

Warrington Waterfront

Our Approach to Biodiversity

Development Framework
April 2020



Mission

In establishing a regionally-significant port, logistics and commercial park in this unique multi-modal location that would deliver significant benefits to Warrington, we recognise there would be short term unavoidable harm to biodiversity, so we will minimise our footprint, enhance, restore and create new compensatory habitats, and establish a country park with a biodiversity focus that will be a green infrastructure resource for the area. We will deliver biodiversity net gain.



The Proposal

The proposed expansion of Port Warrington is an important facet of Warrington Waterfront; a strategic regeneration proposal to reinvigorate Warrington's central waterfront along the River Mersey. Warrington Waterfront will be a new urban quarter of Warrington, taking advantage of its waterside setting and unlocked by a new strategic access arrangement (the Western Link Road).

This is supported by draft policy MD1 in the emerging Warrington Local Plan (submission draft). The proposed allocation includes:

- Expansion of Port Warrington (44ha) with key connections to Port Salford and Liverpool, including a container handling area with loading cranes, extended shipping berths, potential for rail freight connection, warehousing for manufacturing, distribution and storage purposes, potential turning basin to the south of the MSC and open storage and hardstanding areas.
- Creation of a large nature reserve and country park. The expansion of Port Warrington requires an area of Moore Nature Reserve to be developed. To address this loss, the proposals will improve upon the existing restoration plan

for Arpley Landfill and retain the remaining area of Moore Nature Reserve to create an enhanced Nature Reserve and Country Park at Arpley Meadows (186ha)

- A new business hub ('Warrington Commercial Park') (31ha) further contributing to meeting Warrington's employment and business needs, including job opportunities for the new urban quarter.
- New infrastructure works and road access to link to the wider Western Link Road
- Approximately 2,000 new homes.

The proposed expansion of Port Warrington, the proposed Arpley Meadows Nature Reserve and Country Park, and the proposed business hub aspects of the Warrington Waterfront proposals are on land-holdings which are owned by Peel. These elements are illustrated visually below and within the Development Framework for the Site (Ref: PW2)





Warrington
Commercial Park

Moore Nature Reserve
and Country Park

Port Warrington

Purpose and Approach

Our approach is summarised in the graphic below:



This document presents the case for the development proposals at Port Warrington and Warrington Commercial Park from a biodiversity perspective. It identifies the impact of the proposals and how adverse effects can be mitigated. It summarises, using evidence from surveys and consultations, the ecological mitigation and enhancement strategy that addresses Warrington Local Plan's policy requirements for MD1. It shows how biodiversity net gain requirements of existing and emerging national planning policy can be achieved.

The proposal will achieve biodiversity net gain by:

- Restoring and enhancing Moore Nature Reserve;
- Enhancing the existing restoration of Arpley Landfill to create a Country Park;
- Delivering green infrastructure on site;
- Delivering offsite mitigation at appropriate nearby sites;
- Implementing and securing the long term management of Moore Nature Reserve and Arpley Meadows Country Park via a Landscape and Habitat Management Plan.

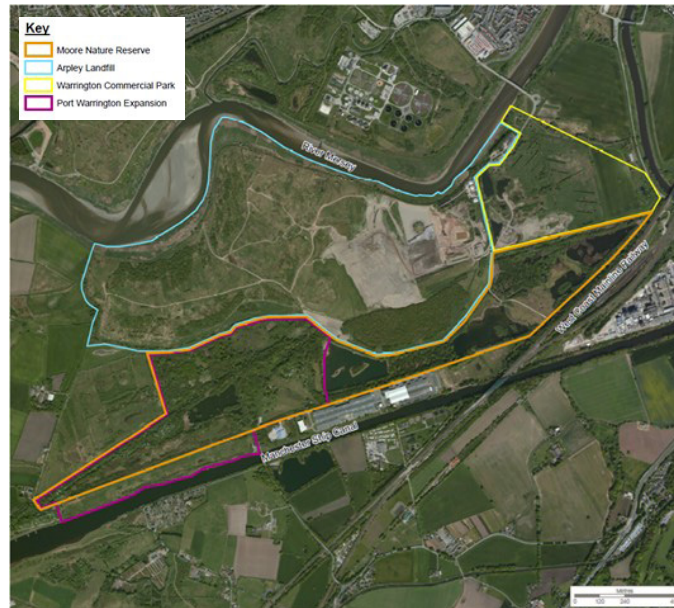


A view along the footpath next to the dry Runcorn-Latchford Canal, the canal will be rewetted as part of the development process providing habitat for amphibians & birds

Baseline Conditions

In ecological terms the area controlled by Peel has the following zones (refer to location plan):

- Moore Nature Reserve (NR), which includes a range of wetland, mature woodland and grassland habitats. It includes sections of the defunct and dry Runcorn – Latchford Canal.
- Arpley Landfill (restored areas), which consist of grassland, woodland and reedbed habitats established at various dates from the late 1980s onwards as part of the restoration of the Landfill. Public access will be permitted following completion of the approved remediation strategy through an informal path network. Once the restoration of the Landfill is complete the area will become a 'Country Park'.
- Arpley Landfill (unrestored areas), consisting of bare ground, ephemeral habitats and some areas of open water, tall herbs, scrub and grassland, which will soon be restored to a similar mix of habitats as the rest of the restoration of Arpley Landfill.
- The proposed Warrington Commercial Park area which consists of a variety of restored habitats, bare and flooded areas; all of which would be subject to future restoration



Site Location - Source; Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

For context, the existing Port Warrington (owned by Peel) and Upper Moss Side Woodland (owned by Forestry Commission) are also shown.

Whilst the habitats within the already restored areas of Arpley Landfill are naturalistic in style, it is fair to say that more modern methods of habitat restoration could be applied, resulting in greater soil, botanical and structural biodiversity. This opportunity for betterment forms part of Peel's approach to biodiversity net gain.

Designated Sites and Ecological Planning Policy

The government is required at a European, national and local level to ensure protection of habitats of principal importance and of habitats that support protected species. The paragraphs below set out the policy and legislation covering protected sites (within influencing distance of the Warrington Waterfront Development), which might be impacted.

NPPF paragraph 117 advises that development should be allocated on land of least environmental or amenity value, where consistent with other policies. In this case, this allocation includes land of local environmental value, but the locational characteristics mean that other policies on sustainability and transport linkages apply.

NPPF paragraph 174 requires that plans should a) identify, map and safeguard components of local wildlife-rich habitats...including the hierarchy of international, national and locally designated sites... and b) promote the conservation, restoration and enhancement of priority habitats ecological networks and the protection and recovery of priority species and pursue opportunities for securing measurable net gains for biodiversity.

The site is not covered by any statutory wildlife designations and the closest European site is the

Mersey Estuary SPA/Ramsar, some 6.1km to the west. This is also a SSSI, the reasons for scientific interest relating to wintering waders, waterfowl and breeding wetland species along with the intertidal and shoreline habitats these species use. Statutory designations are proposed to be protected by draft policy DC4 Ecological Network in the draft Warrington Local Plan, which significantly restricts any development adversely affecting such sites. The European sites also require a Habitats Regulations Assessment.

The Moore NR is largely designated as a Local Wildlife Site (LWS) and subject to draft policy DC4 Ecological Network (point 5) of the draft Warrington Local Plan which states that development adversely affecting a LWS will not be permitted unless there are reasons which outweigh the substantive nature conservation value of the site and the loss can be mitigated ... to achieve a net gain in biodiversity assessed against the latest version of the defra metric.

The Moore NR and some of the habitats of the Arpley Landfill would also be protected by draft Local Plan Policies DC3 Green Infrastructure and draft policy DC4 Ecological Networks, although the latter policy is not currently accompanied by a map

of the ecological networks. Both these draft policies allow development proposals, but require mitigation and compensation, with the effect of achieving net gain in biodiversity.

Draft Local Plan Allocation Policy MD1 Warrington Waterfront recognises that there would be biodiversity loss associated with the proposed expansion of Port Warrington, due to its unique locational requirements, and that it is essential a comprehensive mitigation package is in place.

Existing Habitats

Ecological and Arboricultural Surveys have been carried out by TEP in 2018 and 2019 including;

- An extended Phase 1 habitat survey
- National Vegetation Classification (NVC) survey; and
- Arboricultural surveys

The current extent and distribution of habitats is shown on Figure G6929.01.001B Phase 1 Habitat Survey and Table 1 overleaf lists out the habitats present.

Phase 1 Habitat Survey Plan

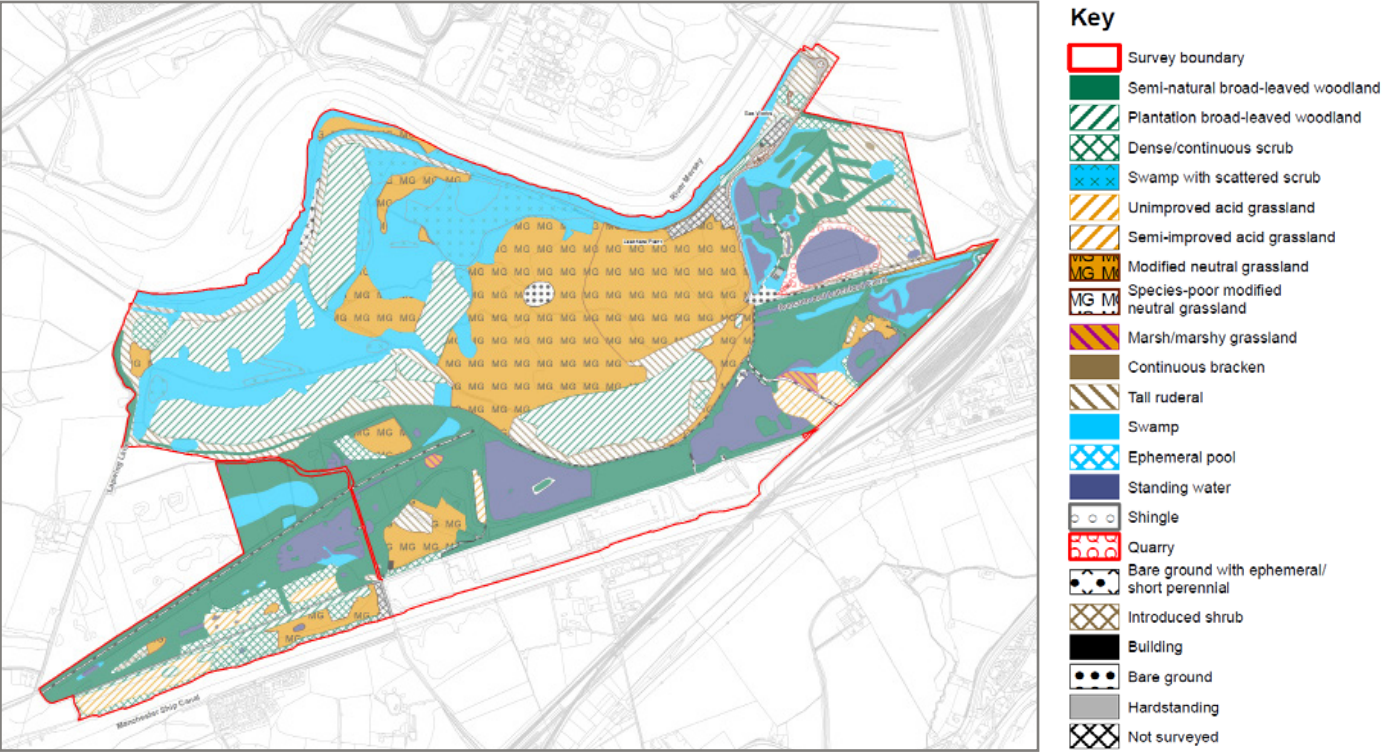


Table 1 – Habitats as existing on site

Habitat Type	Moore Nature Reserve	Arpley Landfill
Modified neutral grassland¹	Yes	Yes
Acid grassland	Yes	No
Marshy grassland	Yes	No
Tall ruderal herb	Yes	Yes
Dense continuous/ scattered scrub	Yes	Yes
Broad-leaved semi natural woodland	Yes	Yes
Broadleaved plantation woodland	Yes	Yes
Scattered trees	Yes	Yes
Hedgerows	Yes	Yes
Swamp	Yes	Yes
Standing water	Yes	No
Running water and ditches	Yes	Yes
Buildings	Yes	No
Hardstanding and bare ground	Yes	Yes

¹ 'Modified neutral grassland is not derived from agricultural grassland and the terms semi-improved and improved do not apply. Some modified neutral grassland may be species-rich but many swards are dense, coarse and species-poor. Modified neutral grassland naturally regenerates on disturbed ground and is unmanaged. It most commonly occurs in urban areas and on post-industrial land'.

Species

Protected species surveys carried out at the site to date include:

- Desktop records search
- Breeding bird survey
- Winter bird survey
- Otter survey
- Water vole survey

Although not an exhaustive list, the protected and notable species from Table 2 are found on site in regular and/or significant numbers.

The following protected and notable species are not confirmed on site, but might be capable of (re-) colonisation or population enhancement if habitats are managed appropriately.

- Otters,
- Water voles
- Polecat
- Round-leaved wintergreen
- Ear-lobed dog-lichen



Table 2 – protected and notable species on site

Species	Moore Nature Reserve	Arpley Landfill
Bat roosts	Yes	No
Great Crested Newts	Yes	No
Badgers	Yes	No
Wetland birds	Yes	Yes
Woodland birds	Yes	No
Birds of Prey	Yes	Yes
Birds of open habitats	No	No
Bluebell	Yes	No



Land Management Arrangements

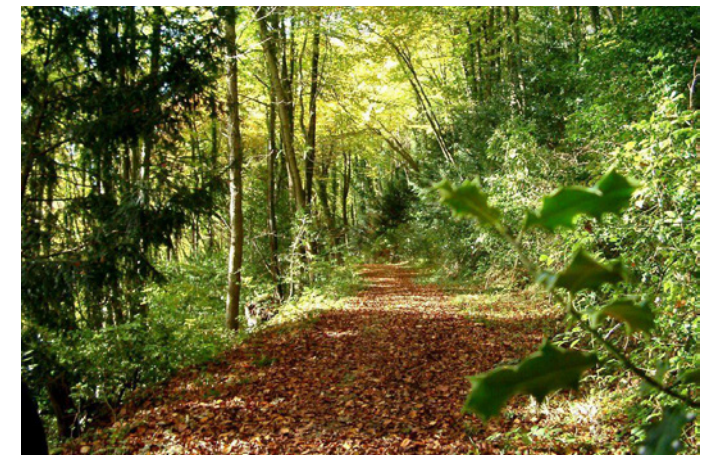
Moore NR is currently managed by a single ranger. Management includes providing opportunities for education, access management and some habitat works. There is no long-term management arrangement in place beyond the end of 2021. Resources for management include volunteer labour and an annual expenditure limit that gradually reduces until the landfill operator's management responsibility ends in 2021.

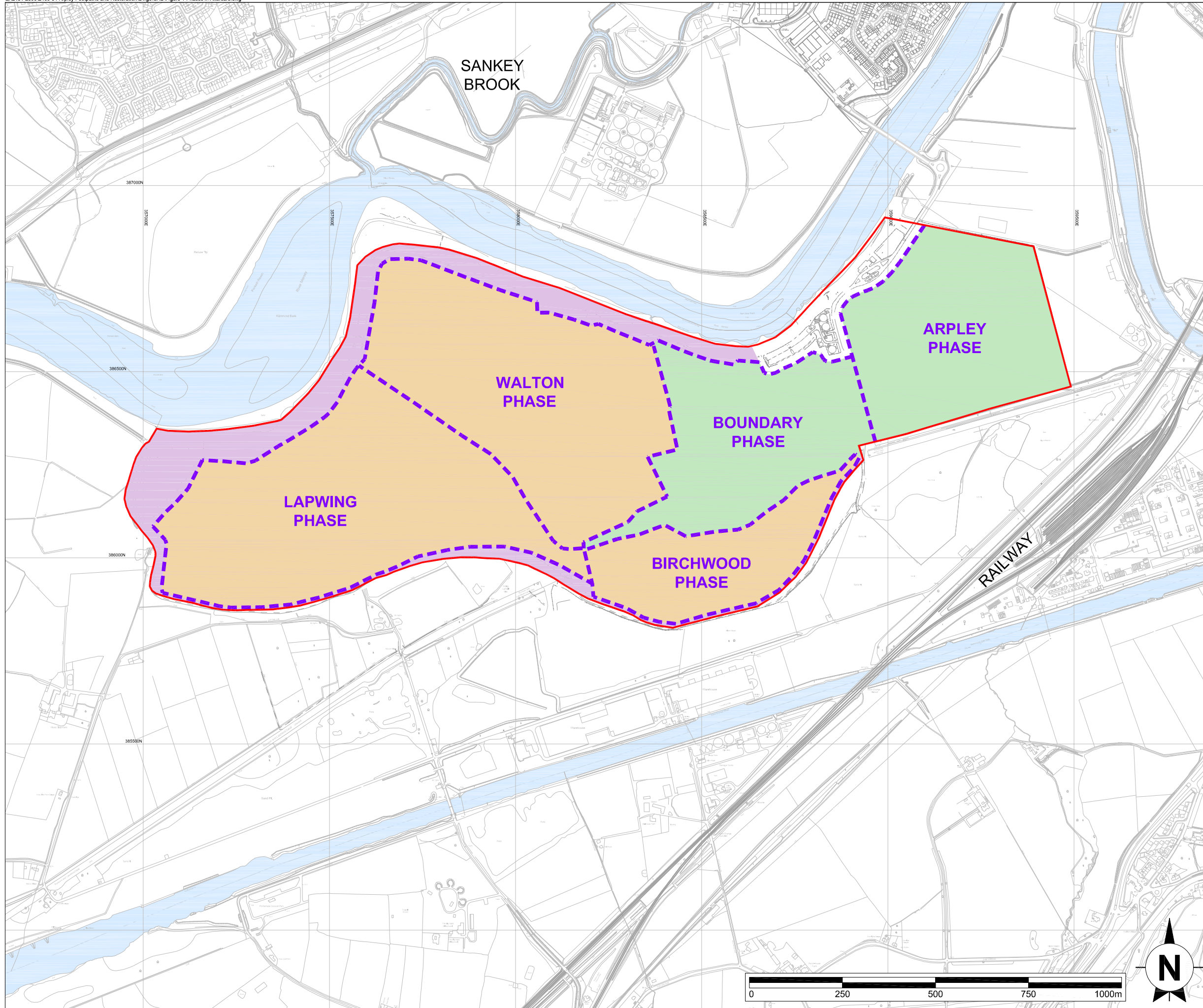
Arpley Landfill ceased its operations in October 2017. Since then the landfill has been in restoration and aftercare and has come to be known as 'Arpley Meadows Country Park'. The habitats on Arpley Meadows are managed by FCC. There are five restoration phases. Three are complete and are within their aftercare period which will extend until mid 2025. Two phases are not yet restored and are anticipated to be complete by late 2021, after which time they will receive ten years aftercare. Following complete restoration of the site it will be opened up to the public.

In summary, there is no current prospect of long-term, pro-active and regularly-funded habitat management on either the Moore NR or the Arpley Landfill / Arpley Meadows Country Park. For Moore NR, this would result in a gradual decline in

habitat quality and diversity. For the restored Arpley Landfill (Arpley Meadows), the potential of the site to progress towards a high-quality sustainable habitat is compromised by the lack of long-term arrangements beyond 2030. The provision of long-term management is an important part of Peel's approach to delivering biodiversity net gain and delivering a significant green infrastructure resource.

There is therefore an opportunity for the provision of long-term management of the Moore NR and Arpley Meadows Country Park to be incorporated into the allocation and future development of Warrington Waterfront.





- Arpley Landfill Site Boundary
- - - Phasing Boundary
- Entered Initial Aftercare
- Not in Initial Aftercare
- Areas Restored Outside of Phasing Boundary

Arpley Landfill Site

Figure 1

Phases in Aftercare

Scale
1:10,000@A3

Date
September 2019

Consultations

As part of the Ecological Assessment, a desktop study gathered data from local recorders, via the local records centre, about species currently or historically present on site, particularly at Moore NR.

Peel has engaged with :

- Warrington Council in relation to their ecological priorities for the Warrington Waterfront proposal, taking into consideration the representations received on the emerging Local Plan
- Cheshire Wildlife Trust in relation to their ongoing management of Moore NR
- Forestry Commission, in their capacity as neighbouring landowners who might be interested in a joined-up approach to management of green infrastructure

The local importance of Moore NR, particularly as an educational and visitor resource has been emphasised in public representations by the Wildlife Trust.



GCN DNA Testing

Headline Impacts

The built development, relating to Port Warrington and Warrington Commercial Park would result in the following losses of habitats at the construction stage, based on 2019 survey data and the proposed remediation strategy.

Operational stages of the proposal may result in further disturbances arising from traffic, lighting and human activity.

The following species would be affected, either directly by habitat loss or indirectly through disturbance and displacement:

- Badger
- Bats
- Great crested newts
- Protected bird species
- Bluebell

Peel has produced a Biodiversity Mitigation Strategy which sums up how the habitats and species would be affected and describes measures to minimise and compensate for adverse effects.

Table 3 – Habitat losses across the site

Habitat	Port Warrington losses (ha)	Warrington Commercial Park losses (ha)
Standing water	0.51	0.06
Lake	2.58	0
Tall ruderal vegetation	0.8	5.80
Swamp	2.59	0.62
Modified neutral and semi-improved grassland	8.55	12.11
Marshy grassland	0.17	0
Acid grassland	0.93	0
Bracken	0	0.05
Arable land	0	4.42
Scrub	4.57	1.94
Broadleaved plantation woodland	1.44	2.94
Broadleaved semi natural woodland	20.74	3.08
Buildings and hardstanding	0.64	0.13
Bare ground	0.39	0

Mitigating Our Impacts and Enhancing Biodiversity

Our ecological mitigation and biodiversity strategy has been devised in line with the approach as set out in national planning policy and guidance and upon on the following principles:

- Minimising impacts through design rationale as much as possible;
- Maximising green infrastructure through on-site embedded mitigation;
- Restoring and enhancing Moore Nature Reserve
- Enhancing Arpley Country Park

In respect of green infrastructure, as well as the Country Park, Peel is exploring ways of working with neighbouring landowners and Warrington Council to implement habitat creation and restoration works that will extend the benefits of the Arpley Country Park maintaining and enhancing the links to existing green infrastructure within Warrington.



Arpley landfill is to be enhanced from the existing rough grassland to a diverse mix of species rich grassland, scrub and woodland

Minimising Our Impact

Although there is a locational requirement for the Port Warrington Expansion that leads to an inevitable effect on Moore NR, Peel undertook an iterative design and assessment process to avoid larger areas of Moore NR being lost.

In particular, consideration was given to the feasibility of retention of the lake in its current position. It was concluded that it would not be possible due to logistical and circulation issues, coupled with the fact that the lake would not retain its current ecological value if retained between two port units. Further justification is provided in the Development Framework document (PW2).

The proposed Warrington Commercial Park is located on land with little current ecological value, mostly awaiting restoration.

Design-stage measures would be incorporated into the built development proposals, notably the provision of boundary woodlands to reduce visual and lighting disturbance to adjoining habitats.

Where possible, features of greater value and “irreplaceability” have been avoided, but the nature and size of the proposed buildings and the circulation arrangements means that woodland

loss is unavoidable, including two of the veteran trees identified in the preliminary arboricultural assessment.



A view of Lapwing lake which is to be lost as part of the development but will be mitigated for through the completion of a biodiversity net gain assessment



a view along the mersey showing the remediated Arpley landfill to the left of the river.

Maximising Green Infrastructure Through On-site Embedded Mitigation

The layout of Port Warrington and Warrington Commercial Park offers opportunity for linear habitat creation, including bioswales and woodland corridors which will assist in provision of “stepping-stone habitats” between retained Moore NR and Arpley Landfill and the wider network of habitats between the Manchester Ship Canal and the River Mersey.



Aerial Figure

Restoring and Enhancing Moore NR Local Wildlife Site

Approximately half of Moore Nature Reserve LWS is to be retained during development. There is opportunity within the retained sections to significantly increase the ecological value of the site and the opportunities it offers to local wildlife. This can be achieved through:

1. Woodland Management
2. Re-wetting of Runcorn – Latchford Canal
3. Funding of long-term management, including wardening and education, as set out in a Landscape and Habitat Management Plan
4. Promoting conservation and recolonisation of signature local species such as kingfisher, willow tit, water vole, otter and round leaved winter green.

Increased woodland management will provide a safer and more structurally diverse habitat which provides further opportunity for local bird, bat and invertebrate species, whilst re-wetting of the Runcorn to Latchford Canal offers foraging, commuting and breeding habitat to local amphibians, otter and water vole.

Funding of wardening and education will help to ensure conservation of the site is maintained into

the future and will, with a consistent presence, allow a reactive approach to management to ensure the best possible care is taken of the site.



Part of the existing Moore Nature Reserve footpath network. the footpath network will be extended and enhanced through this development.



Enhancing Arpley Landfill as a Country Park

A range of habitat enhancement measures are possible on Arpley Landfill:

- Additional woodland, species-rich grassland and reedbed creation
- Woodland enrichment planting
- Funding of long-term management, including wardening and education, as set out in a Landscape and Habitat Management Plan
- Promoting conservation and recolonisation of signature local species such as willow tit and otter

Increasing the woodland cover on Arpley Landfill, particularly compared to the restoration proposals approved under earlier planning permissions will result in reduced grassland cover. It is recognised that this will reduce the future ability of plants and birds of open grassland to thrive, but in the context of a societal need to increase carbon sequestration and the scheme's effect on woodland, it is considered that this is the most appropriate form of mitigation and compensation.



An example of one of the many ponds on site

Biodiversity Mitigation Strategy (BMS)

A BMS has been produced which demonstrates how the scheme's construction will be managed to avoid and mitigate harm to the range of interests on site. The type of measures include:

- Advance habitat creation and provision of replacement breeding, hibernating and resting features
- Construction Environmental Management Planning (CEMP), covering pollution control, timing of works, closed seasons for particular activities, severe weather restrictions, screening, protective fencing, sensitive lighting etc.
- Bespoke measures for each protected species and priority habitat
- A veteran tree compensation scheme
- Re-use of cleared vegetation, especially dead-wood habitat of value to invertebrates and birds
- Invasive Species Eradication

Advance habitat creation will allow more mature and diverse habitats to be present on site at the point of development whilst provision of replacement breeding, hibernating and resting features on site will ensure that there are features available to support any species which may be displaced or disturbed by development.

A suitably worded CEMP will further protect wildlife by ensuring physical impacts on protected species and habitats are avoided during development.

Avoidance of impacts on protected species and habitats will be further secured through production of bespoke measures including a detailed compensation strategy to mitigate, as far as possible, for impacts on veteran trees.

Use of dead wood on site will provide new habitat which is valuable for bird nesting and for bird and invertebrate foraging whilst removal of invasive species will reduce competition and allow for a more diverse species composition.

The BMS can be secured through planning conditions attached to future planning applications or through a development brief attached to the Warrington Waterfront allocation. If necessary a s106 agreement can secure advance habitat creation measures on Arpley Country Park.

For some species, a European Protected Species Licence will be required and the BMS summarises the conservation measures that would be included in a licence method statement.



One of a number of badger setts present within the woodland on site.



Japanese knotweed present on site which is to be remediated as part of the development.

Landscape and Habitat Management Plan (LHMP)

An outline LHMP has been prepared which describes how the following areas would be managed in the interests of nature conservation and education:

- Arpley Country Park, incorporating retained areas of Moore NR
- Structural areas of green infrastructure within the development e.g. boundary landscapes and bioswales
- Off-site areas used for habitat creation, where the landowner wished to incorporate their management into the LHMP.

Peel would likely establish a management company which would have the ability to provide long term access and management agreements to nature conservation organisation(s) for care of the Arpley Country Park.

The LHMP is produced in outline form for the purpose of demonstrating that the land can be allocated, in secure knowledge that the biodiversity mitigation measures would be sustained over the long-term, something that is an essential part of demonstrating “net gain”.

It is anticipated that the LHMP would be secured at planning application stages for the scheme through s106 agreement. As the Arpley Country Park provides green infrastructure for a wider area, it is appropriate for the LHMP to be funded by other developments in the Warrington Waterfront and the South West Urban Extension, again by means of s106 agreement.



“Wildlife on the Waterfront” – A Bespoke Commitment

Peel recognises that this development would result in habitat losses which cannot be rapidly compensated, in particular mature wet woodland. Whilst the habitat restoration and enhancement measures, managed over the long term, will eventually deliver biodiversity net gain, Peel is making a bespoke commitment to an early programme of intervention to enhance conditions for species that are, or could be, special features of the Moore area e.g. willow tits, water voles, otters, kingfishers and the round-leaved wintergreen. This enhancement would be primarily within the retained areas of Moore Nature Reserve.

The precise nature of the works programme will be developed in conjunction with local specialists, based on further investigations and feasibility studies.



Water Vole

Habitats Regulations Assessment

TEP has produced a “shadow HRA” for the purposes of informing the allocation of Peel’s land as part of the Warrington Waterfront Major Development MD1. The HRA considers a range of European sites (Natura 2000 sites) and identifies likely significant effects on certain birds and habitats associated with the Mersey Estuary SPA/Ramsar. On a highly precautionary basis, further effects on this and other Natura 2000 sites are identified “in-combination” with other plans and projects.

Mitigation measures are identified in the form of:

- CEMP (as described in the BMS)
- Boundary treatments and exclusion zones
- Cold-weather restrictions on potentially disturbing activities near wetlands used by SPA birds

The appropriate assessment identifies that, taking account of mitigation, there would be no adverse effect on integrity of Natura 2000 sites. The HRA can be revisited at later stages in the planning process, but it contains sufficient detail at the allocation stage for the Council to satisfy itself that it can discharge its obligations under the Habitats Regulations.



Aerial Figure

Biodiversity Net Gain (BNG)

TEP has prepared a BNG report, based on use of the established Defra metric 1.0 (the beta test version 2.0 is not yet adopted and is subject to consultation (as at February 2020). However the calculations will be updated to the latest version of the defra metric at the time of submission of an outline planning application.

The calculation proceeded on the basis that the current management arrangements at Moore NR and Arpley Landfill are short-term and unfunded beyond a 5-10 year period, whereas the future management arrangements would apply for over 30 years, and for the lifetime of the development, enabling good condition scores to be allocated to the existing and future habitats in the Arpley Meadow Country Park.

The calculation indicates a minor shortfall in biodiversity units based on the current scheme, but opportunities to create or restore additional habitats on a number of nearby sites are being explored which would enable a perceptible “net gain” to be delivered. It is apparent that the Government’s proposed 10% net gain threshold could be delivered through interventions on nearby land.

The BNG report is not yet available for publication,

since it is understood that Warrington Council will engage an ecological consultant to assess its Local Plan allocation, so Peel envisage the BNG calculation will be externally reviewed and, prior to Examination in Public, the BNG calculation can be published to take account of a) the review, b) any agreements relating to off-site habitat creation and c) any updates to the defra metric.

“Net Gain” is not assessed solely through the metric, it is incumbent that the scheme must follow the mitigation hierarchy and must also consider the actual species and habitats affected by the proposal. In this case, most species and habitats will benefit over the long term, but some species and habitats will not benefit. As noted earlier, there is a trade-off between a desire to create compensatory woodland and the loss of open grassland habitats. The net amount of wet woodland will decline, although to some extent the benefits it provides to species can be enhanced through management of retained wet woodland and through provision of non-wet woodland using a similar species mix on Arpley Country Park, albeit not on flooded substrates.



Conclusions

The construction of an extension to the existing Port Warrington and creation of Warrington Commercial Park will result in some unavoidable loss of biodiversity from the existing Moore Nature Reserve LWS. However, this document shows that the impacts of this development can and will be minimised as far as possible through a varied approach to management, enhancement and replacement of existing habitats which will maintain, enhance and diversify flora and fauna supported by the LWS in-perpetuity.

Impacts on habitats will be minimised through undertaking of a full biodiversity net gain assessment which will result in significant enhancement of Arpley Country Park and the creation of new ecologically valuable habitats in the areas immediately surrounding the site. Retained habitats have also been considered and will be enhanced through in-perpetuity management related to habitat enhancement.

Species diversity will be maintained and enhanced through, in addition to the creation of new habitats, species specific mitigation strategies which detail bespoke measures for each protected species to ensure that they are able to prosper on site well into the future.

Furthermore it has been shown that all international, national and local policy can be adhered to during development through the undertaking of all required surveys and the production of required reports and documentation including a LHMP, CEMP, HRA and ecological survey and reports.



Drawings and Documents Referred To:

Landscape Masterplan Peel Reference 10315_GA_PL_01)

Phase 1 Habitat Survey Drawing (TEP Reference G6929.01.001B)

Ecological Assessment (TEP, 2019)

Tree Survey (TEP, 2019)

Biodiversity Mitigation Strategy (TEP, 2019)

Landscape and Habitat Management Plan (TEP, 2019)

Shadow Habitats Regulation Assessment Report (TEP, 2019)

Biodiversity Net Gain Report (not yet available)