Date: February 2025
Vs4.



LAND OFF PENLEY HALL DRIVE, PENLEY

WOODLAND MANAGEMENT PLAN

The management plan is intended to discharge a reserved matters planning condition for residential development of 9no. dwelling on land off Penley Hall Drive, Penley. The plan is to be handed to the building owner/ occupants/ management company/ contractor, or whoever is responsible for the ground's maintenance of the site.

Landscape Institute Registered Practice

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Above Zero Reference:	023.01. Penley Hall Drive- Woodland Management Plan-V4.docx

Issue Version	Status	Prepared by	Checked	Date
V1	Final	ES	TS	23.03.2022
V2	Updated	ES	TS	28.04.2022
V3	Updated	ES	TS	24.05.2022
V4	Updated	ES	TS	06.02.2025

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1.0 Introduction

Background and Purpose of Management Plan

1.1 The proposed development is for 9no. residential dwellings. The development site is located off Penley Hall Drive, Penley, Wrexham.

1.2 The development is made up of private residential dwellings and curtilages, access roads, communal areas of open space and retained trees including a small woodland. New trees are proposed to be planted on site as part of the development and also within a large newt mitigation area created on neighbouring land. The existing and proposed woodland areas covered by this management plan are shown on Figure 1.

1.3 The purpose of this document is to provide a plan for the long-term management (5 years) of existing woodland with the proposed development and new woodland planting in the off-site mitigation area. The plan sets out guiding principles, aims and long-term objectives. This allows those responsible for the management and maintenance of the site (the management company) to understand the existing site, proposed development and implications for ongoing maintenance for woodland areas.



Figure 1- Plan to show areas of existing and proposed woodland to be managed under this management plan.



1.4 This Woodland Management Plan (the plan) should be read in conjunction with the following planning drawings:

- 023.02.01- Soft Landscape GA Plan. (Figure 2). Above Zero
- 023.02.02- Planting Schedules (Figure 3). Above Zero
- 023.02.03- Outline Specification for Planting. (Figure 4). Above Zero
- Landscape Strategy- Reference AZ023.010 (Figure 6.1). Above Zero
- Site Layot Plan- NWD Architects
- Arboricultural and AIA Report- Reference 18/AIA/WXM/220 –(UPDATED OCT 2019). Tree Solutions.

1.5 A maintenance specification is provided in section 5. This sets out the detailed landscape maintenance requirements for existing and newly planted woodland. Maintenance of the site must be carried out as per the requirements set out in the specification. Any discrepancies between this plan, the drawings and specification must be highlighted to site owners and overall management staff.

Planning Requirements

1.6 This management plan supports the application to discharge condition 13 of Planning Appeal decision APP/H6955/A/20/3258703 as follows:.

'As part of the reserved matters application, a Woodland Management Plan, including long term management objectives, management responsibilities and maintenance schedules for all areas either containing existing woodland or to be planted as woodland shall be submitted to and approved in writing by the Local Planning Authority. The woodland shall be managed and maintained in strict accordance with the plan as approved.

Reason: To ensure landscape features are properly considered and protected in accordance with Policies GDP1 and PS2 of the Wrexham Unitary Development Plan.'

1.7 The plan, to cover a five year period after completion, has been requested by the planning inspectorate to:

''.... ensure landscape features are properly considered and protected in accordance with Policies GDP1 and PS2 of the Wrexham Unitary Development Plan.'

Monitoring and Review

1.8 Annual monitoring reports against measurable targets such as levels of litter, condition of planting, health of mature trees, complaints from residents and instances of anti-social behaviour. The outcomes of this monitoring will form part of a Site Management Monitoring Report to be submitted by the management company to the site owner annually. The report will include management operations undertaken and any actions outstanding or required within the following year that fall outside of this plan and maintenance specification.

1.9 This management plan will be reviewed annually by the site owner, management company and other interested parties to ensure that the aims of the plan are being met. The success of the management company shall be reviewed through regular meetings and inspections including:

- Quarterly site inspections and reports Annual Site Meeting following submission of annual report; and
- Other unscheduled inspections made as required.

1.10 After 5 years the management plan will be reviewed and updated. This will review the type and frequency of maintenance operations to ensure the continued high-quality management of the site in accordance with the design philosophy and habitat requirements as the site establishes and matures.

Content

1.11 The structure of this plan has been set out under the following headings:

- Introduction
- Baseline Information
- Site Management
- Implementation of the Management Plan
- Specification for Maintenance

2.0 Baseline Information

Trees and Woodland on Site

2.1 The site contains a number of existing and proposed trees. A number of which are protected by Tree Preservation Orders as follows:

- 2no. Veteran oak trees. Subject to TPO (WMBC No 20-1985) & listed as T31 and T32)
- A linear group of birch to the front of the site. Subject to TPO WCBC 286/2018
- A young oak also at the front of the site. Subject to TPO WCBC 286/2018
- A woodland comprising mainly of horse chestnut, sycamore, birch and willow, the majority of which are in poor condition. Subject to TPO WCBC 286/2018 and

2.2 Many of the trees on site were TPO'ed by WCBC in 2018 during the planning application process. The WCBC Tree Officer has helped develop this management plan with the intention of preserving a woodland habitat as part of a new development and to ensure new woodland areas are managed and establish naturally.

Existing photographs of the site are shown below. (photographs taken March 2022)



3.0 Site Management

Long-term Design Objectives

3.1. As described above, the residential site has been designed to retain a number of existing mature trees and two areas of existing woodland. A number of new trees are also proposed to form a linear belt of woodland trees and shrubs on neighbouring land to the east of the development site.

3.2. There are 6 strategic design objectives for the woodland areas:

1. Felling of trees and removal of limbs within woodlands that are dead, dying or dangerous. (This will require regular review).

2. Retain and protect the trees that are in good and safe condition and are valued landscape features.

3. Provide new woodland that will sympathetically integrate into the wider environment and mature to create an attractive setting for residents and visitors.

4. Maintain and enhance the habitat within the woodland areas for the benefit of intended fauna species including the management of understorey species, removal of ornamental/ non-native plants and trees and retention of deadwood onsite.

5. Identify small and emerging native trees in the understory of existing woodland, clear ground around and protect these trees alongside the planting of new native trees of varying sizes to replace those lost and to continue the succession of a woodland habitat.

6. Provide a tidy, safe and well-maintained environment for residents and visitors

New Planting with Existing Woodland and Woodland Succession.

3.3. Proposals for new planting across the whole site and included planting within the existing woodland are shown on 023.02.01 (Figure 2). Schedules for nursery stock and specification for planting are contained on drawings 023.02.02 & 023.02.03 (Figures 3& 4).

3.4. A brief description of the woodland enhancement scheme is provided below:

- Tree planting within the woodland consisting of canopy trees with understorey planting of native woodland shrubs.

- The periphery of the existing woodland, closest to the proposed housing to be planted with a continuous native hedgerow comprising mixed native species. The new hedgerow and woodland to be protected with a post and wire boundary fence to restrict access. Lockable 3.5m wide, gates to be included for maintenance access. Fencing will ensure mammals and wildlife can access woodland areas.

- New tree planting should take place on the western boundary of the eastern woodland but should be kept relatively open. Planting should be informally spaced at 4.0m-6.0m centres. Species should consist of field maple (Acer campestre), crab apple (Malus sylvestris) and wild cherry (Prunus avium).

3.5. Schedules provided below set out the objectives, operations and programme to establish and maintain new planting.

5 Planting within the woodland is to be set out by landscape architect on site and after the initial clearance of ornamental/ dominant species and sycamore coppice/ stumps.

Access And Safety

3.1. Access and safety into the woodland is the responsibility of the landowner and/ or managing agent. For the protection of new woodland plants and trees it is advised that the public are excluded from the woodland for the duration of this woodland management plan (5 years). This would help to protect new planting areas and give time to monitor the health of existing trees in relation to their new setting alongside residential development. Notwithstanding any other constraints such as ecology and safety, a long-term ambition would be to allow some safe public access into the woodland for the enjoyment of residents.

3.2. The woodland contains a number of ivy clad, dilapidated structures, these would need to be made safe or structures demolished prior to allowing public access. Note that buildings may be beneficial to wildlife and ecological advice

should be sort prior to removing ivy and/or demolition works.

Objectives for Woodland Areas

Management objectives have been split into the following landscape features:

- Existing Woodland
- New Planting Woodland

Management objectives and operations and a programme for these are described in detail on pages 14-17.

Figure 1- Soft Landscape GA Plan

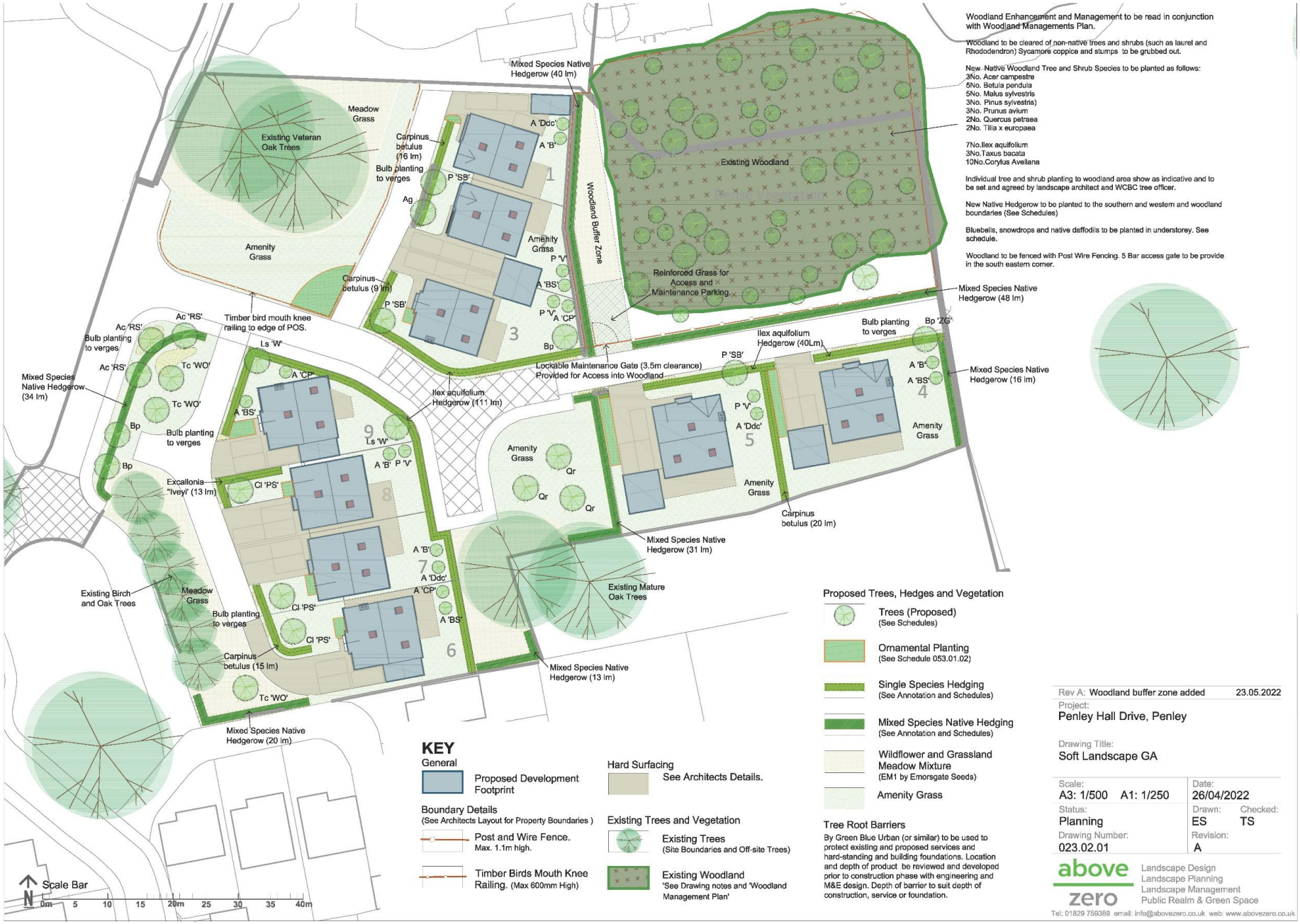


Figure 3- Planting Schedules

Planting Schedules

Standard Tree and Shrub Planting Schedule (Woodland Enhancement)

Botanical Name	Common Name	Min No. Breaks	Girth (cm)	Form	Height (cm)	Clear Stem (cm)	No. of Trees/ Shrubs
Acer campestre	Field Maple	1	8-10	Standard (Standard)	250-300	175-200	3
Betula pendula	Silver Birch	1	8-10	Standard (Standard)	250-300	175-200	5
Corylus avellana	Hazel	1		Branched	60-80		10
Ilex aquifolium	Holly	1		Branched	60-80		7
Malus sylvestris	Crab Apple	1		Whip (BR)	100-125		5
Pinus sylvestris	Scots Pine	1		Branched	100-125		3
Prunus avium	Wild Cherry	1	8-10	Standard (Standard)	250-300	175-200	3
Quercus petraea	Sessile Oak	1	8-10	Standard (Standard)	250-300	175-200	2
Taxus baccata	Common Yew	1		Bushy	60-80		3
Tilia x europaea	Common Lime	1	8-10	Standard (Standard)	250-300	175-200	2
TOTAL							43

Standard Tree Planting Schedule

Dwg Code	Name	Form	Age	Girth (cm)	Height (cm)	Clear stem (cm)	Root condition	Breaks	Nr of Trees
Ac 'RS'	*Acer campestre 'Red Shine'*	Standard (extra heavy)	3x	18-18	425-600	175-200	RB	5	3
Ag	*Acer griseum*	Standard (extra heavy)	3x	12-14	350-425	175-200	RB	5	1
Bp	*Betula pendula*	Standard (extra heavy)	3x	18-18	425-600	175-200	RB	5	3
Bp 'ZG'	*Betula pendula 'Zwister Glory'*	Standard (extra heavy)	3x	18-18	425-600	175-200	RB	5	1
Cl 'PS'	*Crataegus laevigata 'Paul's Scarlet'*	Standard (extra heavy)	3x	14-16	400-450	min 200	RB	5	3
Ls	*Liquidamber styraciflua*	Standard (extra heavy)	3x	18-18	400-450	min 200	RB	5	2
P 'SB'	*Prunus 'Sunset Boulevard'*	Standard (extra heavy)	3x	14-16	400-450	min 200	RB	5	3
Tc 'WO'	*Tilia cordata 'Winter Orange'*	Standard (extra heavy)	3x	18-18	min 450	min 200	RB	5	3
Qr	*Quercus robur*	Standard (extra heavy)	3x	18-18	425-600	175-200	RB	5	3
	Total								22

Fruit Tree Planting Schedule

Drawing code	Name	Form	Age	Container Size (L)	Height (cm)	Root condition	Number of Trees
A 'B'	*Apple 'Braeburn'*	M9 Rootstock	1 year Maiden	12L	100-200cm	C	4
A'BS'	*Apple 'Bramley's Seedling'*	M9 Rootstock	1 year Maiden	12L	100-200cm	C	4
A 'CP'	*Apple 'Cox's Orange Pippin'*	M9 Rootstock	1 year Maiden	12L	100-200cm	C	3
P 'DdC'	*Pear 'Doyenne du Comice'*	M9 Rootstock	1 year Maiden	12L	100-200cm	C	3
P 'V'	*Plum 'Victoria'*	M9 Rootstock	1 year Maiden	12L	100-200cm	C	4
Total							18

Single Species Hedgerow Planting Schedule

Plant name	Height (cm)	Root Condition	Number of times Transplant	Size (L)	Habit	Breaks	Density/ lin m	Length (m)	Total No. Plants
Hedgerows (Double staggered row)									
Carpinus betulus	60-80	B	1+1 or 1/1				6	60	360
Excallonia 'Iveyi'	30-40	C		3L	Bushy	4	6	13	78
Ilex aquifolium	60-80	B	1+1 or 1/1		Lateral	3	5	151	755

Mixed Species Native Hedgerow Planting Schedule

Plant name	Common Name	Height (cm)	Root Condition	Number of times Transplant (min)	Form	Length (lin.m)	Plants/ lin.m	Total No. Plants
Hedgerows (Double staggered row. 5 per m)								
Corylus avellana	*Hazel*	60-80	B	1+1	Branched	20	5	100
Crataegus monogyna	*Hawthorn*	60-80	B	1+1	Transplant	95	5	475
Ilex aquifolium	*Holly*	60-80	B	1+1	Leader and laterals	25	5	125
Prunus spinosa	*Blackthorn*	60-80	B	1+1	Transplant	13	5	65
Rosa canina	Dog Rose	60-80	B		Branched	5	5	
Viburnum opulus	Guilder Rose	60-80	B	1+1	Branched	10	5	50
Viburnum lantana	Wayfaring tree	60-80	B	1+1	Branched	15	5	75
						183		890

Prunus spinosa and Rosa canina, not to be used on boundaries to rear gardens.
All new hedgerows to include post and 3 wire fencing where no other adjacent fencing type has been specified.

Shrub Planting Schedule

Plant name	Height (cm)	Root Condition	Size (L)	Habit	Breaks	Planting Mix (m2)	Density (per m2)	Total Number Plants
Choisya ternata 'White Dazzler'	30-40	C	3L	Bushy	4	3	3	9
Cornus stolonifera 'Flaviramea'	40-60	C	3L	Branched	4	2	3	6
Cotinus 'Flame'	60-80	C	10L	Branched	5	1	Specimen	1
Hebe 'Autumn Glory"	20-30	C	3L	Bushy	5	2	3	6
Hydrangea macrophylla 'Lanarth White'	40-60	C	3L	Branched	5	2	4	8
Lavendula 'Hidcote'	20-30	C	3L	Bushy	5	3	3	9
Potentilla fruticosa 'Abbotswood'	20-30	C	3L	Bushy	4	2	3	6
Rosa 'Kent'	40-60	C	3L	Bushy		2	3	6
Rosa "Lancashire'	40-60	C	3L	Bushy		2	3	6
Rosmarinus officinalis 'Miss Jessopp's Upright'	30-40	C	3L	Branched	4	2	3	6
Spirea thunbergii	40-60	C	3L	Branched	5	2	3	6
		Totals				23		69

Herbaceous/ Perennial Planting Schedule

Plant Name	Root condition	Size	Propagation	Planting Mix (m2)	Density (m2)	Total Number Plants
Achillea 'Summer Berries'	C	1L	V	3	6	18
Alchemilla mollis	C	1L	S	3	6	18
Anemanthele lessoniana	C	1L		3	6	18
Astilbe 'Deutschland'	C	1L	S	3	6	18
Bergenia 'Silberlicht'	C	1L	V	3	6	18
Calamagrostis x acutiflora 'Karl Foerster'	C	1L	V	5	6	30
Deschampsia cespitosa	C	1L	V	5	6	30
Geranium macrorrhizum	C	1L	V	4	6	24
Geranium 'Sweet Heidy'	C	1L	V	4	6	24
Hakonechloa macra	C	1L		5	6	30
Helleborus foetidus	C	1L	S	5	6	30
Heuchera 'Plum Pudding'	C	1L	S or V	5	6	30
Persicaria affinis 'Superba'	C	1L	S or V	6	6	36
Pulmonaria officinalis 'Sissinghurst White'	C	1L	V	3	6	18
Salvia officinalis 'Purpurascens'	C	1L	V	5	6	30
Sedum 'Ruby Glow'	C	1L	V	5	6	30
Stipa gigantea	C	1L	V	5	6	30
Tellima grandiflora	C	1L	V	5	6	30
		Totals		77		462

Bulb Planting Schedule (Woodland Enhancement and Verges)

Plant Name	Form	Grade	Density/m2	% of Area	Area	Number of Bulbs
Galanthus nivalis	Bulb	5./6	15	30	85	383
Hyacinthoides non-scripta	Bulb	8./9	15	30	85	383
Narcissus 'Tete a Tete'	Bulb	10./12	15	40	85	510

Project:
Penley Hall Drive, Penley

Drawing Title:
Planting Schedules

Scale: NTS
Date: 26/04/2022
Status: Planning
Drawn: ES Checked: TS
Drawing Number: 023.02.02
Revision: -

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Figure 4- Outline Planting Specification

Planting Specification

Trees and shrubs planted shall comply with BS.3936 (Specification of Nursery Stock) and shall be planted in accordance with BS.4428 (General Landscape Operations) and BS8545:2014 ' Trees from nursery to dependence in the Landscape'.

Woodland Enhancement Scheme to be read alongside 'Woodland Management Plan'

Bare root and root-balled stock to be planted in the dormant season.
All planting stock to be clearly labelled on delivery with the full botanical name. Plant stock to be approved prior to delivery to site and planting and trees be set out by Landscape Architect. All topsoil to be of good quality AS-DUG in accordance with BS 3882.2015. Depths of topsoil (Turf -150mm), (Shrubs- 300mm), Hedgerows (350mm) over free draining subsoil.

Organic soil improvement compost to be dug into all planting areas and used at 1cubic m per 10m2. All planting beds to be mulched in 75mm depth medium grade bark mulch immediately after planting.

If very wet or very dry conditions are found in proposed planting areas the landscape architect shall review planting locations and/or species.

Tree pits to be dug 400mm larger than rootball in any direction. Side and base of pit to be forked over to aid drainage help root establishment. Tree pit to be back-filled with a mix of:

- *1 part 'Melcourt topgrow' (or similar)* tree planting compost;
- Mycorrhizal Fungi; and
- 3 parts good quality, as dug topsoil.

1m2 area of medium grade bark mulch to be placed at the base of each trees to a depth of 75mm. Mulch to be maintained at size and depth for two growing seasons.

Tree Stakes
3no. stakes and 3no. hessian/ rubber ties system to be used on each tree over 8cm girth
Single stake and 1.no rubber tree tie and spacer to be used on trees under 8cm girth.
Stakes to be 75mm diameter tanalised softwood and pointed at one end. Top of stake to be 600mm above ground level .
Stakes to be firm in ground, position stakes at time of planting,

Tree irrigation system to be provided to all trees.

Any queries in relation to planting schedules, layout or planting stock to be raised with Landscape Architect.

Suitable tree root barriers to be used on boundaries with hard-standing, walling, services, proposed and existing buildings.

Project:
Penley Hall Drive, Penley

Drawing Title:
Outline Specification for Planting

Scale:	Date:	
NTS	26/04/2022	
Status:	Drawn:	Checked:
Planning	ES	TS
Drawing Number:	Revision:	
023.02.03	-	

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Landscape Feature Type 1: Existing Woodland

Objective

W1 Allow trees to continue to develop naturally, selectively prune for visual amenity and safety.

W2 Encourage wildlife and promote biodiversity.

W3 Monitor trees for condition and safety. If trees are thought to be diseased, take action to prevent disease spreading.

W4 Ensure a succession and diversity of native woodland species by management of non-native, dominant or aggressive species, and also through new planting.

* Obtain correct permissions from WCBC prior to any work on protected trees or woodlands.

* Works to trees and shrubs not to be carried out in bird nesting season (March- End August) unless under the supervision of a qualified ecologist.

Operation/Prescription	Frequency per annum	Years applicable	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Biennial Inspection of trees by a trained arboriculturalist for hazards, tree safety and disease (Objective W3)	0.5	Prior to construction and 1,3 and 5	■	■	■	■	■	■	■	■	■	■	■	■
Reduce weight loading by reducing/ removing lateral, secondary limbs encroaching or in close proximity to the proposed boundaries of building plots 1,2 and 3. (Objective W3)	As required	1	■	■								■	■	■
Sever and remove the ivy from all mature trees located along the western and southern boundaries. Retain all other ivy except where ivy infestation has extended beyond 20-30% of the individual crown. In such cases the ivy should be severed at ground level. (Objective W1 and W3)	1	1	■	■								■	■	■
Removal and grubbing out (or stump grinding where grubbing out would cause damage to adjacent trees for retention) of sycamore stumps, regrowth, coppiced stools and suckers. (Objective W4)			■	■								■	■	■

Removal (including grubbing out roots) of ornamental, non-native species. Species include, rhododendron and laurel. (Objective W4)	1	1 to 5												
Clear vegetation from 1m radius around the base of naturally establishing native trees (holly and yew). Keep area clear of vegetation for a period of 5 years. (Objective W1)	2													
Remove approximately 75% of the existing bramble cover to provide for new tree planting locations and for the creation of woodland glades. Carefully dig out bramble roots being mindful not to disturb any small native trees, shrubs or native bulbs and seeds within the soil understorey. (Objective W2 & W4)	1													
Carry out selective pruning as required to main visual amenity and remove any crossing, damaged or diseased limbs. Carry out any recommendations contained in tree condition reports. (Objective W1 &W3)	1	1 to 5												
Carry out tree works as required. Leave dead wood within brash piles in appropriate locations and close to where it was removed. Where it doesn't pose a risk to people or property, leave stumps/ trunks in place to a hight of 4-6m to provide habitat. (Objectives W2)	As required	1 to 5												
Carry out new planting of native trees, shrubs hedgerows and bulbs. (Continued maintenance of new trees and shrubs as per landscape feature type 2 below). (Objective W4)	As required													
Biennial inspection to ensure tree roots are not causing damage to nearby foundations, pavings or roads. (Objective W3)	1	1,3 and 5												
Check and report on buildings, structures and fencing with the woodland area, repair and rectify as required. (Objective W3)	1	1 to 5												

Landscape Feature Type 2: Native Woodland Planting

Objective

NW1 To establish new woodland planting as a habitat and wildlife feature.

NW2 Monitor trees for signs of disease and take action to prevent the spread through the site.

* Obtain correct permissions from WCBC prior to any work on protected trees or woodlands.

* Works to trees and shrubs not to be carried out in bird nesting season (March- End August) unless under the supervision of a qualified ecologist.

Operation/Prescription	Frequency per annum	Years applicable	Indicative timing of operation (monthly)											
			J	F	M	A	M	J	J	A	S	O	N	D
Check protective guards to newly planted trees and mulch monthly and repair/replace as required. Remove guards at year 5. (Objective NW1)	12	1 to 5	■	■	■	■	■	■	■	■	■	■	■	■
Weed control to base of newly planted trees achieved through maintaining 75mm depth of mulch and ensuring 1m diameter weed and grass free by hand-weeding only'. No chemical application permitted. (Objective NW1)	2	1 to 5			■	■	■	■	■	■	■	■		
Watering as required during establishment particularly during times of prolonged drought (Objective NW1)	As required	1 to 3				■	■	■	■	■	■			
Re-firming of new planting as required (Objective NW1)	As required	1 to 3	■	■	■	■	■	■	■	■	■	■	■	■
Fertiliser application in spring and autumn as required (Objective NW1)	2	1 to 5				■					■			
Replacement of failed planting in the next available planting season (Objectives NW1 and NW2)	As required	1 to 3	■	■									■	■
Inspection of woodland by a trained arboriculturalist/ecologist for signs of disease (Objective NW2)	Annually	1 to 5	■	■	■	■	■	■	■	■	■	■	■	■
Annual strim of understorey scrub (brambles) vegetation to 300mm in height between late July to mid-August to help control the establishment of self-seeded trees, shrubs and large weeds. (Objective NW3).									■	■				

Perennial weed control to woodland understorey achieved by hand removal only. (Objective NG1)	As required	1 to 5				■	■	■	■	■	■			
Removal by hand any invading scrub annually. (Objectives NG1 and NW2)	As required	1 to 5										■		

4.0 Implementation of the Management Plan

Responsibilities

4.1. The management responsibility of landscape features and habitats across the site will fall to the developer and owner/ occupiers and/or their appointed third party management company responsible for management and maintenance on shared open spaces. The management plan sets a standard for this maintenance to ensure establish of landscape features.

4.2. It is the developers responsibility to ensure the management plan is passed to the relevant management organisations throughout the plan period.

4.3. The developer or owner/ occupiers may employ other organisations to carry out landscape maintenance operations on their behalf. The developer or owner/ occupiers must ensure the third parties have the relevant experience and certificates of competence to carry out the management operations.

4.4. Appointed management companies will be responsible for ensuring that maintenance operations are in accordance with this report. 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 guidance.

4.5. The Local Authority/ third parties will be responsible for preparing risk assessments for all elements of work as required under the Management of Health and Safety at Work Regulations 1999 and for carrying out monitoring and review. The Health and Safety Procedures for the site will follow the guidelines within the HSE publications including HSG65 'Managing for Health and Safety and HSG268 'How to Control Risks at Work'. The managing company will need to comply with the relevant legislation including:

- Health and Safety: Health and Safety and Work Act (1974);
- Equality Act 2010 (Superseding the Disability and Discrimination Act (2005));
- The Wildlife and Countryside Act 1985 as amended;
- Environmental Protection Act 1990;
- Control of Pollution Act (1974) / Pesticides Act (1998);
- Building Regulations Approved Documents;
- BS3936:1989 Part 1 Nursery Stock, Trees & Shrubs;

- BS5837:2012 Trees in Relation to Construction;
- BS3998:2010 Recommendations for Tree Work;
- BS7370-4:1993 Grounds Maintenance. Recommendations for Maintenance of Soft Landscape;
- The Control of Pesticides Regulations 1986;
- The Code of Practice for the Use of Approved Pesticides in Amenity Areas 1988;
- The Code of Practice of Plant Handling 1980;
- National Plant Specification Section 10.2 'Handling & Establishing Landscape Plants'; and
- CPSE Recommended Form of Tender for the Supply & Delivery of Plants.

5.0 MAINTENANCE SPECIFICATION

General

5.1. Trees and shrubs planted shall comply with BS.3936 (Specification of Nursery Stock) and shall be planted in accordance with BS.4428 (General Landscape Operations) and BS8545:2014 ' Trees from nursery to dependence in the Landscape'.

5.2. All new tree planting to be firmly staked in position and tree/rodent guards securely fitted in place.

5.3. New tree planted to be mulch with 75mm depth bark mulch or biodegradable spat mats used to suppress weeds at the base of new planted trees. Whips and transplant to have a min 0.25m2 coverage, feathers and standards to have min 1m2 coverage to the base of each tree.

5.4. Any damage or disturbance to the soil structure, planting area, grass, fencing, hard landscaping, structures or buildings during planting operations should be restored to their original condition.

5.5. Watering should be carried out as necessary to ensure the continued thriving of all planting. Water using potable mains water and wet the full depth of topsoil. Care should be taken to avoid damage or loosening of plants. Any compacted soil should be loosened by lightly forking.

5.6. Unless specified otherwise, dispose of all arisings to a licensed tip

5.7. Any chipping operations undertaken on site should be chipped into a pile and removed from site.

5.8. All rubbish on site should be collected and removed from site to a licensed tip.

5.9. Care should be taken to protect all areas affected by maintenance operations using boards/tarpaulins. Do not place excavated or imported materials directly onto grassed areas.

5.10. Soil and arisings: should be removed from hard surfaces, car parking and footpaths around the building. Works should be left in a clean and tidy condition at completion and after any maintenance operations.

Maintaining Herbaceous Plants/ Shrubs/ Trees/ Hedges

5.11. Tree stakes, guards and ties should be inspected monthly and adjusted twice annually. Loose, broken or decayed stakes should be replaced to original specification. If the stake is longer than half of clear tree stem height, cut to this height in spring. Retie to tree firmly but not tightly with a single tie.

5.12. Adjust, refix or replace loose or defective ties, allowing for growth and to prevent chafing at each inspection as required. If chafing has occurred, reposition or replace ties to prevent further chafing.

5.13. All trees and shrubs should be refirmed after strong winds, frost heave and other disturbances. Tread around the base until plant is firmly bedded.

5.14. Any collars in soil at base of tree stems, created by tree movement should be broken up by fork, avoiding damage to roots. Backfill with topsoil and refirm.

5.15. Pruning shall be carried out annually in accordance with good horticultural and arboricultural practice to BS3998:2010 - Tree work: Recommendations'

5.16. When removing branches do not damage or tear the stem.

5.17. Keep wounds as small as possible and cut cleanly back to sound wood. Make cuts above and sloping away from an outward facing healthy bud, angled so that water will not collect on cut area.

5.18. Larger branches prune neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.

5.19. Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well balanced natural appearance. Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife.

5.20. Watering to be carried out as required during prolonged drought in the growing season to ensure the healthy

establishment and growth of plants. Watering points to be confirmed on site, if none available water supply to be via bauser. If water supply is likely to be restricted by emergency legislation, submit proposals ad await instructions before carrying out operations.

Pruning trees, shrubs and hedges

5.21. Prune trees and shrubs to BS 7370-4.

5.22. All tree pruning to be undertaken in accordance with BS3998:2010 - Tree work: Recommendations and undertaken by qualified arboricultural contractors.

5.23. Do not prune whips or feathered trees.

5.24. Extensive pruning of young trees and any surgery to larger trees must be carried out by an approved member of the Arboricultural Association or other approved specialist. Permission from the LPA must be obtained prior to any works on protected trees or trees in conservation areas.

Weeding

5.25. Hand weeding should be carried out monthly between April and September.

5.26. Remove weeds entirely, including roots and ensure that the minimum quantity of soil is removed to minimise disturbance to plant, bulb and mulched surfaces. On completion of hand weeding rake planting area to a neat, clean condition and reinstate mulch to original depth/ and or reposition mulch mat to ensure coverage.

Reinstatement of planting

5.27. Remove dead or diseased trees as soon as possible and replace in the next available planting season.

- Deciduous trees and shrubs: Late October to late March.
- Conifers and evergreens: September/ October or April/ May.
- Herbaceous plants (including marginal): September/ October or March/ April.
- Container grown plants: At any time if ground and weather conditions are favourable.
- Dried bulbs, corms and tubers: September/ October.