10 YEAR LANDSCAPE AND ECOLOGICAL MANAGEMENT PLAN;

Change of use of disused stables to single dwelling (resubmission of planning permission ref. 22/02082/FUL to include an extension, revised access and alteration to cladding to the Barn at Shornhill Farm, Withington.



Report Record	
Project number:	23
Project name:	The Barn at Shornhill Farm, Withington
Client:	SF Planning Ltd

Report status				
Issue number:	Report status:	Date:	Prepared by:	Approved by:
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1 INTRODUCTION

1.1 Appointment

1.1.1 MHP Design Ltd, Chartered Landscape Architects were instructed by SF Planning Ltd. to prepare a 10-year landscape management plan for the landscape proposals associated with the new access track at the Barn, Shornhill Farm, Withington.

Aims of the management plan

- 1.1.2 The aim of this 10-year management plan is to achieve the successful establishment and initial development of proposed landscape elements within the site. In addition, the management plan seeks to maintain existing established vegetation in a good and safe condition to maximise wildlife value and longevity. The plan covers the landscape proposals as shown on the Soft Landscape Proposals Plan for the site, MHP drawing 23027.101 (See Appendix A).
- 1.1.3 The overriding landscape management objective is to ensure that a thriving and diverse landscape is established and maintained in line with the overall landscape design aims.
- 1.1.4 In order to build full picture of the landscape and required management of the site this report has been prepared in conjunction with:
 - MHP drawing 23027.101 Landscape Proposals (Appendix 1);
 - Maintenance schedules Years 1-10;
 - Ecological appraisals and assessment undertaken by All Ecology (2023).
 - Arboricultural survey and Impact Assessment undertaken by MHP Arboriculture (2023)

1.2 Management Objectives

1.2.1 The following are key landscape management objectives:

Landscape generally

- To achieve 100% successful establishment of all new tree and hedge planting;

 Provide a landscape structure appropriate to the wider character area within which the site is located;

CHARTERED LANDSCAPE ARCHITECTS

- Where appropriate to conserve existing trees, scrub and hedgerows in good condition and maximise the longevity for amenity and conservation value;

1.3 Site Setting and Context

- 1.3.1 The Site is located to the east of the Farmhouse at Shornhill Farm within the wider grounds associated with the house. Planning permission was granted by Cotswold District Council (ref: 22/02082/FUL) for the conversion of two connected barn buildings with attached leantos to a single residential dwelling. The application for new access seeks to provide a vehicle access to the dwelling with a proposed new access track which is rural in character and appearance in keeping with its surrounding context. Much of the land associated with the formation of the new access track is currently well managed amenity lawn. There are a number of established trees, hedges and established vegetation within proximity to the proposed access track.
- 1.3.2 The local area comprises areas of woodland, arable and grassland fields and is situated within the Cotswolds Area of Outstanding Natural Beauty (AONB).

2 EXISTING LANDSCAPE FEATURES

2.1 Trees

2.1.1 The site contains a number established trees which are to be retained including an avenue of hornbeam trees to the west and large established field grown English Oak trees further to the west.

2.2 Amenity Lawns

2.2.1 Open amenity grass forms much of the land where the new access track is proposed. There are no wildflower meadows on the existing site.

2.3 Habitats

- 2.3.1 The summary of the ecological survey for the site (by All Ecology) states:
- 2.3.2 The habitats on the main part of the site were identified during a Preliminary Ecological Appraisal first carried out in March 2022. This survey was updated and the location of the proposed new access track included in a repeat survey in July 2023. The survey recorded common habitat types of building, improved grassland and bare ground with small areas of tall ruderal and scattered scrub. A small number of trees and a laurel hedge were also present. The proposed location of the access track passes through a short, regularly maintained sward of poor semi-improved grassland.
- 2.3.3 The majority of these habitats would be lost or modified the impact of which is negligible due to the their low ecological value. The present LEMP proposes the creation and management of a variety of habitats, including grassland, native hedges, shrub and tree planting, which are expected to compensate for the small loss of habitat and generally enhance the site.

3 INTRODUCED LANDSCAPE FEATURES

3.1 Trees

- 3.1.1 A number of individual trees (12no.) will be planted to provide additional amenity and biodiversity and wildlife value. All trees are to be planted as individual specimens.
- 3.1.2 New native tree species include: Oak, Hornbeam, Hazel and Hawthorn. Full details of species and specified planting sizes can be found on the MHP planting plan drawing 23027.101.

3.2 Hedgerows

3.2.1 A new native hedgerow will be introduced to the eastern boundary of the access track (192m) and at the site entrance (10m) resulting in a net gain of 202m of new native hedgerow. Species are indicated on drawing 23027.101 and include, Field Maple, Hawthorn, Hazel and blackthorn. These hedgerows are characteristic of the wider landscape and will help create a robust boundary to the eastern side of the access track from the wider amenity grass field.

3.3 Amenity Grass

3.3.1 Following construction areas of grass will be sown to the edges of the new track, the former horse meage and to the area of exiting hard standing which is to be removed as part of the application.

4 AVOIDANCE OF IMPACTS ON HABITATS

The following section highlights management practices in terms of ecology for the site which all landscape managers and site operatives should be aware of.

4.1 Avoidance of impacts

- 4.1.1 Both the existing landscape features identified in section 2.0 and introduced landscape features outlined in section 3.0 should be provided and retained in accordance with the landscape proposals (as shown on MHP Landscape proposals drawing) and this plan in order to protect the habitats on site.
- 4.1.2 Indirect impacts on habitats need to be prevented. E.g. no stockpiled materials (e.g. concrete, sand, topsoil) should therefore be located within 10m of root protection areas associated with trees and shrubs.
- 4.1.3 All landscape management operatives should be made aware of the sensitivity of wildlife habitats and legal protection afforded to protected species under the Wildlife and Countryside Act (1981), the Wild Mammals Protection Act (1996) and the Conservation of Habitats and Species Regulations 2017. Operatives shall also be made aware of the locations of habitats prior to them commencing work on site. It is anticipated that this information would be incorporated into the general health and safety briefing which is given to all landscape maintenance operatives when they first visit the site.

5 LANDSCAPE PRESCRIPTION AND MANAGEMENT OBJECTIVES

The following section details the management objectives and prescriptions for the different landscape areas and features.

5.1 New Tree planting

<u>Monitoring</u>

- 5.1.1 Check newly planted trees and their stakes and fixings for firmness and possible damage at quarterly intervals during the year. Replace or re-fix damaged stakes and crossbars immediately when identified. Check for leaning of trees at the same time and straighten/readjust if necessary. Check and adjust each tree tie at each visit along with each strim guard ensuring that it remains correctly in place. Where damaged replace guard immediately.
- 5.1.2 Check newly planted trees annually for damaged, dead or diseased limbs and remove where necessary.

<u>Watering</u>

- 5.1.3 Year 1: During first growing season adequately water newly planted trees fortnightly during drought conditions between May and August.
- 5.1.4 Years 2 -5: Check newly planted trees for signs of drought conditions and report findings to managing agent for further actions. Watering to be carried out on monthly basis (May to August) during prolonged drought or if signs of stress showing

<u>Feeding</u>

5.1.5 Annually for the first two years after planting only. During spring apply a slow release tree and shrub fertiliser at manufacturers recommended rates to each tree.

Removal of stakes

5.1.6 Where monitoring identifies trees that are sufficiently established and sound, or where damage from stakes and ties has been identified due to volume of tree growth, the tree

stake and any crossbar shall be removed. Stakes shall be cut off at ground level leaving the below ground stake section to decay naturally. Where stakes have become loose and can easily be removed in their entirety then the stake shall be lifted and the resulting void infilled with topsoil. No stakes shall be removed until at least 5 years after planting.

Pruning and shaping

5.1.7 Prune off side shoots and epicormic growth to maintain a clear stem during November each year. At same visit cut out any crossing or damaged wood along with any dead or diseased branches.

Replacement of failed planting

5.1.8 During September each year undertake inspection of all trees planted as part of the development or as replacements for failures, to identify losses. Where losses are identified arrange for replacement planting to original specification to be undertaken during November.

5.2 Native hedge planting

<u>Monitoring</u>

5.2.1 During September each year, undertake a visual inspection of the hedge planting to identify and replace plants that have failed. Plant replacement hedge whips during November using replacement stock of identical size and specification.

<u>Watering</u>

5.2.2 Year 1: May to August water fortnightly during drought conditions. Years 2 -5: Monitor new planting for signs of drought, report findings to landowner for further action.

Weed control

5.2.3 Control emerging weed growth by spot treatment with glyphosate herbicide during May, July and September if required during the first year. In subsequent years (2-5) spot treat weed growth during May and again in September.

Feeding

5.2.4 Annually for the first two years after planting, during April, apply a top dressing of generalpurpose slow release shrub and tree spring fertiliser to all hedges at manufacturers recommended rate.

CHARTERED LANDSCAPE ARCHITECTS

5.3 Amenity grass establishment

5.3.1 During first season after sowing control first flush of annual weed growth by mowing.

<u>Monitoring</u>

5.3.2 During September and February each year undertake visual inspection of the amenity grass to identify any areas compaction, hollows or trip hazards. Relieving areas of compaction, infilling with topsoil and overseeding is to take place as required after mowing operations.

<u>Mowing</u>

5.3.3 Amenity grass areas to be regularly cut at monthly intervals during March, October and November reducing sward height to a height of 30 – 40mm. During the period April to September carry out fortnightly grass cutting to a height of 25-35mm. Cutting to be carried out with an appropriate mowing machine with sharply cut leaf blades. During mowing operations do not remove more than one-third of the grass blade height per cutting. Do not cut during periods of prolonged drought when grass not actively growing. Note: *hand weeding and all landscape operations carried out on green roofs to be undertaken in full accordance with approved method statements and risk assessments for safe working practice.

6 MONITORING AND REVIEW

6.1 **Review process**

- 6.1.1 During the initial establishment period Years 1-5. The landscape maintenance and management shall be reviewed each year by the landowner, to determine the effectiveness of the operations in establishing the initial objectives. Where changes are identified to be necessary then it is intended that these can be adopted into the management plan in the following season:
- 6.1.2 During the period Years 6 to 10, annual reviews will continue (as outlined above) to identify any necessary changes to maintain the original landscape but, in addition, will consider longer term changes both positive and negative which may influence the longevity or quality of the landscape.

6.2 Remedial measures

6.2.1 Where issues on site are discovered these should be addressed as promptly as possible depending on the nature of the works required with any required replacement planting and seeding carried out at an appropriate time of year. Other issues will feed into the monitoring and review process with required works included in maintenance visits going forward. All programmed works will reflect the timing restrictions to work order to protect wildlife and habitats on site as previously outlined in Section 4.



7 SCHEDULE OF LANDSCAPE MANAGEMENT WORKS YEARS 1 TO 10

ltem	Landscape feature		Ye	ear fr	om si	ite pı	actic	al co	mple	tion		Frequency	Season/period	Notes
1.	Tree planting	1	2	3	4	5	6	7	8	9	10			
1.1.	Monitoring	~	~	~	~	~	~	~	~	~	~	Quarterly		
1.2.	Watering	~										Fortnightly	May-August	Drought periods.
1.3.	Feeding	~	✓									Annually	Spring	First 2 years only
1.4.	Removal of stakes					~						At year 5	Autumn	
1.5.	Pruning and shaping	~	~	~	~	~	~	~	~	~	~	Annually	November	
1.6.	Replacement of failed planting	~	~	~	~	~	~	~	~	~	~	Annually	Sept/Nov	
2.	Native hedge planting	1	2	3	4	5	6	7	8	9	10			
2.1.	Monitoring	~	~	~	~	~	~	~	~	~	~	Annually	September/ November	Inspect - September Planting – No later than November
2.2.	Watering	~										Fortnightly	May-August	Drought periods.
2.3.	Weed control	~	✓	✓								Three times yearly	May, July and September	Year 1
2.4.	Feeding	~	✓									Annually	April	First 2 years only
2.5.	Litter	~	~	~	~	~	~	~	~	~	~	Twice yearly	April and September	
2.6.	Pruning, Trimming & shaping		v	~	√	~	✓ ✓	~	~	√	~	Annually	February and September	Years 2-10 (rotational basis)



ltem	Landscape feature	Yea	Year from site practical completion							Frequency	Season/period	Notes		
3.	Amenity grass	1	2	3	4	5	6	7	8	9	10			
3.1.	Establishment	~										Monthly (May- July)	May, June & July	First growing season only
3.2.	Monitoring	~	~	~	~	~	~	~	~	~	~	Twice yearly	February / September	
3.3.	Mowing	~	~	~	~	~	~	~	~	~	~	Regularly during growing season	March-November	Intervals vary see section 5.8.4



8 APPENDICES

Appendix 1 – Landscape Proposals 23027.101

Outline Planting Specification

GROUND PREPARATION

All soil areas to be cultivated prior to the commencement of planting and seeding operations. Works to include the loosening, aerating and breaking up soil to a depth of 400 mm for planting beds and 150 mm in proposed grass areas, with weeds and any stones removed. For areas designated grass seeding, topsoil shall be prepared to a fine tilth by mechanical or hand raking. Surfaces shall be prepared to a consistent level with any surface deviation greater than 15 mm regraded. All imported materials shall be in accordance with BS 3882 for amenity use.

All areas to be planted are to be treated with roundup or similar approved herbicide at least 14 days before planting operations commence

TOPSOILING

All top soiling to general planting and grass areas to be in accordance with BS3882. All topsoil supplied to site shall be free or pernicious weeds and roots, clay lumps, non-soil materials or other building materials. Topsoil shall be spread evenly over areas and settlement accounted for in depth calculations. Topsoil is to be spread in layers and firmed when the material is reasonably dry. All soil finishes should be married in with existing adjacent levels to form a consistent join. Minimum topsoil depths are as follows;

Grass areas 150 mm

Native hedges 400 mm

Trees backfill with 300 mm depth, or backfilled to rootball depth + 100 mm using topsoil subsoil mix if smeared clay is present in pit or soil is identified as contaminated.

TREEPLANTING

Tree pits are to be excavated to the depth of the rootball or larger as per the attached section with the base forked over to prevent smearing. Trees are to be planted at the same depth as supplied. Pits are to be backfilled using a mix of TPMC and this operation is to be completed in layers and firmed. All trees are to be tripple staked, cut approximately one third clear height of stem above ground level. Triple staked trees to be attached to the tree using 3 adjustable ties. All trees are to be thoroughly watered after planting. Strim guards to be fitted to base of tree.

NATIVE HEDGEROW PLANTING

All hedge planting shall be 1m in width and planted in rows to be pit planted in sufficient sized pits capable of fully accommodating the root system. Shrubs to be planted a level as supplied and heeled in and watered if planting works are completed during a dry period. Dead damaged or straggly branches shall be removed after planting. All plants shall be fitted with strim and protection guards, where possible these shall be supplied in black or green with sufficient support and means to allow for expansion.

Bark mulch (not shredded timber) is be applied to the base of the hedgeline and spread to a minimum depth of 75 mm with particle size of 30-50mm. The mulch shall be free of disease, pest or weed contamination, treated with a fire retardent and be supplied with a certificate of quality.

GRASS SEEDING MIXTURE

Ground preparation - Control existing seed bank and weed establishment with an approved herbicide treatment prior to initial sowing. Good preparation is essential to success so aim to control weeds and produce a good quality seed bed before sowing.

To prepare a seed bed first remove weeds using repeated cultivation. Then plough or dig to bury the surface vegetation, harrow or rake to produce a medium tilth, and roll or tread to produce a level firm surface.

Sowing - Seed is best sown in the autumn or spring but can be sown at other times of the year if there is sufficient warmth and moisture. The seed must be surface sown and can be applied by machine or broadcast by hand at a rate specified by the manufacturer. Do not incorporate or cover the seed and ensure consolidation of the seed in the soil by use of a light roller, or alternatively by treading, to give good soil/seed contact.

First Year Management - The wild flower and grass species in this mix are perennial; they will be slow to germinate and grow and will not usually flower in their first growing season. There will often be a flush of annual weeds from the soil in the first growing season. This annual weed growth is easily controlled by repeated mowing.

Mow newly sown flowering lawns regularly (every 7 -10 days during growing season) throughout the first year of establishment. Cut to a height of 40-60mm, removing cuttings if dense. This will gradually develop a good sward structure, help maintain balance between faster growing grasses and slower developing wild flowers, and control annual weeds. Remove any residual perennial weeds such as docks.

Key



Existing tree to be removed.

20

Proposed native hedge planting.

Existing trees and hedgerow.

RPA shown as dashed red line.

Proposed native tree planting.

Proposed new access track alignment.

Existing grassland / meadow.

Tarmac road surfacing.



Scale

0 2 5 10

Existing road surfacing to be broken out.

Existing

house



Central track margin to be topsoiled to a depth of 150 mm and seeded to establish a grass verge. All margins disturbed by the construction works to be seeded to restore existing Existing ground — Agricultural access track to be constructed using a clean stone to permit natural drainage. Surface to be finished in road scalpings to reduce visual impact limit

All plants to be supplied from an HTA approved nursery and in accordance with National Plant

cies	Specification	Life cycle Carbon Capture	No.
/lus avellana	12-14cm, Ex Hvy Std, rb	2762 Kg	3
pinus betulus	12-14cm Hvy Std 3.5-4.25m	6731 Kg	1
aegus monogyna	12-14cm, Ex Hvy Std, rb	509 Kg	4
rcus robur	14-16cm girth	7500 Kg	3
cordata'	12-14cm, Ex Hvy Std, rb	5019 Kg	1
supplied from Oak Processionar ing protected zones. Plant pass	y Moth (OPM) free countries, ports will be required.	from designated pe	est free

DGEROW MIX (Ref: NHM)		
ies	Specification	Νο
campestre	1+1 bareroot transplant, 90-120cm height	202l/m
egus monogyna	1+1 bareroot transplant, 90-120cm height	
us avellana	1+1 bareroot transplant, 90-120cm height	
trum vulgare	1+1 bareroot transplant, 90-120cm height	
era periclymenum	2L container	
is spinosa	1+1 bareroot transplant, 90-120cm height	
oucus nigra	1+1 bareroot transplant, 90-120cm height	
num opulus	1+1 bareroot transplant, 90-120cm height	
to be pit planted in rows (Nove	ember to March). Rows shall be 500 mm apart (total hedge
nd planted at 500 mm centres	(staggered) ensuring no less than 18 no plants p	per linear
et with eniral rabbit quarde 60	cm in height supported by cane	

DLF Trifolium Pro Master 50 Mix Quality Lawn/Landscape or equivalent

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MHP DESIGN LTD 79 THE PROMENADE CHELTENHAM GL50 1PJ T 01242 250 822 E mhp@mhpdesign.com www mhpdesign.com