



Morris Homes

LAND AT LUCAS LANE, HILTON

LANDSCAPE MANAGEMENT PLAN (LMP)

July 2022

FPCR Environment and Design Ltd

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1.0 INTRODUCTION

- 1.1 The following Landscape Management Plan has been prepared by FPCR Environment and Design Ltd on behalf of Morris Homes. It sets out the proposed long-term landscape management approaches for the Biodiversity off setting area associated with the residential development at Lucas Lane, Hilton. The Management Plan has been prepared as a guide for the Management Company who is responsible for the long-term maintenance of the landscape areas and sets out the management prescriptions to be adopted.
- 1.2 The detail of the Biodiversity Off Setting plan of the site is provided at Appendix A: Detailed Biodiversity Off Setting Plan (ref: 09960-FPCR-XX-XX-DR-L-001-002).
- 1.3 This Management Plan sets out the long-term management tasks over a 15 year period, including maintenance operations for an initial 5 years and on-going works from years 6-15. All landscape areas and management regimes will be monitored by Morris Homes to allow for appropriate refinement or revision of the Plan, so long as the modifications are in accordance with the Key Objective and Overall Aims set out in Section 2.0.

2.0 LANDSCAPE DESIGN OBJECTIVES

Key Objective

- 2.1 The key management objective is to maintain a quality, safe, landscaped area that enhances opportunities for biodiversity through appropriate management of habitats.
- 2.2 In order to achieve this it will be important to monitor the ongoing effectiveness of the Management Plan.

Overall Aims

- 2.3 The overall aims for the landscape are as follows:
- Establish **New Habitats** of value with a range of faunal species / groups to encourage structural diversity and maintain open glades.

Guiding Management Principles

- 2.4 The guiding principles for the above identified aims are set out below:

New Habitats

- 2.5 New planting and habitats will be created within the Biodiversity off setting area to the east of the Lucas Lane development. New native scrub planting will enhance the existing vegetation and provide new wildlife habitats. Meadow grassland will be seeded within the open space to encourage clearings and glades to establish. Individual tree planting is proposed throughout the open space.

3.0 LANDSCAPE MANAGEMENT AND MAINTENANCE PROPOSALS

3.1 The design proposals for the landscape areas of the site are included at **Appendix A**. Management principles are devised for the following landscape elements that are proposed or existing within the site.

1. Native Shrub Planting
2. Meadow Grassed Areas
3. Individual Tree Planting
4. Hedgerows

3.2 The management approach for each component is defined below.

1. Native Shrub Planting

3.3 Native shrub planting will be incorporated within the biodiversity off setting area in areas surrounded by meadow grassland. Management will focus on ensuring the shrub planting establishes well and does not become overgrown and swamp the meadow grassland and individual trees. Maintenance will be as follows:

- Planted shrubs will be staked and protected using appropriate biodegradable rabbit guards.
- Planting will be inspected quarterly through the first two growing seasons following planting.
- Replace plants if less than 75% establishment of original planting in first 2 years post planting. Any failures will be replaced in the next planting season.
- Weeds can be controlled around the bases the shrubs using non-residual herbicide during establishment. The use of herbicides will be avoided thereafter.
- Following establishment, scrub will need minimal management, allowing it to develop naturally, with edges cut back annually to retain the grassland and prevent encroachment.
- Areas between shrubs, seeded as grassland, will be managed as per the grassland section.
- After approximately five years, once the plants have established, remove canes and guards and/or rabbit proof fencing for reuse or recycling at a suitable facility.
- On-going management to include selective removal and coppicing of shrub during the period October – March (inclusive) to avoid disturbance to breeding birds.

2.

2. Grassed Areas

3.4 The grassed areas of the biodiversity off setting area comprise wildflower meadow grassland. Due to the current agricultural nature of the Site and likely high nutrient and phosphorus levels ground preparation in the form of topsoil stripping or inversion ploughing would be required to aid successful creation of species-rich grassland.

Wildflower Meadow Grassland

3.5 This is applicable to longer areas of grassland identified as wildflower meadow (species rich) grassland. (Refer to Appendix A for proposed mix).

- Establishment of new (sown) meadow grassland: Regular cutting when the grassland reaches 150mm in length (4-5 times) will be undertaken taken in the first half of Year 1 as the sward is establishing to reduce the number of coarse grasses and pernicious weeds. During this time persistent pernicious weeds can be removed, and spot treated with herbicides, used against excessive growth of some invasive or dominant species such as docks, creeping thistle and nettles.
- After the first year two grass cutting visits should be undertaken each year. Grass to be cut to the ground. This should be undertaken in late July and late September/early October.
- Prior to mowing a check will be made to ensure that no ground nesting birds are present. If present delay mowing until fledged.
- Arisings should be removed from the site no more than 5 days after cutting.

Grassland Generally

- 3.6 For *all* grassland types the Management Contractor should use appropriate machines in size, shape and method for the type of work involved. All litter, stones or other debris should be collected and removed by the Contractor immediately prior to grass cutting operations. Care shall be exercised by the Management contractor to avoid damage when mowing or strimming around trees and other structures.

3. Individual Tree Planting

- 3.7 Individual standard trees within the biodiversity off set area, will be maintained as follows.
- During establishment (the first 3 years after planting) the base of trees, circa 500mm radius, must be kept weed and grass free with the installation of a weed suppressant membrane and bark mulch.
 - Water tree during establishment to capacity if the tree is under stress during dry periods.
 - Trees will be supported by single stakes, during the establishment period and these can be removed after 2-3 years, unless there is soil or root movement when the tree is rocked. Stakes and ties to be regularly inspected and adjusted or replaced as necessary.
 - Trees to be installed with a biodegradable tree guard to protect trunks from damage during establishment. Care should be taken to avoid strimming close to trees during the establishment period.
 - Plants found to be dead or dying within the first five years post planting to be replaced on a like-for-like basis as soon as possible within the next available planting season.
 - Throughout the management period grassland at basal areas should be left unmown to protect the trunk and root areas from machinery.
 - Pruning of dead, diseased or damaged branches should be carried out as appropriate to promote healthy growth and natural shape, and to favour a single central leading shoot.

- Arisings from tree works will where practical be used to create dead wood piles within the woodland or chipped to provide mulch for use in amenity planting areas. Alternatively, they will be removed from site.

4. Hedgerows

3.8 The following management approach is proposed for new hedgerows:

- Plants to be maintained by suitable means, to prevent competition by weeds and grasses until planting has established. Plant protection to be regularly inspected and any damaged protection replaced. Mulch to be regularly topped up to help prevent weed growth.
- Water planting during establishment as required for healthy establishment, depending on weather conditions.
- Plants found to be dead or dying within the first five years post planting to be replaced on a like-for-like basis as soon as possible within the next available planting season.
- Until establishment, formative pruning will be undertaken once annually to keep the hedgerow tidy.
- Cut during the late winter months, following fruiting, during frost free periods. Cutting should not be carried out during the bird nesting season (March-August) unless preceded by a nesting bird check undertaken by a suitably qualified ecologist. Works will thereafter proceed in accordance with the ecologist's advice. Following pruning operations, all arisings should be removed from the site. Trees within/adjacent to the hedgerow will be left uncut and managed in a similar way to trees in item 4. above.
- Plant protection and any protective fencing will be removed once the hedgerow is established.

Other Requirements

3.9 Litter picks and general litter clearance should be carried out on all landscape areas on a regular basis. Litter picks should be undertaken at every visit to the site for maintenance operations. The overall objective is to ensure that all landscape areas are free from litter and fly tipping.

Monitoring

3.10 The open space areas, including all new and existing habitats will be monitored annually for the first five years, with monitoring decreased thereafter as appropriate. Management prescriptions will be amended as necessary to ensure the landscaping and associated habitats establish and maintain their quality over time.

4.0 FIVE YEAR MAINTENANCE SCHEDULE

- 4.1 The following maintenance schedule summarises the maintenance operations to be carried out annually within the public areas for the first five years where applicable and indicates where the maintenance operations should be continued into future years (6-10). Cross reference should be made to the detailed descriptions within section 3.0.

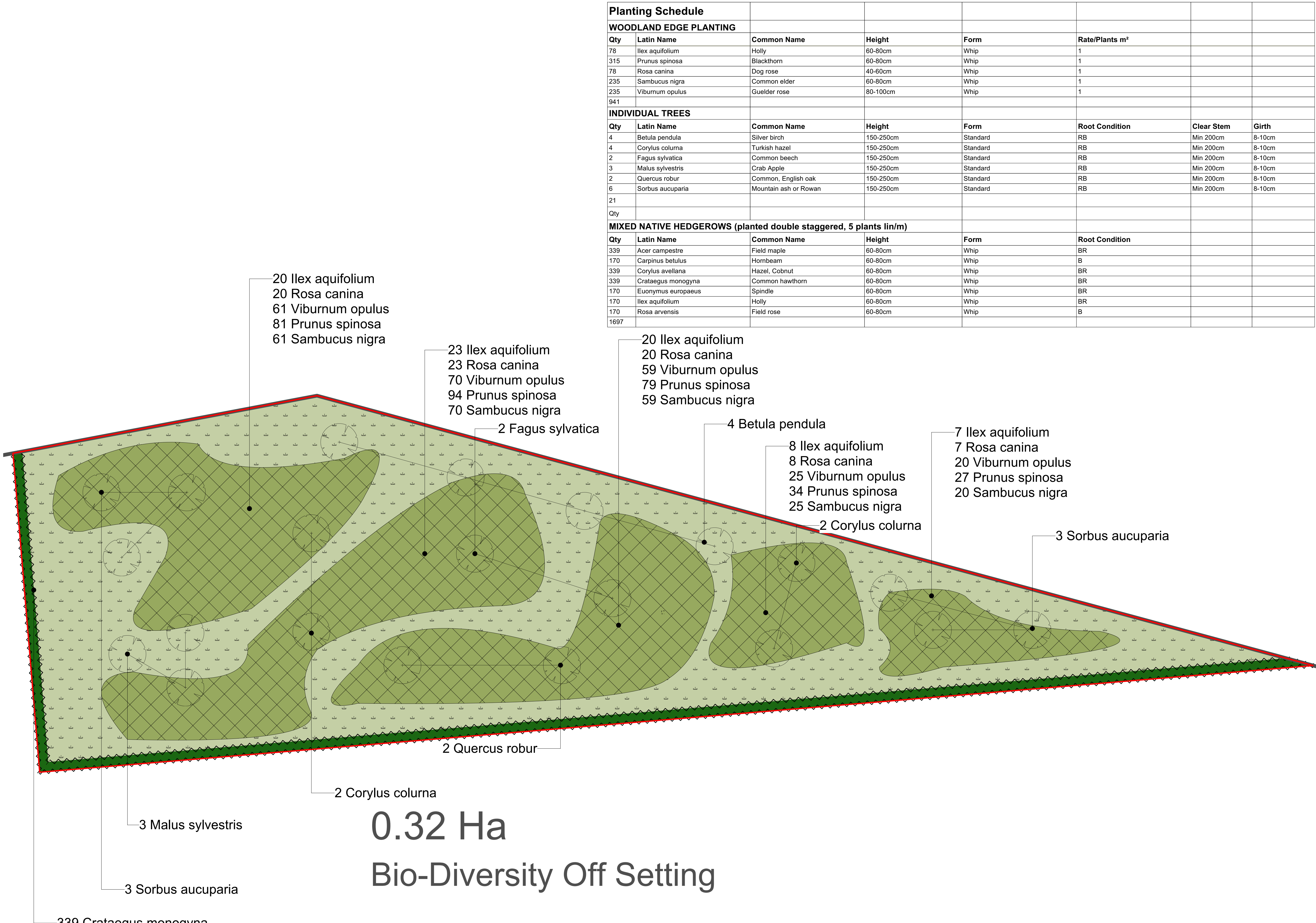
Description of works	Years Active with Priority					
	1	2	3	4	5	6-15
New Native Shrub Planting						
Quarterly inspection of planting with replacement of failed specimens during the next planting season as required.	√	√	√	√	√	-
Weed control to prevent competition by weeds and grasses, inspect plant protection regularly and adjust or replace where damaged and, undertake formative pruning to keep tidy.	√	√	-	-	-	-
Cut back annually near footpaths, boundaries and proposed hedgerow to prevent encroachment.	-	-	√	√	√	√
Remove plant support once plants are established.	-	-	-	-	√	-
New Standard Tree Planting						
Ensure a 500mm radius around each tree is kept weed and grass free, inspect plant protection regularly and adjust or replace where damaged. Water during establishment to field capacity if tree is under stress. Re-mulch 50mm bark around base of trees.	√	√	-	-	-	-
Replace dead or dying trees with a tree of either the same species or similar species as those existing. This is to allow some flexibility and to avoid problems encountered with the 'same tree disease'	-	-	√	√	√	-
Remove tree protection once plants have established	-	-	√	√	√	√
Inspect trees annually and after storms. Undertake any resultant scheduled tree works outside of the bird breeding season as appropriate. Prune as required to achieve healthy growth and natural shape. Retain or remove arisings as appropriate.	√	√	√	√	√	-
New Native Hedgerows						
Weed control by mechanical means or by applying 50mm mulch to prevent competition by weeds and grasses, inspect plant protection regularly and adjust	√	√	-	-	-	-

or replace where damaged and, undertake formative pruning to keep the hedgerow tidy. Water planting as required for healthy establishment, depending on weather conditions.						
Replace dead or dying plants.	√	√	√	√	√	-
Once established regularly cut once per year during late winter and outside of bird nesting season to maintain a good shape. Remove arisings.	-	-	√	√	√	√
Once established regularly cut once per year during winter and outside of bird nesting season to maintain a good shape. Remove arisings.	-	-	-	-	-	√
Remove plant protection once plants have established (end of year 3 or sooner), only remove protective fencing once the hedgerow is impenetrable (this may be after year 5).	-	-	√	-	-	-
Meadow Grassland						
16. During year 1 mow regularly (4-5 times) when the grass reaches 150mm height. Treat pernicious weeds. Remove arisings by day 5.	√	-	-	-	-	-
Two cuts annually to the ground (once each in late July and late September / early October). Remove arisings by day 5.	-	√	√	√	√	√
Re-sow worn patches.	√	√	-	-	-	-
Other						
Litter pick on a regular basis	√	√	√	√	√	√
Monitoring						
Monitor landscaping and habitats every year for first five years and use results to inform future management for coming year. Reduce detailed monitoring to appropriate frequency thereafter.	-	√	√	√	√	√

5.0 SUMMARY

- 5.1 This report provides information on the landscape aims and objectives behind the resultant strategy for the management of the biodiversity off setting area. It sets out the management principles for each of the key elements of the areas to be managed, before describing the management operations required in order to maintain a quality, neat, tidy, safe, useable and attractive landscape setting to the development as well as maintaining and enhancing biodiversity within the site.
- 5.2 It is envisaged that the appointed landscape contractor would carry out initial maintenance operations for a period of 12 months following practical completion of the landscape works contract. Subsequently a specialist landscape management contractor would be appointed to undertake the required landscape management operations.
- 5.3 At any reviews, which are undertaken, findings and recommendations arising may be provided to Morris Homes and the Local Planning Authority if necessary for approval.

APPENDIX A: Detailed Biodiversity Off Setting Plan (ref: 09960-FPCR-XX-XX-DR-L-001-002)



Planting Schedule							
WOODLAND EDGE PLANTING							
Qty	Latin Name	Common Name	Height	Form	Rate/Plants m²		
78	Ilex aquifolium	Holly	60-80cm	Whip	1		
315	Prunus spinosa	Blackthorn	60-80cm	Whip	1		
78	Rosa canina	Dog rose	40-60cm	Whip	1		
235	Sambucus nigra	Common elder	60-80cm	Whip	1		
235	Viburnum opulus	Guelder rose	80-100cm	Whip	1		
941							
INDIVIDUAL TREES							
Qty	Latin Name	Common Name	Height	Form	Root Condition	Clear Stem	Girth
4	Betula pendula	Silver birch	150-250cm	Standard	RB	Min 200cm	8-10cm
4	Corylus colurna	Turkish hazel	150-250cm	Standard	RB	Min 200cm	8-10cm
2	Fagus sylvatica	Common beech	150-250cm	Standard	RB	Min 200cm	8-10cm
3	Malus sylvestris	Crab Apple	150-250cm	Standard	RB	Min 200cm	8-10cm
2	Quercus robur	Common, English oak	150-250cm	Standard	RB	Min 200cm	8-10cm
6	Sorbus aucuparia	Mountain ash or Rowan	150-250cm	Standard	RB	Min 200cm	8-10cm
21							
Qty							
MIXED NATIVE HEDGEROWS (planted double staggered, 5 plants lin/m)							
Qty	Latin Name	Common Name	Height	Form	Root Condition		
339	Acer campestre	Field maple	60-80cm	Whip	BR		
170	Carpinus betulus	Hornbeam	60-80cm	Whip	B		
339	Corylus avellana	Hazel, Cobnut	60-80cm	Whip	BR		
339	Crataegus monogyna	Common hawthorn	60-80cm	Whip	BR		
170	Euonymus europaeus	Spindle	60-80cm	Whip	BR		
170	Ilex aquifolium	Holly	60-80cm	Whip	BR		
170	Rosa arvensis	Field rose	60-80cm	Whip	B		
1697							

NOTES

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15

20m

N

KEY

Site Boundary

Proposed Native Hedge

Proposed Tree

Proposed Meadow Mix
(to be Eriogonate EM2 or similar approved)

Proposed Shrub Planting

Notes:

Implementation of scheme will be in the first available planting season following the occupation of the 57th dwelling.

P02

19/07/2022

Added more grasslands from ecologist comments

SDO

OFD

P01

13.07.2022

FIRST ISSUE

SDO

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rev

date

description

dm

chk

fpcr

masterplanning

environmental assessment

landscape design

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drawing title

DETAILED BIODIVERSITY OFFSET PLAN

scale

1:200 @ A1

dm

chk

SDO

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13 JULY 2022

project number

9960

status

S3

issue

P02

document number

09960-FPCR-XX-XX-DR-L-0001

Project Code

Originator

Zone

Level

Type

Role

Drawing Number

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