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Pengarnddu Landscape Management Plan

May 2022

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Pengarnddu Landscape Management Plan

May 2022

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1 Introduction

This Landscape Management Plan has been produced by Mott MacDonald on behalf of Welsh Water to provide a framework for landscape management and maintenance of the landscape associated with Pengarnddu Service Reservoir scheme.

1.1 Objective

To retain the site's existing scrubby vegetation and structural quality, and to introduce grassland managed for biodiversity.

1.2 Site Location

Pengarnddu Service Reservoir is situated approximately 3.5km north-east from the centre of Merthyr Tydfil and approximately 3.7km north-west of Rhymney. The Site is located to the east of an area of common land (Blaenmorlais SINC) and to the west of an industrial estate. To the north of the Site is moorland, with further common land, a traveling community and an industrial estate being found to the south. It is situated at NGR: SO07592 08923 within the county borough of Merthyr Tydfil.

1.3 Planning and development context

Full planning permission was granted by Merthyr Tydfil Borough Council on the 28 June 2021 (application No. P/21/0157) for the construction of a 9 ML (mega litre) 2-cell reservoir and associated engineering, access and landscaping works.

A planning application (Application No. P/21/0142) was also granted on the 28th June 2021 for the construction of a temporary haul road to facilitate construction of a new service reservoir.

P/21/0157 Condition 6

A landscape management plan, including management responsibilities and maintenance scheduled for all landscaped areas, shall be submitted to and approved in writing by the local planning authority prior to the development being brought into use. The landscape management plan shall be carried out as approved and all planting, seeding or turfing comprised in the approved details of landscaping shall be implemented in the first planting and seeding seasons following the completion of the development.

P/21/0142 Condition 4

*A landscape management plan, including management responsibilities and maintenance schedules for all landscaped areas to be reinstated, shall be submitted to and approved in writing by the local planning authority **prior to the approved reservoir, under application P/20/0228, being brought into use.** The landscape management shall be carried out as approved and all planning, seeding or turfing comprised in the approved details of landscaping for the reinstatement of the land shall be implemented in the first planting and seeding seasons following the completion of the approved reservoir development.*

This management plan has been compiled to discharge the above conditions.

2 Operational Notes

The following should be implemented: -

- The works must be read in association with Mott MacDonald drawing number B10237-123532-XX-XX-DR-LA-DI9003 P03 a copy of this can be found in Appendix A.
- Undertake maintenance visits as necessary to maintain the works in a tidy and healthy condition.
- Maintain grass areas and vegetation free from rubbish and debris.
- Water as necessary, without damaging or displacing plants or soil, to promote healthy growth.
- Where wind rocking or soil heave has occurred, straighten plant and lightly firm soil around without compacting.
- Remove plant growth overhanging public access ways and weak, dead or damaged material. Prune back to healthy and strong buds or growth points between November and March. Remove all other arisings and dispose of off-site.
- Plants that have failed to thrive (unless due to theft or malicious damage after completion) should be replaced with equivalent plants during the next planting season, between November and March. Replacements should match either size of adjacent or nearby plants of same species or match original specification, whichever is the greater size.
- Check and remove any tree stakes, ties and guards and dispose of off-site.
- Check fencing and repair or replace as necessary to maintain the area free of grazing animals.
- Leave the works clean and tidy. Remove all arisings and dispose of off-site. Do not light fires.
- Undertake all pruning, lopping, coppicing, felling and other shrub/scrub operations between November and March.
- Undertake protected species checks prior to carrying out any site operations and take all necessary measures to avoid disturbance

3 Landscape Management Table

Table 3.1 Landscape Management Table

Vegetation type	Management operation task	Year 1	Year 2	Year 3	Year 4	Year 5	Years 5-10	Years 10-15	Years 15-20	Years 20-30	Years 30-50	50-year module continues in perpetuity
Existing scrub /shrubs retained	Check stock proof fencing to prevent grazing at every maintenance visit. Repair or replace as necessary when encountered.	x	x	x	x	x	Annually	Annually	Annually	Annually	Annually	Annually
	Check for, and manage, rabbits and squirrels annually in spring/summer	x	x	x	x	x	Annually	Annually	Annually	Annually	Annually	Annually
	Check for, and manage, plant pests and diseases annually in summer	x	x	x	x	x	Annually	Annually	Annually	Annually	Annually	Annually
	Control bramble, ivy and honeysuckle growth. Cut down to ground and remove from growth from canopies between Nov-Feb.	x					Annually	Annually	Annually	Annually	Annually	Annually
	Coppice shrubs. Remove 25% of coverage every 5 years. Undertake the work	x					Annually	Annually	Annually	Annually	Annually	Annually

	in a random manner spread throughout the total area											
	Treat and control all pernicious weeds and the following in accordance with current legislation: - Common ragwort - Spear thistle - Creeping or field thistle - Broad leaved dock - Curled dock - Japanese knotweed - Giant hogweed - Himalayan balsam - Rhododendron ponticum	x	x	x	x	x	Annually	Annually	Annually	Annually	Annually	Annually
Existing grass retained	Cut on existing programme	x	x	x	x	x	Annually	Annually	Annually	Annually	Annually	Annually
	Control bracken growth in mid-July/ August	x	x	x	x	x	Annually	Annually	Annually	Annually	Annually	Annually
	Control bramble growth in November	x	x	x	x	x	Annually	Annually	Annually	Annually	Annually	Annually
	Treat and control all pernicious weeds and the following in accordance with current legislation:	x	x	x	x	x	Annually	Annually	Annually	Annually	Annually	Annually

	- Common ragwort - Spear thistle - Creeping or field thistle - Broad leaved dock - Curled dock - Japanese knotweed - Giant hogweed - Himalayan balsam - Rhododendron ponticum											
	Undertake 1st season cuts, broadly monthly, to maintain a height of between 100 and 150mm.	x										
Proposed wildflower meadow	Undertake cutting in 2nd season and beyond. Divide area into 25%, 25% and 50% sections. Cut each section separately, to a height of between 50 and 150mm. Cut the lushest 25% area in late June, the main 50% in late July and the final 25% in late August. Cut whole area in October and November. Check the 1st 25% section for breeding birds prior to		x	x	x	x	3 cuts annually	3 cuts annually	3 cuts annually	3 cuts annually	3 cuts annually	3 cuts annually

	cutting. Leave 2m wide edge strips uncut as winter refuge for insects. Remove arisings 5 - 7 days after cutting each section.											
	Control bracken growth in mid-July/ August	x	x	x	x	x	Annually	Annually	Annually	Annually	Annually	Annually
	Control bramble growth in November	x	x	x	x	x	Annually	Annually	Annually	Annually	Annually	Annually
	Treat and control all pernicious weeds and the following in accordance with current legislation: - Common ragwort - Spear thistle - Creeping or field thistle - Broad leaved dock - Curled dock - Japanese knotweed - Giant hogweed - Himalayan balsam - Rhododendron ponticum	x	x	x	x	x	Annually	Annually	Annually	Annually	Annually	Annually

4 Appendices

A. Landscape Plan



Figure 1. Landscape Plan

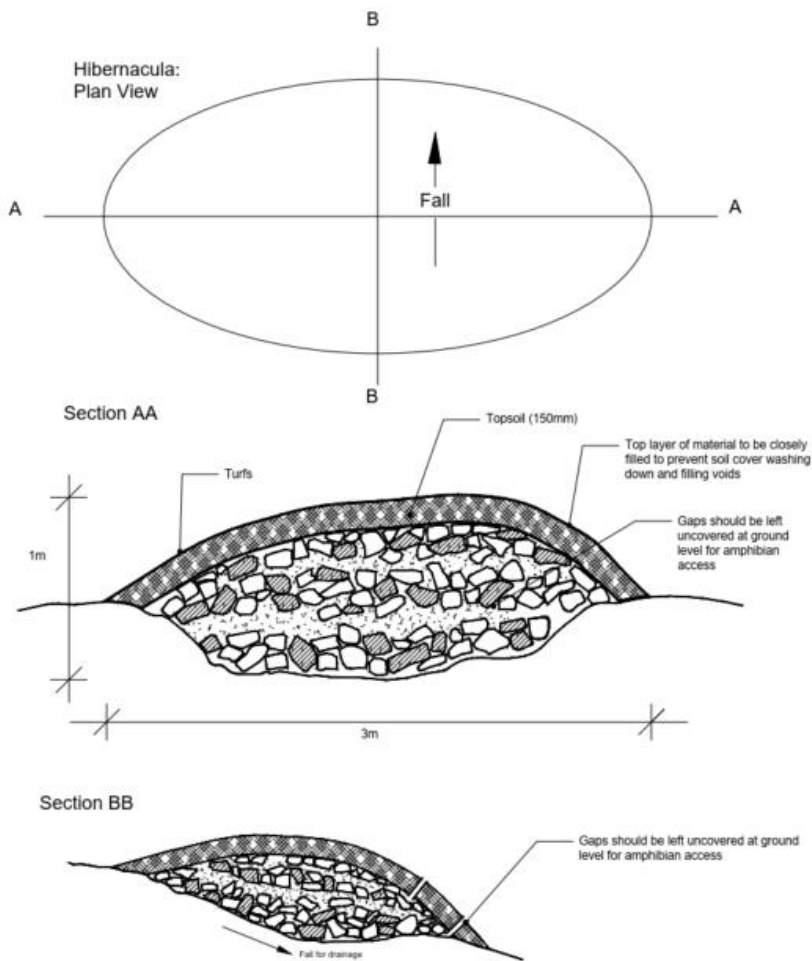
B. Hibernacula and Brash Pile Specification

Pengarnddu Hibernacula Guidance

Hibernacula to be installed in area of grassland and wildflower planting to the south of the proposed service reservoir. Specification as per the Natural England GCN Mitigation Guidelines and using material cleared from site.

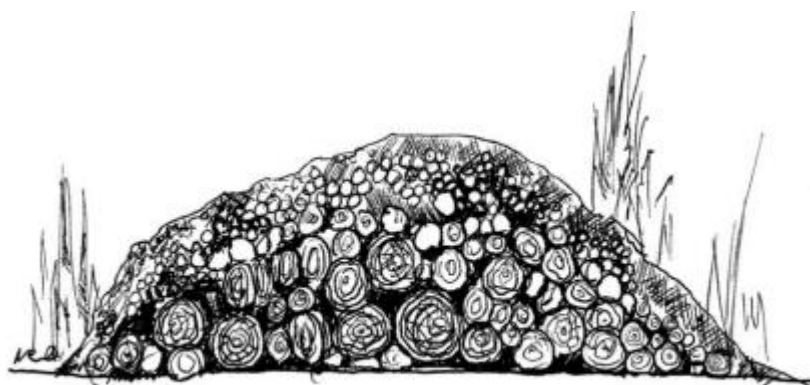
- The hibernaculum hole is to be no less than 2m in diameter and 0.5m deep.
- The hole is to be lined with sand and gravel.
- Turfs are removed prior to excavation for re-use on top of the hibernaculum.
- The hibernaculum is to be constructed from new, clean bricks, (brick sizes to be half and full brick) and/or untreated logs.
- Vertical gaps to be no more than 50% filled with soil/vegetative matter so that voids are created for amphibians.
- Bricks or logs to be hand placed, roughly coursed with some bricks placed at 45° to the ground and locally found soil/dead leaves/grass roots to be placed in 300mm layers between courses.
- The mound is to be covered with 150mm topsoil and turfs.
- The hibernaculum should measure 1.5m in height from the base of the hole to the top of the mound.
- Once vegetation has established on top of the hibernaculum, this should be cut every 2 to 3 years. More frequent cutting will be required if nettles and thistle start to establish.

Hibernacula Details Scale 1:25



Brash Pile Guidance

- The brash pile is to be no less than 2.0m in width and 1.0m in height.
- The pile is to be constructed of untreated logs of different sizes and branches.
- Logs and branches need to be compacted at the core of the brash pile, and looser on the outer layers on top.
- Monitor the brash pile to ensure that it stays intact and is not destroyed by bad weather/large mammals.



An artificial brush pile created from arisings from woodland management work.

Source: Amphibian and Reptile Group UK.

