B5605 GELLI WOOD LANDSLIDE

LANDSCAPE MAINTENANCE AND MANAGEMENT PLAN

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Project Manager:	Andy Emmott
Originator (Company):	AtkinsRealis
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1. Introduction

1.1 Purpose of the Document

This Landscape Maintenance and Management Plan accompanies the Landscape Concept Plan (drawing reference 5219364-ATK-L-XX-XX-DR-000001) and should also be read in conjunction with Engineering General Arrangements sheets 1 & 2 (drawing references 100114754-MMD-XX-XX-D-G-0001 & 100114754-MMD-XX-XX-D-G-0002).

1.2 Background

The landslip (Gelli Woods) reinstatement works on land off Newbridge Road, Newbridge, Wrexham, LL14 5AW was granted planning permission on 28 May 2025 (P/2024/0332). Planning condition 4 required that *'Prior to the reopening of the B5605 to through traffic, a scheme of landscaping shall be submitted for the written approval of the Local planning Authority.'* One of items listed was for the inclusion of *'A Management and Maintenance Plan.'*

This Landscape Management and Maintenance Plan has been produced with respect to the discharge of the aforementioned planning condition, in compliance with Section 91(3) of the Town and Country Planning Act, 1990; and in order to protect wildlife interests in accordance with Policies DM1 and SP14, NE1 and NE2 of the Wrexham Local Development Plan and in the interests of the visual amenities of the area, to conserve the natural beauty of the Clwydian Range and Dee Valley Area of Outstanding Natural Beauty and to ensure the development delivers net benefit to biodiversity in accordance LDP policies DM1, BE1, NE3, NE4 as well as paragraph 6.4.5 of Planning Policy Wales 12.

2. Implementation of the LMMP

2.1 Project Team Roles and Responsibilities

During the initial 5-year maintenance period (Aftercare Period including 1 year defects period), the Principal Contractor (PC) will be responsible for the maintenance and management of tree planting, to ensure that the tree planting is appropriately established and maintained.

This includes being responsible for monitoring the establishment of new tree planting up until handover to the relevant asset owner, landowner or operator. The PC will also be responsible for replacing all dead, dying or defective stock during the contracted Aftercare Period and any other management prescriptions provided that are scheduled to be undertaken during the Aftercare Period.

All landscape and ecological works shall be carried out by suitably qualified and experienced professionals in landscape and ecological construction activities.

The PC will appoint an appropriately experienced and qualified landscaping contractor. The contractor is to be competent at identifying plant species, including those proposed as part of seeded and planted mixes, as well as any undesirable species, and experienced in the various habitat creation and enhancement works required on this Scheme.

The PC is to obtain permission from the landowner to access the site for landscape maintenance and management inspections / operations prior to any site visits.

After the initial 5-year maintenance period, the Scheme will be handed over to the relevant asset owner, landowner or operator, who will be responsible for ongoing maintenance.

2.2 Programme

Establishment maintenance and monitoring operations of all landscape and ecology works are to be carried out by the PC as part of their work up to the end of construction/ Aftercare Period.

The ‘Aftercare Period’ refers to the initial 5-year maintenance period carried out by the PC. The formal Aftercare Period will total five years to allow the successful establishment of planting on-site. The Aftercare Period starts immediately following the end of construction, following the Aftercare period, the Scheme will be handed over to the relevant asset owner, landowner or operator. The relevant asset owner will be responsible for the continued management and monitoring of the landscape and ecological mitigation areas.

2.3 Programme Considerations

For soft landscape elements, all replacement planting will be carried out in the recognised planting seasons: April to October for grass sowing and late October to late March for shrubs. Trees will be replaced during the tree planting season from November until the end of March.

The relevant asset owner, landowner or operator must be made aware of the intention to commence the operations listed below should the works differ from the monthly programme advised:

- Arboricultural works, including tree felling or tree surgery and hedge cutting
- Application of pesticides
- Scrub clearance

Should works be suspended, the PC is to provide a revised programme for delivering the management prescriptions to ensure continued compliance with overall objectives. The reasons for suspension might include, for example, identification of protected species, fuel spillage, or inclement weather.

2.4 Annual Inspection

Site inspections shall be on an annual basis for during the Aftercare Period (Years 1 to 5). The PC shall undertake the replacement planting inspections, and the details will be captured in a Landscape Inspection Report[1]. The numbers of replacements will be agreed upon by all parties prior to any replacement planting occurring.

Inspection reports are to be completed by the appointed contractor and agreed upon by the Overseeing Authority.

3. Management Approach Prescriptions and General Maintenance

3.1 Deciduous Woodland

Woodland planting will achieve a dual function of landscape integration and nature conservation and biodiversity.

Where the function is landscape integration, the objective for all woodland blocks is to mimic the structure and value of locally occurring native broadleaved woodlands.

3.2 Planting and Establishment

Planting for landscape integration will be at an average density of 3-metre centres to provide relatively quick establishment without incurring high costs.

The dominant canopy will consist of Oak. Hawthorn, Rowan, Birch and Alder will be included to function as nurse crops.

Where local conditions are seasonally or permanently wet, Willow will be included as well as Alder.

3.3 Maintenance and management

The principles of adaptive and dynamic management shall apply to minimise the risk of catastrophic failures, such as those that may occur during periods of drought or other unforeseeable events, such as the identification of a new biosecurity/plant health hazard.

Any plants that fail to thrive will be replaced in the first available planting season following identification. The replacements will be in the ground so that they can be inspected in January. This will allow enough time for additional stock to be purchased and planted if advised by the contracting authority.

[1] A ‘Landscape Inspection Report’ is a detailed document that assesses the condition and maintenance needs of a landscape.

The PC shall ensure that failed plants are replaced with stock equivalent to a healthy plant that has survived in a similar location.

A minimum of a one-metre-wide band or one-metre diameter spot is required to be weed-free around each tree from April to July for at least four years after planting. The large-scale use of herbicide shall be discouraged to minimise danger to operators, other plants, and wildlife. Herbicide shall be applied a maximum of three times per year, with actual quantities applied decreasing as canopy closure increases.

Weed control will be even more important in periods of drought to ensure that trees are free from competition for moisture. The PC will inspect all plantings following extreme weather events.

Young trees are vulnerable to damage from wind, pests, diseases, and drought. If left un-weeded, they can stay vulnerable for many more years, and the risk of failure becomes substantial. During Years 0-5, weeds will be removed from tubes and shelters by hand pulling.

Weeds and coarse grasses within one metre of any plant will be controlled. The PC will ensure that coarse grasses in open spaces near plants are removed at minimal frequency, with arisings collected and removed off-site.

Watering will be required in sufficient quantities to ensure planting achieves its stated environmental function.

Low management intervention is envisaged beyond Year 5 as planted stock shall be considered to have settled into the receiving environment if species have taken. Any failures will have been replaced before Year 5.

3.4 Provenance and Biosecurity

All native species supplied are to be of the most local provenance available in commercial volumes.

The PC will ensure that all plant materials are free of pests and diseases, as advised on the plant health portal (Department for Environment, Food and Rural Affairs, 2022). Provenance certificates will be required for all plant materials and seeds. Natively grown planting material will always be kept separate from imported stock.

3.5 Tubes, Guards and Ties

All proposed tree species planting should have suitable shelters and staking;

Rabbit guards (60cm x 50cm and biodegradable with two releasable ratchet ties) supported by 50mm dia. treated softwood stakes (straight, peeled and free from projections & pointed at lower

end) approx. 90cm high. The Overseeing Authority may prefer the type/brand of tree guard that should be used.

The shelter shall be pushed a minimum of 25 mm into the ground. The stake shall be of sufficient length to support the shelter firmly for 5 years and shall not protrude above the rim height of the shelter but shall extend at least 75 mm above the top tie. Where the shelter is attached to the stake by two releasable ratchet ties, one tie shall be positioned at, or within, 75 mm of ground level, and the other shall be positioned within 100 mm of the shelter top. The shelters shall be the same colour throughout the works.

Where tree shelters are used, pits for shrub and tree transplants located on sloping ground shall be backfilled so the top of the pit forms a horizontal surface sufficient to allow the entire base of the shelter to contact the ground.

Plant protection specifications are to be standardised across the Project; the disparity between individual planting plots throughout the Project will not be accepted (UK Government, 2020).

3.6 Plant Establishment

The first 5 Years will be the establishment phase for all newly planted vegetation, with annual replacements planted to ensure plant numbers and objectives are achieved. After 5 Years, the work on the planted stock will move away from replacement to management.

3.7 Replacement of Stock

Replacement planting shall be undertaken annually for the duration of the 5-Year Aftercare Period. Defective plants include those failing to thrive with poor extension growth. Following annual monitoring, all plants shall be replaced in the planting season.

The appointed PC is to replace all dead, dying, or defective stock for the duration of the Aftercare period following contract completion, after which these responsibilities will be handed over to the relevant maintaining authority.

Following the Aftercare Period, gaps left within planting beds from dead stock may, if appropriate, be filled by the growth of surrounding plants rather than with replacement planting.

3.8 Ground and Pit Preparation for Replacement Planting

All ground and pit preparation for replacement planting must be undertaken in accordance with best practices and recognised industry standards. Diseased plants must be disposed of at a licensed facility off-site.

3.9 Planting Sundries, Including Stakes and Tie for Replacement Planting

Following replacement planting, any stakes, ties, tubes, or guards shall be re-fixed/replaced. Watering may be specified on completion of the replacement planting as determined by the Overseeing Authority.

3.10 Pesticide Application

All pesticides, methods of application, materials and tank mixes, methods of working, transportation, storage, and records shall be strictly in accordance with current legislation and codes of practice and in line with Overseeing Authorities policy where applicable. Landowner consent should be sought before the application of pesticides. The PC/ landscape contractor shall make available evidence of competency in the use of pesticides.

The Food and Environment Protection Act 1985 and Control of Pesticides Regulations 1986, as amended, set out the rules for using pesticides to control weeds growing in water or on land. The Environment Agency (EA) requires permission to apply herbicides near water using the EA AqHerb01: Agreement to use herbicides in or near water.

3.11 Control of INNS, Noxious and Injurious Weeds

The control of INNS, noxious and injurious weeds in all areas of the site is required throughout the duration of this management plan, in line with current legislation, including The Weeds Act 1959, The Wildlife and Countryside Act 1981 as amended, The Environmental Protection Act 1990, and the Ragwort Control Act 2003. Refer to Annex B15 Invasive Non-Native Species (INNS) Management Plan for further details regarding INNS.

The control method is to be appropriate to the location, type of weed, and season. The list of noxious and injurious weeds includes the following:

- Broadleaved Dock (Rumex obtusifolius)
- Common Ragwort (Senecio jacobaea)
- Curled Leaved Dock (Rumex crispus)
- Spear Thistle (Circium vulgare)
- Creeping Thistle (Circium arvensis)

Where the treatment of noxious weeds conflicts with other environmental constraints, such as the presence of protected species, the PC is to notify the relevant asset owner, landowner or operator to ensure any mitigation measures are identified and implemented to comply with all relevant legislation.

Where broadleaved weeds have been established in newly seeded areas, they are to be treated using an appropriate selective non-residual translocated herbicide via spot application. The herbicide shall be applied during a period of active growth in accordance with the manufacturer’s

guidelines. Spot applications of translocated herbicide may be specified for any of the injurious and noxious weeds, dependent on on-site conditions and location.

Weed control by hand weeding shall be carried out as necessary to control injurious and noxious weeds for the duration of the management period in marginal planting areas, individual shelters, and guards where spot applications may cause damage.

Hand weeding includes removing the entire weed, including roots, by digging, forking, hoeing, or pulling. Weeds shall be removed prior to flowering.

Weed control via cutting can be carried out following instruction by the Overseeing Authority only. This will only relate proposed deciduous woodland planting (a minimum of a one-metre-wide band or one-metre diameter spot is required to be weed-free around each tree from April to July for at least four years after planting).

All arisings from weed control operations are to be removed from the site and disposed of to a licensed tip.

Further advice on the treatment and removal of invasive non-native plants can be found at:

https://www.gov.uk/guidance/prevent-the-spread-of-harmful-invasive-and-non-native-plants

https://www.gov.uk/guidance/prevent-japanese-knotweed-from-spreading

https://www.gov.uk/government/publications/treatment-and-disposal-of-invasive-non-native-plants-rps-178/treatment-and-disposal-of-invasive-non-native-plants-rps-178

3.12 Works to Trees and Shrubs Generally

Bird nesting season is defined as the beginning of March to the end of August. All breeding birds and their nests are protected by the Wildlife and Countryside Act 1981. Therefore, all necessary vegetation clearance of shrubs, scrub trees and ponds shall be carried out outside of the bird nesting season when there is less risk of damaging nests. If any vegetation clearance needs to be carried out between March and August, the areas must be checked by a suitably qualified ecologist.

All arisings from site operations are to be disposed of in an appropriate matter, to licensed tip offsite or, where approved, chipped and spread evenly within planting plots. Any infected (diseased or pest) cuttings or woody material is to be removed off-site and disposed of either by burning or in line with any recommendations specified by the Forestry Commission in their Forest Research section on their website (www.forestry.gov.uk).

Confirmation of the disease or pest will need to be sought from a suitably qualified and experienced Arboriculturist or similar.

3.13 Watering

This will be as required and determined by monitoring, especially during summer months, to ensure healthy establishment and growth. The PC/ appointed landscape contractor should undertake a minimum of one inspection per month between May and September to ensure suitable watering is undertaken during this period.

3.14 Control of Rabbits

Rabbits are considered pests under the Pests Act 1954, and all occupiers of land have a responsibility to take action to prevent them from causing damage. Rabbit control is best achieved by liaising with adjoining landowners to plan control and management action.

Where rabbits have actively been identified through monitoring on-site, suitable measures may be required to protect sensitive structures and areas within the Scheme.

3.15 Typical Maintenance Operations

This management plan summarises the maintenance requirements by specifying targets, management prescriptions, programmes, timescales, and overall responsibility, see Table 1: Typical Maintenance Operations.

Whilst the nature of the maintenance operations set out will typically be repeated year on year, the frequency of such operations should be flexible so that a response can be made to any change in circumstances necessary to achieve the target outcomes. The maintenance schedule will, therefore, need to be reviewed on an annual basis to determine the exact requirements to suit the longer-term management objectives.

Table 1: Typical Maintenance Operations

Landscape Element	Responsibility		Management Prescription	Activity	Years after Planting	Annual Frequency	Timings (Monthly)											
	Aftercare Period	Following Handover					J	F	M	A	M	J	J	A	S	O	N	D
Woodland - Deciduous	Principal Contractor (PC)	Relevant asset owner, landowner or operator	Annual site monitoring	Safety and condition assessment of trees and the identification of any appropriate remedial works.	All, following establishment	Once									•			
	Principal Contractor (PC)		Plant and Tree Shelters	Check/secure/adjust tree stakes and fastenings. Also, inspect after periods of severe storms.	Yr. 1-5 (remove shelters, ties, and fixings at the end of Yr.5)	Once									•	•		
	Principal Contractor (PC)		Plant and Tree Shelters	Re-firm planted trees and stakes by treading around the base. Also, inspect after periods of severe storms.	Yr. 1-5 (remove shelters, ties, and fixings at the end of Yr.5)	Once									•	•		
	Principal Contractor (PC)		Plant Inspections/ Replacements	Plant inspections to determine plant failures, e.g., dead, diseased, and dying tree stock and vandalised and missing stock.	Yr. 1-5	Once									•	•		
	Principal Contractor (PC)		Plant Inspections/ Replacements	Plant replacements as identified. If instructed, priority shall be given to completing replacement planting before the end of December each year.	Yr. 1-5	Once										•	•	•
	Principal Contractor (PC)		Control of grass and weeds within areas of tree planting	Maintain a clear vegetation strip around the base of plants. Coarse grasses within open spaces near plants are removed at a minimal frequency, with arisings collected and removed off-site.	Yr. 1-5	Twice, as required					•	•			•			
	Principal Contractor (PC)	Relevant asset owner, landowner or operator	Weed Control (including INNS, Noxious, and Injurious weeds)	As required, any undesirable weed species should be controlled and reduced where possible. Weeds to be removed in an appropriate manner.	All	As required	•	•	•	•	•	•	•	•	•	•	•	•
	Principal Contractor (PC)	Relevant asset owner, landowner or operator	Watering	As required to achieve successful establishment. A minimum of 1no. inspection per month between May-Sept to be undertaken to assess requirement for watering. Additional watering should also be undertaken during periods of abnormally dry weather.	All	As required			•	•	•	•	•	•	•	•		
	Principal Contractor (PC)		Slow-release fertiliser	Aftercare Period, annually.	Yr. 1-5	Once								•	•	•		

Landscape Element	Responsibility		Management Prescription	Activity	Years after Planting	Annual Frequency	Timings (Monthly)											
	Aftercare Period	Following Handover					J	F	M	A	M	J	J	A	S	O	N	D
	Principal Contractor (PC)		Replacement planting of failed, vandalised and missing stock	Replacement of failed, vandalised and missing stock where necessary.	Yr. 1	Once, as required										•	•	•
Injurious and invasive weeds	Principal Contractor (PC)	Relevant asset owner, landowner or operator	Maintain affected property to control the spread or increase of identified instances of injurious/ invasive weeds.	Control spread of previously unidentified populations of injurious/weeds.	All	Annually (May-Sep)					•	•	•	•	•			

AtkinsRéalis
3 Piccadilly Place
Manchester
M1 3BN