Proposed Housing Development on land adjacent to Haulfryn, Llanarth, Ceredigion SA47 0NZ

LANDSCAPE STRATEGY & MANAGEMENT AND MAINTENANCE PLAN

Wales and West Housing Association

mh/839

September 2025



CONTENTS

- 1 Introduction
- 2 The site, proposals and design considerations
- 3 Eastern boundary including roadside hedge
- 4 Central 'green' and access road margins
- 5 Northern boundary (with neighbouring properties)
- 6 Front gardens
- 7 Rear gardens
- 8 Western margin
- 9 Southern amenity area
- 10 Monitoring and review of this Management Plan

Appendix

Appendix 1 Management Prescriptions
839.02 Landscape Planting Plan

839.03 Plant Schedules and Specification

1. Introduction

- 1.1 This Landscape Management and Maintenance Plan has been prepared by Michael Haire, who is a Chartered Landscape Architect.
- 1.2 The site is owned by Wales and West Housing Association and maintenance of the site will be undertaken by WWHA staff unless indicated otherwise.

2. The site, proposals and (general) landscape design considerations

- 2.1 The site is a sloping former pasture that is rectangular in plan. It is contained on three sides by overgrown hedges, with a ditch running along the western side. Residential properties lie to the south, west and north. To the east, the site is contained by a hedged lane which gives access to the village of Llanarth in both directions.
- 2.2 The proposal is to construct 17 dwellings in 9 buildings on the site. Access will be from the existing lane to the east with an estate road that will curve northward into the site to a hammerhead that will be parallel with the northern boundary. The houses will be accessed directly from this road.
- 2.2 Some terracing of the sloping site is required, with retaining walls at the southern edge of some of the gardens. This will affect the amenity area in the south. The adjacent lane will be widened to allow access and so that a footway can be added. This will require the translocation of the existing hedge to a new line.
- 2.3 The following principles are followed in establishing the Landscape Strategy:
 - Retain and re-use as much of the site resource as is possible i.e.
 - o Dense Scrub habitat to be retained or translocated to appropriate locations
 - Semi-improved Neutral Grassland to be retained or translocated to appropriate locations
 - Native species-rich hedgerow to be avoided/retained
 - Running water (present in the western ditch) is to be avoided
 - Standing water (and marginal aquatic habitats) to be extended where possible (both the existing pond and the proposed attenuation basin will be 'ephemeral')

3 Eastern boundary including roadside hedge

- 3.1 A new footway and a lay-by are proposed along the western side of the narrow lane and the existing hedge will be realigned as a result. The established hedge will be translocated and any gaps filled with Hawthorn, Hazel and Alder Buckthorn. The new hedgerow feature will be on a hedgebank and will be stone-pitched (only) at the main site entrance and the pedestrian entrance at the lay-by (using stone material arising from the site clearance where possible).
- 3.2 Overhead power lines run along this lane and cross the southern edge of the site. It is assumed that this supply will be placed underground as part of the development and that as a result, trees can be included in this hedgerow. The garden of the southeastern unit (plot 1) will be on a high retaining wall (2.0 2.5m high) with a fence on top. The hedge on hedgebank and with trees will obscure this in time.

Maintenance of roadside hedges as prescription in appendix below. Height nominally 1.8m but taller in locations where retaining structures and fences are present

4 Central 'green' and access road margins

4.1 The central 'green' will be a low maintenance, high biodiversity value amenity space. There are some parking bays within this area. The surface will be retained or translocated semi-improved neutral grassland, enriched with some wildflower turf and bulbs. The grassland will be managed to maximise its biodiversity value ('hay meadow' type mowing regime)

Maintenance of grassland to maximise biodiversity as prescription below. Consideration given to timing of cut to sustain bulbs. Consideration given to neat 'back of footway verge' for appearance

4.2 Evergreen amenity/decorative shrub planting is proposed to mark the site entrance (and to screen the electricity sub-station).

Maintenance of amenity planting as prescription below

4.3 Two Oak trees are proposed in the centre of the estate, with a native hedge along the eastern margin of the green, extending along the boundary with the house and around the retaining wall at the south. Smaller-growing fruiting trees will also be planted in this central amenity area and in a separate, small marginal area at the western arm of the hammerhead.

Maintenance of trees as prescription below

4.4 Native hedge

Maintenance of native hedge as prescription below. Height nominally 1.8m but taller in locations where retaining structures and fences are present

5 Northern boundary (with neighbouring properties)

- 5.1 There is a level change at the northern edge of the site and the configuration of this is affected by the Root Protection Zone (RPZ) of a large off-site tree.
- 5.2 A close-boarded fence at the end of the gardens will be at 'garden' grade but will follow the landform as regards the RPZ.
- 5.3 The space between this fence and the northern site boundary will be managed (cut occasionally in the autumn) as required to control scrub encroachment into the gardens.

Maintenance of regenerating scrub as prescription below (this area to be cleared to ground level once every three years)

6 Front gardens

- 6.1 The space between the houses and the access road includes parking bays, paths and rain gardens. Drainage infrastructure and the proximity of the houses to the road limits planting opportunities for trees.
- 6.2 Amenity or decorative planting is proposed but minimised. Small 'street' type trees are proposed that will provide fruit or berries.

Maintenance of amenity planting as prescription below

6.3 Rain Gardens intercept runoff from the buildings and perform an important role as part of the approved SAB scheme. They comprise sunken areas with a range of grasses and herbaceous plants that are tolerant of wet or damp conditions

Maintenance of Rain Gardens as prescription below

7 Rear gardens

7.1 These will be grassed

Maintenance of rear gardens by residents

8 Western margin

- 8.1 This includes the ditch and established native species-rich hedgerow which contains some mature trees and is of 'County' value in terms of biodiversity. The grassland in this part of the site is being colonised by dense scrub (mainly bramble) which is of low ecological value (only of 'site' value).
- 8.2 The gardens of the houses will end around 7 metres away from the ditch and will be contained by close-boarded fences. Access to this area will be via a pedestrian gate from the hammerhead in the site access road. The corridor created will be fenced at its southern end and at its northern end will allow access to the narrow gap between the garden fences (plots 8-15 and the northern site boundary.
- 8.3 The established dense scrub fulfils a role as an access deterrent and will be retained against the garden fences (plots 4-8). The western part of this strip, against the ditch, will be mown annually to encourage a more biodiverse sward and allow maintenance access to the ditch.

Maintenance of regenerating scrub as prescription below (this area to be cleared to ground level once every three years)

Maintenance of grassland to maximise biodiversity as prescription below. Consideration given to timing of cut to sustain bulbs. Consideration given to neat 'back of footway verge' for appearance

8.4 Small native trees are proposed in the eastern part of this strip to add height, provide cover, foraging and roosting/nesting opportunities for birds

Maintenance of trees as prescription below

9 Southern amenity area

9.1 Parts of this sloping area at the southern end of the site will be made steeper by the terracing of the site. The area is crossed by a (foul) sewer and will contain surface drainage features including an attenuation basin and extensive buried tank. The discharge from these features is into the ditch that runs south along the western edge of the site.

- 9.2 There is a small ephemeral pond at the southwestern corner of the site. This feature is close to the existing ditch and the proposed discharge from the site drainage is very close. There is a small area to the north of this pond and to the east of the ditch that could be regraded to encourage some temporary damp ground conditions and thereby increase its biodiversity potential. A **hibernaculum** is proposed close to the pond
- 9.3 This area comprises a combination of retained or translocated grassland and regenerating scrub. The objective is to maintain a balance between these elements as depicted on the drawing. Some of the grassland should be maintained shorter to allow pedestrian access between the estate access road and the southeastern corner of the site and to the various drainage infrastructure features

Maintenance of regenerating scrub as prescription below (this area to be cleared to ground level once every three years)

Maintenance of grassland to maximise biodiversity as prescription below. This includes the attenuation basin base and slopes

Maintenance of amenity planting as prescription below. Includes native shrub planting in the attenuation basin

- 9.3 **Southern hedge** This Leyland Cypress boundary hedge is closely trimmed on the southern side (garden of neighbouring property) but has received no regular maintenance on the site side and is therefore heavily unbalanced. This feature is to be cut back to tidy its appearance and re-balance the trees somewhat.
- 10 Monitoring and review of this Management Plan
- 10.1 Wales and West Housing Association is the owner of the site. It will therefore become responsible for maintenance of all parts of the site (except the adopted Highway) once the scheme is established.
- 10.2 It is a condition of SAB approval that elements of the scheme will be managed. This covers the rain gardens and the attenuation basin.
- 10.3 Planning conditions requiring the design and detailed specification of landscape mitigation measures and the replacement of any failed plants within the first 5 years should ensure the successful establishment of the scheme. Responsibility for this will lie with the implementation contractor, who will 'hand over' the completed scheme to those responsible for the maintenance of the site within the Housing Association at the appropriate time.
- 10.4 It would be a practical step if the maintenance and management of the wider site is combined in practice with the maintenance of the SAB elements. This is an internal matter within the Housing Association.
- 10.5 This Housing Association will have a copy of this Management Plan and will be able to undertake periodic reviews of the situation 'on the ground' set against the objectives set out.
- 10.6 This review process should be undertaken every 5 years, with appropriate reinforcement plantings or changes to management practice put in hand as required.

Appendix 1

1. Management Prescriptions (refer text and Landscape Masterplan)

Maintenance of native hedges

The **native hedges** comprise native species and will produce berries and fruit that will provide a food source for wildlife. Cut back during dormant season (after berries have been taken by birds) and before March (nesting season). Cut height nominally 1.8m with face cut back to allow full width of adjacent footpath to be accessed. This can normally be done with a hedge cutter with coppicing as appropriate to reinvigorate plants that are becoming 'leggy'. This process can be done piecemeal (over several years), thereby retaining the basic form and height of the hedge (it is not necessary to coppice the entire hedge in a single operation). Remove clippings or mulch back into the base of the hedge.

Maintenance of grassland

Grassland mowing regime to maximise biodiversity to comprise two cuts annually. This includes a 'hay' cut after flowering in July and a second 'tidying' cut in late autumn or very early spring as follows.

<u>The 'hay' cut</u>. Remove all litter, cut grass to 50mm in dry weather and allow to lie for minimum 3 days (to allow seeds to disperse). Collect and remove arisings.

The 'tidying' cut. Remove all litter, cut grass to 50mm and remove arisings from site

Areas where pedestrian access is required or a neat back of footway appearance is desired to be cut to maintain sward height between 25mm and 150mm

Maintenance of amenity planting

There are relatively small areas of **amenity planting** normally associated with the access road and sometimes around the base of specimen trees which provide height and visual amenity. Selective pruning of these (trees) to maintain shape and health. Remove rubbish from plantings at each visit. In early spring, remove dead (previous seasonal) growth including grasses (cut back to 75mm). Ensure that mulch levels are kept up. Cut back shrubs to neat appearance and to prevent lateral growth encroaching onto pavements

Maintenance of trees

Check stakes and ties, remove when appropriate. Prune in autumn for shape and appearance and remove dead or damaged growth. Water to field capacity as required during drought conditions

Maintenance of regenerating scrub

Regenerating scrub is a valuable biodiversity element of this landscape but a balance between it and the species-rich grassland is important.

Cut back approximately 1/3 of bramble growth every third year in the autumn (leave cuttings). Areas to be cut should be selected to ensure that an 'irregular' transition is retained between the scrub and the adjacent rough grassland. Cutting back should also target areas where bramble threatens to encroach into adjacent properties

Maintenance of Rain Gardens

Keep irrigated during establishment. Keep inlets and outlets clear, remove rubbish. Divide plants (such as Iris) when they become overcrowded so that the same proportions of species are retained. Remove dead (previous seasonal) growth Including grasses (cut back to 75mm) in early spring. Ensure that (gravel) mulch levels are kept up. Cut back any lateral growth encroaching onto pavements



SPECIES Mixed Native Hedge Planting Schedule

SPECIES MIXED NATIVE Heage Planting Schedule										
Area of bed lin m				28	36	32	48	29		
50% Area of bed lin m				14	18					
Number of plants per lin m				5	5	5	5	5		
Number of plants per area				70	90	160	240	145		
Planting area				NH1	NH2	NH3	NH4	NH5		
SPECIES	TYPE	SIZE(min.)	%	Nr of PLANTS				TOTAL		
Acer campestre	1+1 bare root	60-90cm	5	4	5	8	12	7	35	
Frangula alnus	1+1 bare root	60-90cm	10	7	9	16	24	15	71	
Corylus avellana	1+1 bare root	60-90cm	21	15	19	34	50	30	148	
Crataegus monogyna	1+1 bare root	60-90cm	25	18	23	40	60	36	176	
Euonymus europeus	1+1 bare root	60-90cm	5	4	5	8	12	7	35	
llex aquifolium	2L	40-60cm Bushy	8	6	7	13	19	12	56	
Lonicera periclymenum	2L	Bushy	2	1	2	3	5	3	14	
Prunus spinosa	1+1 bare root	60-90cm	8	6	7	13	19	12	56	
Quercus robur	1+2 bare root	60-90cm	8	6	7	13	19	12	56	
Viburnum opulus	1+1 bare root	60-90cm	8	6	7	13	19	12	56	
			100			400				
Totals			100	70	90	160	240	145	705	

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% RG1 RG2 RG3 RG4 RG5 RG6 RG7 RG8 RG9 RG10 RG11 RG12 RG13 RG14 RG15 RG16 RG17 TOTAL

Wildflower Turf Specification

Remove 75mm topsoil including large stones, roots or clods of earth. Lightly cultivate, harrow and rake subsoil into a fine tilth, avoid compaction as it is important that the roots of the plants in the turf are all in close contact with the soil and no air pockets are created. Ensure the soil is not waterlogged or compacted prior to laying the turf

When laying the turf, care should be taken to ensure that all joints are butted up correctly to prevent the growth of weeds in any open gaps. Do not overlap the turf at the joints and do not create tension so joints pull apart or shrink as they

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Lav WFT-Landscape-34 (in general areas) and WFT-SUD-37 (in swale and scrape areas by Wildflower Turf with minimum possible delay after lifting or equivalent

Once laid, water the turf thoroughly, for the first week, depending on the weather. If the soil is not soaked before laying it is important to check that the initial watering soaks through to the soil beneath the turf. Do this by lifting a corner of the turf to ensure that the soil below the turf has received water from the irrigation

Do not allow the turf to dry out while it establishes, this should take approximately 2 weeks

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that root-growth is impeded.

sections removed.

settlement

worked into the top 150mm, no deeper.

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The soil profile shall be 300mm topsoil over

600mm subsoil for the full extent of the tree pit.

The interface between topsoil and subsoil shall

be 'keyed in' by cultivation at the interface.

Subsoil shall be compacted as a gentle dome

immediately beneath the root-ball, sufficiently

to support the root-ball, but not to the extent

Non-perishable root-ball wrappings and cages

shall be removed prior to planting. Perishable

wrappings and cages shall be removed

(cohesive root-balls) or retained until the tree is

in position, then cut and peeled back to

one-third root-ball height, with the peeled back

The surface of the root-ball and the root flare

shall be clearly visible after planting and soil

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TRANSLOCATION OF HEDGE

These works to be supervised by a suitably qualified Landscape Professional

Prepare the recipient site by mounding soil to 750mm deep and cultivating the base of the excavation to a depth of 150mm. Place a layer of friable, free-draining, uncompacted subsoil 150mm deep sourced from the area of the site immediately adjacent to the hedge (and from the equivalent depth) in the base and sides of the bank.

The trees that are to be transplanted should be cut down to 300mm above ground level. Using an excavator bucket, excavate around the stems to create a rootball that is an appropriate size to move with the excavator.

Using suitable machinery so that as much soil as possible is kept with the rootballs, move these trees to the recipient area, arranging them so that they are evenly spaced across the area identified.

Adjust the shape of the recipient excavations to suit the size and shape of each rootball as it is moved so that a close fit is achieved all around the rootball. Backfill the excavation to within 200mm of the surface using loose free-draining, uncompacted subsoil sourced from the equivalent depth around the original site of the hedge, compact lightly by hand. Prior to completion of backfilling, ensure that there is effective percolation (test as per B2.4 in BS8545). Backfill the excavation to surface level using free-draining, uncompacted topsoil sourced from the original site of the hedge and water in well, adding more backfill soil as required.

Hedgebank Section (sketch) Native whips and transplants, refer schedule for hedge mix.

STN	Plant	Tree pit size	Backfilli	ng materia with:	Stakes		
ORANT			Compost	Slow release fertiliser	Overall length of stake	Diameter	
AMELI	Shrub or transplant up to 90cm high	splant 300mm x 300mm x 300mm		50g			
A	Fruit / Feathered tree	600mm x 600mm x 600mm	16 litres	100g	1.5m	75mm	
	Specimen tree	900mm x 900mm x 600mm or larger	100 litres	300g	1.5m (x2)	75mm (with cross bar 50mm x 75mm)	

Watering: To field capacity on completion

Specimen trees - 1.25m dia. circles

Hedge - apply mulch 75mm depth in 1m wide strip along hedge length

Rain Garden Mulch

10mm clean pea gravel to 50mm depth.

To manufactures recommendation Prepare a tilth to 25mm and remove stones and rubbish

Grass seed mix 1 - Emorsgate Meadow Mixture EM8 for Wetlands (or equivalent) sow at a rate of 4g/m2

Grass seed mix 2 Emorsgate EG1 General Purpose Meadow Grass Mixture or equivalent sow at a rate of 5g/m2

Mulch: Medium bark mulch, 75mm deep, free from pests, disease, fungus and weeds. Fruit trees - 1.12m dia. circles

Marginal shrubs - complete cover

Grass Seeding

Rudbeckia fulgida 'Goldsturm' CG, 2L 10 100 All works carried out in accordance with BS4428:1989 Code of Practice for General

SPECIES Rain Gardens Planting Schedule

Area of bed m2

Aster Monch

Astrantia major

Carex pendula

Athyrium filix-femina

Number of plants per m2

Number of plants per area

Latin Name

Astilbe chinensis 'Vision in White'

Deschampsia cespitosalris

Persicaria bistorta 'Superba'

Iris 'Butter and Sugar'

Lythrum salicaria 'Blush'

Landscape Operations and all subsequent amendments

The landscape contractor to make him/herself aware of any underground services prior to planting.

Any proposed substitutions, whether species, cultivar, pot size or other specification, must be approved by landscape architect prior to planting;

Compost: Do not use peat or products containing peat (unless site sourced).

Topsoil: Planting soils certified in accordance with British Standards (3882:2015 topsoil, 8601:2013 subsoil) free from weeds. Min 300mm topsoil all shrub and hedge planting areas. Grass lawn areas - 100mm depth topsoill.

Cultivation:

Cultivate native hedge planting areas to a minimum 600mm depth to mix topsoil thoroughly with subsoil before pit planting as schedule. Hedge width 1000mm Cultivate shrub planting areas to 300mm depth and tree planting areas to 750mm following

placing and spreading of topsoil (to loosen

topsoil and incorporate with substrate) and

prior to commencing planting. The interface between topsoil and subsoil shall be 'keyed in' by cultivation at the interface

Plants: To BS 3936 Part 1:1992 and all subsequent amendments

All bare root stock to be planted between Nov and March. To be supplied in accordance with the plant schedules. Plant stock to be healthy, vigorous, free from pests and diseases and suitably hardened off. Stock shall be well formed, fibrous root stock system and be free from perennial weeds. Planting to Horticultural Trades Association 'Handling and establishing landscape plants'.

Refer schedule for pit sizes and ameliorants

Planting Instructions:

Native hedge: Plant in random groups of 3, 5 and 7 No. Double staggered row

Marginal Shrub Planting Instructions:

Plant at 1/m2 in random groups of 2, 3 and 5

Marginal Perennial Planting Instructions: Plant at 3/m2 and in random groups of 3 and 5

with Irises in the deeper areas **Rain Garden Planting Instructions:**

In rain gardens plant smaller species (Aster, Astilbe, Iris) on building side and taller species on opposite side - Dryopteris, Filipendula, Lythrum, Lysimachia

Tree pits: Fruit Trees (Orchard)

Excavate pits to sizes indicated in schedule and break up bottoms of pits to a depth of 150mm, scarify sides. Excavated material to be mixed with compost and fertiliser as stated in schedule.

Tree stakes: Fruit Trees (Orchard):

Stake length as table. Position stake on windward side and drive vertically at least 300mm into bottom of pit before planting. Consolidate material around stake and cut to approx. 600mm above ground. Secure tree to stake firmly but not to rigidly with approved rubber tie, within 25mm of stake top.

Specimen Standard Tree Pit:

The tree is to be inspected prior to and on delivery and found to be compliant in all respects with British Standard 8545:2014, in particular, Table 1, p.21.

Planting soils to be certified in accordance with Standards (3882:2015 topsoil. 8601:2013 subsoil), Tree planting soils should preferably meet the sandy loam textural range and be of no more than pH 6.5 on placement. They must be well structured and well aerated, freely draining but with sufficient mineral and organic content to support the tree and maintain good soil structure. Compost shall be

Tree stakes: Specimen trees:

To be staked with 2nr. 1.5m x 75mm dia stakes. Position stakes and cross bar on windward side with galvanised nails as close as possible to stem and drive vertically at least 300mm into bottom of pit before planting. Consolidate material around stake and cut approx. 800mm above ground. Secure tree to cross bar firmly but not to rigidly with approved rubber tie and spacer.



Refer Dwg Nr 838.02 Landscape

Planting Plan

Wales and West HA Haulfryn, Llanarth

Schedules and Specifications Sept '25 KH

839.03