

TECHNICAL NOTE

Job Name: Margam Substation
Job No: 331201497
Note No: 331201497_Margam_Tech Note Condition 4_ISS_240426
Date: 24th April 2026
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Subject: **Condition 4 – Landscape and Habitat Management Programme**

1. Introduction

- 1.1. The 'Proposed Development' for the substation extension at Margam, Port Talbot was subject to a full planning application by NGET and the planning committee determined a resolution to grant in March 2026 subject to the signing of the S106 Legal Agreement. The Ecological Impact Assessment submitted with the planning application for the Proposed Development (Stantec, 2025a) describes the mitigation, compensation and enhancement that will be delivered, both within the Site and in an off-site area (Margam Burrows) in order to meet legislative and policy requirements.
- 1.2. The Landscape and Habitat Management Plan (LHMPI) (Stantec 2025b) and the Habitat Management Plan (HMP) (Stantec, 2025c) submitted with the planning application detail how habitats within the Margam National Grid Site and off-site Margam Burrows will be created and enhanced, and then subsequently managed and monitored, for the purpose of delivering a Net Benefit for Biodiversity (NBB) through the Proposed Development. A Figure showing the location of the Margam National Grid Site and the off-site Margam Burrows area, along with the illustrative plan showing the features and management for the Margam Burrows Site are provided at Appendix A.
- 1.3. Further information regarding the approach to the Proposed Development in accordance with Planning Policy Wales' requirements, and with regards to the Stepwise Approach, is provided in the Green Infrastructure Statement for the Proposed Development (Stantec, 2025d).
- 1.4. Condition 4 of the consented scheme states:

"Within one month of the date of this permission, a Landscape and Habitat Management Programme (LHMP) shall be submitted to and approved in writing by the Local Planning Authority. The LHMP shall provide a detailed schedule and programme of works for the implementation of all on-site and off-site works (including an on-site Soil Aftercare Programme) alongside the proposed construction phasing of the development and shall be in accordance with the hereby approved Landscape and Habitat Management Plan [331201497, Revision 5 February 2026 Part 1 and 2]

DOCUMENT ISSUE RECORD

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and Habitat Management Plan [331201497, Revision 3, November 2025]. The works shall be carried out in strict accordance with the approved programme and retained as such thereafter.”

- 1.5. The purpose of this Technical Note is to provide the Landscape and Habitat Management Programme for the Margam National Grid Site and for the Margam Burrows Site, as well as the Soil Aftercare Programme required by Condition 4. Discussion with Neath Port Talbot Council determined that the Programme specifically required by Condition 4 relates to the timing of the implementation of the initial Establishment Works described in the LHMP and HMP, in relation to the timing of the construction works (permanent and temporary) to deliver the Proposed Development. NGET are committed to early delivery of the mitigation and compensation works, such that some mitigation and compensation works have been delivered early (prior to commencement of works) whilst others will be delivered in tandem with the Proposed Development. Habitat recreation/ reinstatement will take place following the completion of the Proposed Development and the removal of the temporary works areas. A summary of the timing of the proposed habitat creation/enhancement works in each of the Landscape and Habitat Management Plan and the Habitat Management Plan for Margam Burrows is set out in the sections below. Full details of the habitat creation, enhancement and subsequent management and monitoring are described in the relevant Management Plan (Stantec, 2025b and Stantec, 2025c).

2. Landscape and Habitat Management Plan: Margam National Grid Land

- 2.1. The Margam National Grid land is located at approximate central grid reference SS 78581 86365. It comprises an existing substation and area of wetland complex to the east of the Tata Steel Works and Network Rail railway line. The National Grid land lies to the south of the Tata Steel Sports and Social Club (golf course), to the west of woodland and to the north of the BOC Ltd. works area and fields owned by BOC Ltd.
- 2.2. The Landscape and Habitat Management Plan for the National Grid Land considers the habitat creation /reinstatement and delivery of habitat and species management and monitoring over a 30-year period, following completion of all the works (i.e. Permitted Development works and the Proposed Development works). It also considers species-specific mitigation and management commitments associated with the Permitted Development works; specifically, the Water Vole Management Plan (RSK, 2025a) required under a water vole conservation licence (reference S095134/1) secured from Natural Resources Wales (NRW) and the reptile mitigation strategy also implemented as part of the Permitted Development works (RSK, 2025b).

Establishment Works Schedule: Habitat Creation and Enhancement – Margam National Grid Land

Table 2-1 Annualised Habitat Creation and Establishment Calendar – Margam National Grid Land

Note that the table below is an indicative annualised programme of works, providing optimal dates for activities, some of which have already been delivered. The actual dates for delivery will depend on the confirmed dates for the completion of the Works and the subsequent removal of the Temporary Works areas which will take place when Site conditions are suitable (e.g. to avoid working in very waterlogged conditions, for example).

Month:		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Area/ task	Specific measure												
Ditch Enhancement or Reinstatement	Placement of pre-planted Coir Rolls following reprofiling/reinstatement took place in March/April												

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Month:		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Area/ task	Specific measure												
(Upper Mother Ditch and Ditches D2, D4 and D9)	2026 for ditches D2 and D9, along with seeding of banksides and bank-tops under requirements of Water Vole Licence. Targeted herbicide treatment to be undertaken of tree stumps to minimise future maintenance. Placement of coir rolls in D4 will take place in July/August this year, as agreed with NRW by RSK. (due to presence of contamination in this ditch).												
Creation of Reptile Hibernacula	2 x Reptile Hibernacula Created. Took place in March-April 2025, concurrent with Water Vole Licence Works.												
Ditch Enhancement or Reinstatement (Ditches D3, D7 and D8)	Re-profiling undertaken autumn 2025, placement of pre-planted Coir Rolls undertaken March/April 26. Seeding of bank-tops and sides to take place April 26. Targeted herbicide treatment to be undertaken of tree stumps to minimise future maintenance. All in accordance with Water Vole Licence Works												
Ditch Enhancement or Reinstatement (Ditches D5 and D6)	Following completion of Works and Reinstatement of Temporary Works Areas.												
Removal of Temporary Works and Soil Reinstatement	Following completion of Works. Removal of inert fill and geotextile membrane from Site to a suitable location. Decompaction of soils, where necessary and re-spreading of topsoil.												
Seeding of nurse grass	Seeding of nurse grass from reinstated area, immediately following soil reinstatement/preparation (ideally spring or autumn sowing where possible).												
Natural Regeneration of Reedbed and Associated Habitats	Natural regeneration from seedbed												

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Month:		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Area/ task	Specific measure												
Gabion basket installation	Install gabion baskets												
Provision of Wildlife Tower	Install Wildlife Tower												

- 2.3. As stated prior to the above table, the confirmed timing of the delivery of the habitat creation and enhancement is largely predicated on the delivery of the permanent and temporary works. However, the early delivery of some of the temporary works areas under Permitted Development (“Enabling Works”) has required implementation of some aspects of the habitat creation and enhancement outside of the temporary and permanent works area, with regards to ditch reinstatement and enhancement (as shown in the table above) which provides suitable mitigation and compensation for impacts on water vole populations in accordance with the licence requirements and provides enhancement to habitats within the Site. Furthermore, reptile enhancements were also provided within the Site as part of the Enabling Works, providing 2 x hibernacula within the land outside of the Works areas. These works have therefore been delivered in advance of the Proposed Development.
- 2.4. The remainder of the habitat creation and enhancement works described under the “Site Establishment” section of the LHMP will take place in the appropriate seasonal window, as shown in the table above, following the restoration of soils within the temporary works/enabling works area (see Section 4 below). For example, were the works within the Site to be completed in March, the temporary working areas and geotextile membrane separating those from the soils beneath would be removed. Then the soils would be restored, where necessary (see Section 4 below) prior to the seeding of a nurse grass species to enable natural regeneration over the following growing season. In that same year following completion of the works and installation of the permanent new SUDs basin, gabion baskets will be installed as per the landscape design and the Wildlife Tower will also be installed, as per the design shown in the Landscape and Habitat Management Plan.

3. Habitat Management Plan: Margam Burrows

- 3.1. The Margam Burrows Site is located at approximate central grid reference SS 77616 84571, 2 km southwest of the Proposed Development at the Margam Substation (see Figure at Appendix A). The Margam Burrows Site encompasses part of the Margam Moors Site of Special Scientific Interest (SSSI) and currently comprises an area dominated by coastal grassland on sand dunes.
- 3.2. The Margam Burrows Habitat Management Plan describes the proposed habitat creation and enhancement measures, as well as the proposed habitat management and monitoring within the Site, which is to be implemented to enable the Proposed Development to deliver NBB. The initial works prior to the commencement of the 30 year management and monitoring plan are termed “Establishment Works”. These are described below.

Establishment Works Schedule: Habitat Creation and Enhancement: Margam Burrows

- 3.3. Table 3-1 below provides an annualised monthly schedule for the Establishment Works (habitat creation and enhancement measures, as described in Section 5 of the HMP).

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Table 3-1 Annualised Habitat Creation and Establishment Calendar – Margam Burrows

Month:		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Area/ task	Specific measure												
Dune Slack Creation	Excavation of material to create dune slack												
South facing dunes-creation of open dune habitat	Place material from dune slack excavation on to existing dune												
Consider sowing seed of local provenance including kidney vetch into created areas of open dune habitat													
Gabion basket installation	Install gabion baskets												
Existing Dune slack pond enhancement	Removal of scrub from within 2 m of the pond perimeter												
Scrub removal	Removal of scrub from wider Site dune grassland												
Grassland management	Cut of 30% of sand dune grassland area												

- 3.4. The timing of the delivery of the Establishment Works at Margam Burrows is predicated on the consent for the Margam Substation and the signing of the Section 106 for the delivery of the Margam Burrows works. The habitat creation and enhancement works described under the "Site Establishment" section of the HMP will take place in the appropriate seasonal window, as shown in the table above, following the securing of the S106.
- 3.5. For example, were the planning consent and S106 signed in May, National Grid would aim for the procurement of the Contractors to commence the works scheduled in the May-August window first, with the remainder of the works to follow in the most appropriate seasonal window. The timing of the Establishment Works in this way means that the HMP will be running in parallel with the Proposed Development and the site Establishment Works at Margam Burrows will be completed prior to the completion of the works to build the substation, based on current programme.
- 3.6. As described in the HMP, appropriate consents and licenses will be secured, prior to implementation of the works, where required.

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4. Soil Aftercare Programme

- 4.1. Please refer to Chapter 4 of the Peat Management Plan for Margam Extension, prepared by WRC Stirling (WRC, 2025). Peat arisings from the Proposed Development will be stored as close to the point of excavation as possible and then re-buried as soon as possible, once a suitable cumulative volume has been excavated for that period of works and following the provisions in the Peat Management Plan.
- 4.2. Other than the provisions of the Peat Management Plan (WRC, 2025), stripping, storage and reuse of other topsoil (from the permanent works footprint) should adhere to the guidelines set out with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Defra, 2009), as described in the Construction Environmental Management Plan (Laing O Rourke, 2025) and in the Outline Soil Management Plan submitted with the planning application (Kernon Countryside Consultants Limited, 2025).
- 4.3. With regards to temporary working areas and temporary haul roads, these have been set up with a separation membrane on top of the existing ground surface, to enable clean removal of the materials placed on top, following the completion of the works. A cellular confinement system (Neoloy Geoweb®, a geogrid-type product) was used to enhance ground support and load spread. This allowed the thickness of imported stone needed to create the temporary works areas and haul roads to be reduced, while still providing a stable and suitable surface for construction works.
- 4.4. To check that the approach was appropriate across the full extent of the proposed haul roads and working areas, a series of Dynamic Cone Penetrometer (DCP) tests were carried out. The results of these tests were reviewed to help confirm the minimum stone thickness required. This enabled the design to be optimised, reducing the overall amount and weight of material placed on the existing ground, while maintaining acceptable performance for the temporary works. The inclusion of the Neoloy Geoweb product has reduced the amount of material that was needed to be installed and thus makes it easier to remove once works are completed. The Neology product can also be easily removed as it is a concertina product and can be easily retract by hand, reducing the load on the existing soil surface further.
- 4.5. Following completion of works and the removal of temporary works areas and temporary haul roads, a post-construction soil condition assessment will be undertaken by a suitably qualified soil scientist and ecologist. This assessment will confirm soil condition and identify any evidence of compaction or degradation. Where required, proportionate soil restoration works will be implemented. The LHMPI is predicated on the successful restoration of soils, as the delivery of the landscape and habitat creation measures on National Grid Land is dependent on appropriate soil conditions, following the completion of the works associated with the Margam Substation.
- 4.6. Where identified as necessary through the post-construction assessment, soil restoration works will be undertaken by the Contractor following completion of the Proposed Development and associated Permitted Development (Temporary Works). The suitably qualified soil scientist and ecologist will determine the extent and methodology of soil restoration works required. For example, localised compaction may be addressed through the use of a VOGT geoinjector or air spade, as appropriate to site conditions, while more extensive areas may require low-disturbance sub-soiling. The detailed methodology for any soil restoration works will be confirmed by the Contractor in consultation with their suitably qualified specialists.
- 4.7. All works will be undertaken in accordance with relevant standards and good practice to provide suitable soil surface conditions for the subsequent landscape and habitat creation works. Where required, topsoil will be evenly spread and graded to smooth contours, tying into existing ground levels at site boundaries. Any soil restoration works required will be completed prior to the implementation of Site Establishment Works described in the LHMPI.

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5. References

Kernon Countryside Consultants Limited (August 2025) Outline Soil Management Plan. Margam Substation, Land at Margam, Port Talbot.

Laing O Rourke (2025) Construction Environmental Management Plan. Margam and Port Talbot Substations and Interconnector. Report for National Grid.

RSK Biocensus (2025a) Margam Substation. Water Vole Management Plan. Report for National Grid.

RSK Biocensus (2025b) Margam Substation. Early Works Reptile translocation. Report for Laing O Rourke on behalf of National Grid.

Stantec (2025a) Ecological Impact Assessment Report. Margam Substation. Report for National Grid Electricity Transmission.

Stantec (2025b) Landscape and Habitat Management Plan. Margam Substation. Report for National Grid Electricity Transmission

Stantec (2025c) Habitat Management Plan. Margam Burrows. Report for National Grid Electricity Transmission.

Stantec (2025d) Green Infrastructure Statement. Margam Substation Extension. Report for National Grid Electricity Transmission.

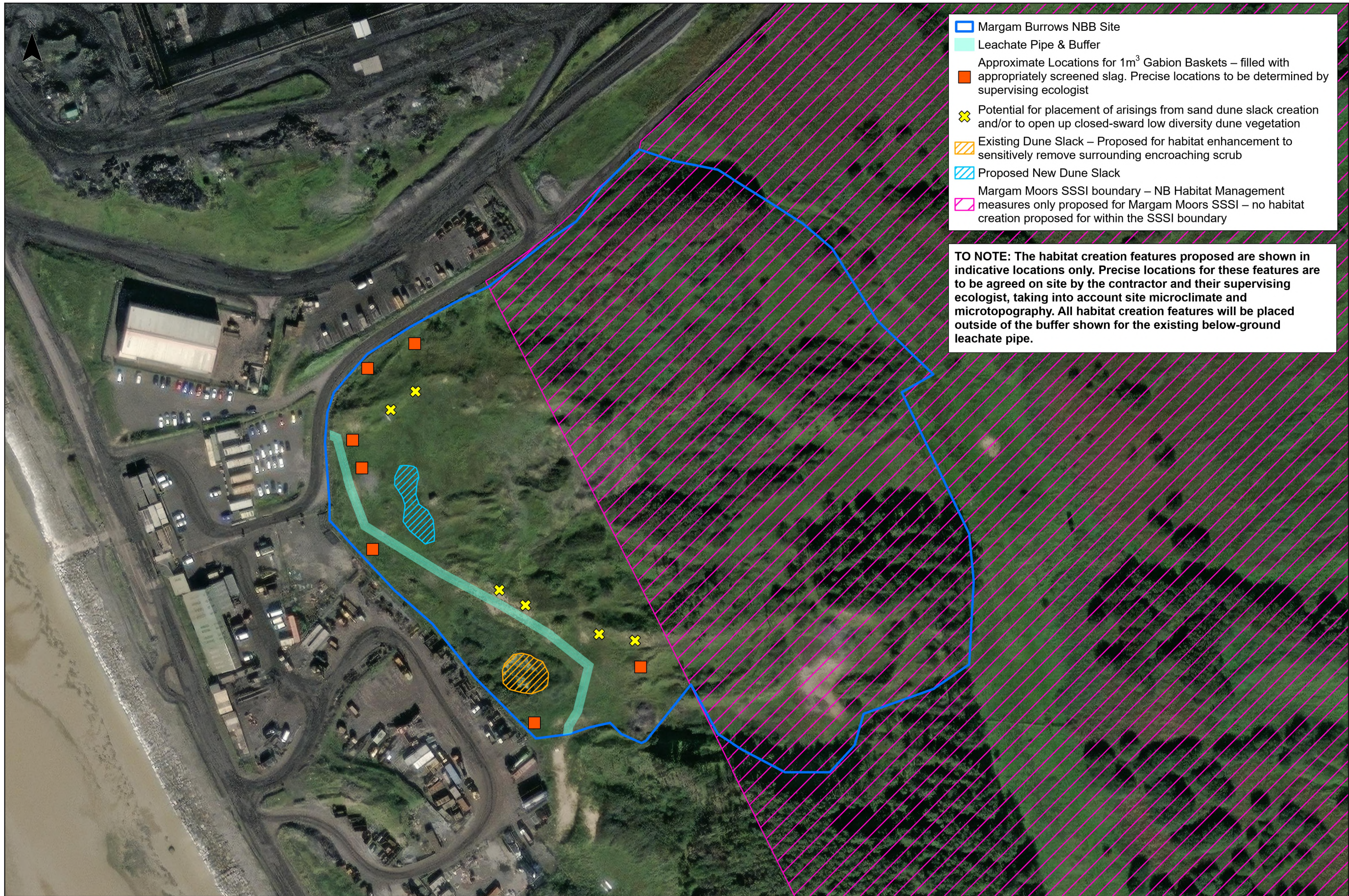
WRC (2025) Peat Management Plan. Margam Substation Extension. Report for Laing O Rourke on behalf of National Grid.

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Appendix A - Figures showing the location of the Margam National Grid Site and the off-site Margam Burrows area, along with the illustrative plan showing the features and management for the Margam Burrows Site



 Stantec 	Client	MARGAM PORT TALBOT Site Location Plan	00.51 km Microsoft, Vantor, Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Contains Ordnance Survey Data, Ordnance Survey Licence number AC0000849444. Crown Copyright and Database Right. Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights Reserved. Contains Ordnance Survey Data, Ordnance Survey Licence number AC0000849444. Crown Copyright and Database Right. Contains public sector information licensed under the Open Government Licence v3.0.	1:12,500 @ A3	Date: 4/10/2026
				Drawn: TL	Checked: HE
				Figure: 01	Rev: B



- Margam Burrows NBB Site
- Leachate Pipe & Buffer
- Approximate Locations for 1m³ Gabion Baskets – filled with appropriately screened slag. Precise locations to be determined by supervising ecologist
- Potential for placement of arisings from sand dune slack creation and/or to open up closed-sward low diversity dune vegetation
- Existing Dune Slack – Proposed for habitat enhancement to sensitively remove surrounding encroaching scrub
- Proposed New Dune Slack
- Margam Moors SSSI boundary – NB Habitat Management measures only proposed for Margam Moors SSSI – no habitat creation proposed for within the SSSI boundary

TO NOTE: The habitat creation features proposed are shown in indicative locations only. Precise locations for these features are to be agreed on site by the contractor and their supervising ecologist, taking into account site microclimate and microtopography. All habitat creation features will be placed outside of the buffer shown for the existing below-ground leachate pipe.