	7	3	_	
Sorbus 'Embley' (SE)		-	3	4	_	
Sorbus aucuparia (Sau)		7	2	2	_	
Sorbus aucuparia 'Asplenfolia'	(SaA)	-	12	3	_	
Tilia cordata (Tc)		-	6	6	-	

All trees to have clear stems to 1.8m above ground level and 2.0m above ground level for extra heavy standard with well developed branching heads with a single, central leader and healthy, fibrous root systems. Multi stemmed specimens shall be at the specified height. Trees shall be root balled or container grown dependant on the time of planting and fitted with an irrigation tube with cap. Trees shall be planted into pits of an appropriate size to accommodate the root system without restriction, backfilled with a 3:1 topsoil:compost mix and shall be secured to a machine rounded stake using 1 no. tree tie with rubber spacer. Finished height of stake shall not exceed 1/3 height of staked tree above ground. Foundation design of new buildings shall accommodate proposed tree planting in accordance with

ORNAMENTAL PLANTING SCHEDULE

NHBC guidelines.

Herba	ceous				
Nr	Name	Ht in cm	Pot(L)	Density	
115	Bergenia cordifolia 'Silberlicht'		3L	6.00	
180	Carex oshimensis 'Evergold'		3L	11.00	
176	Festuca glauca 'Elijah Blue'		3L	9.00	
53	Stachys lanata 'Silver Carpet'		3L	9.00	
Shrub					
Nr	Name	Ht in cm	Pot(L)	Density	
22	Choisya ternata 'Sundance'	30-40cm	3L	4.00	
94	Cistus corbariensis	30-40cm	3L	5.00	
50	Cytisus praecox 'Albus'	40-60cm	3L	4.00	
14	Escallonia 'Edinensis'	50-60cm	3L	4.00	
39	Euonymus fortunei 'Emerald Gaiety'	20-30cm(D)	3L	6.00	
102	Hebe 'Oratia Beauty'	30-40cm	3L	4.00	
254	Lavandula angustifolia 'Munstead'	25-30cm	3L	6.00	
45	Lonicera nitida 'Baggesen's Gold'	30-40cm	3L	4.00	
100	Lonicera nitida 'Lemon Beauty'	30-40cm	3L	5.00	
52	Prunus laurocerasus 'Zabeliana'	50-60cm	3L	4.00	
45	Santolina chamaecyparissus 'Nana'	25-30cm	3L	6.00	
104	Skimmia japonica 'Rubella'	30-40cm	3L	4.00	
92	Spiraea japonica 'Goldflame'	30-40cm	3L	4.00	
7	Weigela florida 'Foliis Purpureis'	30-40cm	3L	4.00	

All shrub material shall be first quality, sturdy, well rooted non-refridgerated stock with well branched heads and fibrous root systems. Shrubs shall be planted into 450mm good quality fibrous topsoil incorporating organic compost and slow release fertiliser in accordance with all good horticultural practice. All plant material shall be a minimum of 3L pot size unless otherwise specified and conform to BS3936 Part 1 and BS 4428. Finished beds shall be lightly forked over and dressed with

GRASS SEEDING

LOW MAINTENANCE GRASS MIX

50mm coarse forest bark mulch.

100mm depth of topsoil complying with BS3882 to be spread to area. Pre-seed fertiliser to be applied at 50gm/m². Soil to be cultivated using a disc harrow or rotovator, to

50mm depth then further cultivated and rolled to produce a firm seed bed. Low maintenance grass seed mix such as Germinal Seeds A22 mix to be sown at 35gm/m2.

Subsoil to be cultivated using a disc harrow or rotovator, to 30mm depth then further cultivated and rolled to produce a firm seed bed.

An 80% grasses: 20% wildflower seed mix to be sown. Eg: Emorsgates EM2 at 5gm/square metre.

Rev.A: Play areas updated to reference Miracle spec (SF) April 2024 **Barratt Homes** Sue Farmer BA MALD MLI (Yorkshire East) Ltd Landscape Architect

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PHASE 4 drawing title

POS DETAILS date drwn by drawing no 1:500/200 Dec 23 | SF | R/1970/22A

Residential Development

APPENDIX 2:

Relevant Legislation

Breeding Birds

All wild birds are protected under the *Wildlife & Countryside Act 1981* (as amended) during the breeding season (which is normally assumed to be from the 1st March to 31st July).

Bat species

All British bat species and their roosts are legally protected under the *Wildlife & Countryside Act 1981* (as amended), through inclusion in Schedule 5 and under the *Conservation of Habitats and Species Regulations 2010* which implements the EC Directive 92/43/EEC in the UK. Under the legislation, it is an offence to intentionally kill, injure or capture bats, deliberately disturb bats and damage, destroy or obstruct access to bat roosts. Since the introduction of the *Countryside and Rights of Way (CROW) Act* in *2000* it is also an offence to recklessly harm or disturb bats in their roosting places.

Reptile species

The four common reptile species (Common Lizard, Grass Snake, Adder and Slow-worm) are listed under Schedule 5 of the *Wildlife & Countryside Act 1981* (as amended), in respect of Section 9(5) and part 9(1). This protection was extended by the Countryside and Rights of Way (CROW) Act 2000. This legislation makes it an offence to:

Intentionally or recklessly, kill or injure any of the above species and / or; Sell, or attempt to sell, any part of the species, alive or dead.

The Sand Lizard and Smooth Snake receive greater protection under both the *Wildlife & Countryside Act 1981* (as amended) and from the Conservation of Habitats and Species Regulations 2010 which gives them full protection under Regulation 39.

The legislation protects these species from:

deliberately or intentionally killing and capturing (taking) or intentional injuring; deliberately disturbing;

deliberately taking or destroying eggs;

damaging or destroying a breeding site or resting place, or intentionally damaging a place used for shelter and protection:

intentionally obstructing access to a place used for shelter; and

keeping, transporting, selling or exchanging; offering for sale or advertising.

Water Vole

Since April 2008 the Water Vole has received full protection under Section 9 of the **Wildlife** & **Countryside Act 1981** (as amended). Legal protection makes it an offence to:-

intentionally kill, injure or take (capture) a water vole;

possess or control a live or dead water vole or any part of a water vole;

intentionally or recklessly damage, destroy or obstruct access to any structure or place which water voles use for shelter or protection or disturb a water vole while they are using such a place;

sell, offer for sale or advertise for live or dead water voles.

RELEVANT HEALTH & SAFETY LEGISLATION

Health & Safety at Work Act 1974 (and amendments) HSE's Managing Health and Safety in Forestry

RELEVANT PESTICIDES, BIOLOGICAL CONTROL AGENTS LEGISLATION

Control of Pesticides Regulations 1986 (COPR), as amended by the Control of Pesticides (amended) Regulations 1997 (COP(A)R)
Control of Substances Hazardous to Health 2002 (COSHH)
Waste Management (Duty of Care) Regulations 2002
Waste Management Regulations 1996
Waste Management Licensing Regulations 1994 (plus carious amendments)
Environment Protection Act 1990

Operational Schedules

Operation			Year			Proposed	Restrictions				
Operation	1	2	3	4	5	Frequency	Restrictions				
New Standard Trees -	Sec	Section C.1									
Maintain tree pits weed free	✓	✓	✓	✓	✓	6 visits per year	Avoid the use of chemicals in sensitive / nature conservation areas				
Fertilise trees	✓	✓	✓			Once annually	In March or April				
Water trees	✓	√	✓			Weekly / as required	April to September and weekly during prolonged dry weather (See Section C.6)				
Check firmness of trees in tree pits and re-firm as required	✓	✓	✓			At each visit	Carry out additional checks after exceptionally windy or frosty weather during early establishment years (Year 1-2)				
Prune damaged branches	✓	✓	✓	✓	✓	As required	Prune as soon as identified				
Check tree stakes & ties & repair / replace	✓	✓	~			Every 3 months	Replace with materials to existing specification and replace as soon as identified				
Check establishment of trees and remove stakes as required			√	√		As required					
Replace defective & failed trees	✓	✓	✓	✓	✓	Once annually in planting season	In nearest available planting season as agreed at the annual walkover (See Section C.7)				
Top up mulch to tree pits in grassed areas	✓	✓				Once annually	In March or April				
Litter pick and remove all arisings	✓	✓	✓	✓	✓	At each visit	Dispose of to tip in accordance with relevant Waste Management Regulations				

New Ornamental Si	hrub	Plar	nting	ı - Se	ectio	n C.2	
Maintain shrub beds weed free			6 visits per year	Avoid the use of chemicals in areas containing herbaceous plant material or bulbs			
Apply slow release fertiliser	✓	✓	✓	✓	✓	Once annually	In March or April
Check firmness of shrubs in shrub bed and re-firm as required	✓	√	✓	✓	✓	At each visit	Carry out additional checks after exceptionally windy or frosty weather during early establishment years (Year 1-2)
Water as required	✓	✓	✓			Weekly / as required	April to September and weekly during prolonged dry weather (See Section 6)
Prune damaged shrubs	✓	✓	✓	✓	✓	As required	Prune as soon as identified
Replace defective & failed plant material	✓	✓	✓	✓	✓	Once annually in planting season	In nearest available planting season as agreed at the annual walkover (See Section C.7)
Top up mulch	✓	✓	✓	✓	✓	Once annually	In March or April
Litter pick / remove flytipping and remove all arisings	✓	✓	√	✓	✓	At each visit	Check for harbouring wildlife

New Native Species Tree	& SI	hrub	Plai	nting	ı - Se	ection C.3	
Maintain 300mm diameter area around each plant weed free and remove undesirable herbaceous or woody species	~	~	~	✓	~	Four times annually	Avoid the use of chemicals in areas within the catchment area of water bodies
Control the spread of any invasive or undesirable weed	✓	✓	✓	✓	✓	As required	Before flowering / seeding and in accordance with specific requirements for the particular weed species
Check firmness of plant material in ground and re- firm as required	✓	✓	✓	✓	✓	At each visit	Carry out additional checks after exceptionally windy or frosty weather during early establishment years (Year 1-2)
Prune as required	✓	✓	✓	√	✓	Once annually	Out of bird nesting season

Water as required	✓	✓	✓			Weekly / as required	April to September and weekly during prolonged dry weather (See Section C.9)
Replace defective & failed plant material	✓	✓	✓	✓	✓	Once annually in planting season	In nearest available planting season as agreed at the annual walkover (See Section C.10)
Top up mulch	✓	√				Once annually	In March or April
Replace / repair or remove rabbit shelters / stakes as required	✓	√	✓	✓	✓		
Litter pick / remove flytipping and remove all arisings	✓	✓	✓	✓	✓	At each visit	Check for harbouring wildlife and dispose of arisings to tip in accordance with relevant Waste Management Regulations

Maintain 300mm diameter area around			✓		✓	Four	Avoid use of chemicals and hand pull to avoid disturbing		
each plant weed free	•	v	•	•	•	times annually	hedge roots and other ground flora particularly as hedge establishes		
Check firmness of plant material in ground and re-firm as required	✓	✓							
Hard prune to 450mm height		✓				Once annually	Out of bird nesting season		
Continue pruning to achieve desired height and width carting out cutting to sides in alternate years					✓	Once annually	Out of bird nesting season		
Water as required	✓	✓	✓			Weekly / as required	April to September and weekly during prolonged dry weather (See Section C.6)		
Assess the need for replacing defective & failed plant material to achieve a consistently uniform hedge	✓	✓	✓	✓	✓	Once annually	In nearest planting season - numbers and rates as agreed with Client (See Section C.7)		

Top up mulch	√	√	✓	√		Once annually	Assess the need for top-up mulch in Year 5 depending on hedge establishment and developing ground flora
Litter pick / remove flytipping and remove all arisings	✓	✓	✓	✓	✓	At each visit	Check for harbouring wildlife

Grass Areas – Section C.8							
Maintain amenity grassland avoiding cutting areas of naturalised bulb planting until died back	✓	✓	✓	✓	✓	As required between height tolerances as specified	
Apply fertiliser to amenity grass areas only	✓	✓	✓	✓	✓	Once annually	Spring or Autumn
Cut wildflower grass areas	✓	✓	√	✓	√	As specified	
Reinstate any damaged areas of amenity grass as required by reseeding or re-turfing		✓	✓	✓	✓	Annually in season	

Equipped Play Area – Section C.9							
Inspect play equipment, fencing, gates, street furniture at each maintenance visit and seek approval for repair as required	✓	✓	√	✓	✓	As required	

Site furniture and Hard landscape Section C10								
Maintain footpaths, fencing and street furniture and rectify or repair any problems as required	✓	✓	✓	✓	✓	3 monthly		

Litter – Section C11						
Collect all litter and remove from site	✓	✓	✓	✓	✓	On each visit

Management Plan Review – S	Secti	on E		
Undertake necessary survey work with specialist consultants, review this document and prepare new plan as required		✓	Once	Consultation with Client, consultant Landscape Architect, Ecologist, Arboriculturist and Management Company