



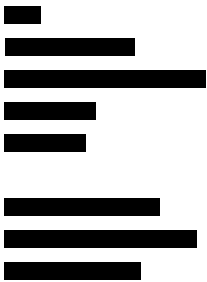
THE ENVIRONMENT PARTNERSHIP



WARRINGTON WATERFRONT WEST

MOORE

OUTLINE HABITAT AND LANDSCAPE MANAGEMENT PLAN



Offices in Warrington, Market Harborough, Gateshead, London and Cornwall

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and TEP ref: IN6929.01.001)

1.0 Introduction

Purpose of the Management Plan

- 1.1 This Management Plan has been produced by The Environment Partnership (TEP) Limited on behalf of Peel Holdings (Land & Property) Limited to provide a framework for long term landscape and habitat management and maintenance of the open spaces associated with the proposed expansion of Warrington Waterfront West.
- 1.2 Peel (Land and Property) is seeking allocation, and release from greenbelt, of land at Moore Nature Reserve and Arpley Landfill for their Warrington Waterfront West development proposal in the draft Local Plan. The area is part of the proposed allocation for Major Development (MD1) in the Warrington Local Plan.
- 1.3 Warrington Waterfront West includes Port Warrington extension, a multi-modal port facility which would provide opportunities for port related manufacturing and logistics. Nearby, the proposed Warrington Commercial Park will provide flexible employment space. Adding to the existing Port Warrington facility, the scheme provides a unique potential for a more sustainable approach to freight transport by linking movements along the Manchester Ship Canal to strategic road and rail networks.
- 1.4 Green infrastructure is integral to the draft allocation, including the creation and long-term management of Arpley Country Park and the long term management of the retained Moore Nature Reserve.

Scope of the Management Plan

- 1.5 This Management Plan provides information on managing landscape elements associated with the proposed allocation and includes the following areas:
 - Arpley Meadows Country Park;
 - Moore Nature Reserve;
 - Port Warrington Expansion; and
 - Warrington Commercial Park.
- 1.6 This Management Plan covers all areas of open space within the areas listed above and shown on Landscape Masterplan Proposal (Land Use Consultants ref: 10315_GA_PL_01) and the Landscape Masterplan (TEP ref: IN6929.01.001).
- 1.7 The Management Plan should be read in conjunction with the Ecological Assessment (TEP ref: 6929.01.001), Biodiversity Mitigation Strategy (TEP ref: 6929.01.039) and Biodiversity Net Gain Report (TEP ref: 6929.01.037).
- 1.8 This Management Plan also acknowledges the Moore Nature Reserve Draft Management Plan (Axis 1569-02 V2), submitted to comply with an obligation under s106 of the Town and Country Planning Act 1990.
- 1.9 The Draft Moore Nature Reserve Management Plan states aims and objectives for the reserve and provides an indicative program of maintenance operations and habitat improvement works within identified management compartments of the Moore Nature Reserve.

Structure of the Management Plan

- 1.10 Chapter 2.0 provides a summary of the factors influencing management and a site analysis. Chapter 3.0 outlines the long-term aims and objectives for management and Chapter 4.0 sets out how the success of the plan will be monitored.
- 1.11 Appendix A are the Landscape Masterplans (Land Use Consultants ref: 10315_GA_PL_01 and TEP ref: IN6929.01.001).

2.0 Site Management Considerations

Management Objectives

- 2.1 The long term management objectives of this plan are:
- To ensure that proposed habitats are successfully established and managed in perpetuity;
 - To enhance the biological and physical integrity of Moore Nature Reserve;
 - To improve the condition of the habitats within Arpley Meadows Country Park;
 - To enhance and maintain the existing woodlands across the Site, including those retained within the Port Warrington Expansion and Warrington Commercial Park;
 - To enhance public awareness and appreciation of the habitats and associated flora and fauna of Moore Nature Reserve and Arpley Meadows Country Park;
 - To ensure a Biodiversity Net Gain is achieved and maintained across the Site; and
 - To comply with legal obligations and constraints.

Ecological Factors

Designations

- 2.2 The Site is not covered by any statutory wildlife designations and the closest European site is the Mersey Estuary Special Protect Area (SPA) and Ramsar, 6.1km to the west.
- 2.3 Oxmoor Wood Local Nature Reserve is located 1.14km to the south west of the Site.
- 2.4 Moore Nature Reserve is largely designated as a Local Wildlife Site (LWS) and there are five further LWS in close proximity to the Site:
- Moss Side Farm;
 - Norton Marsh & Upper Moss Side;
 - Upper Mersey Estuary;
 - Gatewarth; and
 - Manor Park Woodland.

Habitats and species of principal importance in England

- 2.5 Section 41 of Natural Environment and Rural Communities (NERC) Act requires a list of habitats and species of principal importance in England to be drawn up.
- 2.6 Local Biodiversity Action Plans (BAPs) provide an indication of the relative value given to existing habitats and species. The Cheshire Local BAP has been used when assessing the value of the habitats and species present within the Site.
- 2.7 The following priority species and habitats listed in the Cheshire Local BAP will be sustained around or within the Site:
- Bats;

- Great crested newts;
- Bluebell;
- Lowland mixed deciduous woodland;
- Reedbeds; and
- Ponds.

Ecological Surveys

2.8 Below is a list of the ecological surveys carried out at the Site by TEP in 2018 - 2019:

- Desk study;
- Extended Phase 1 Habitat Survey;
- National Vegetation Classification (NVC) survey;
- Preliminary bat roost assessment and desktop study;
- Water vole and otter survey; and
- Breeding and wintering bird survey.

Flora

2.9 The following habitats are currently present within the Site:

- Grasslands (acid grassland, grassland in glades and woodland edges, marshy grassland, modified neutral grassland and seeded semi-improved grassland, species- rich grassland and species- rich wet grassland);
- Tall ruderal vegetation;
- Woodland (broadleaved woodland, lowland mixed deciduous woodland and plantation woodland);
- Scrub;
- Reedbeds;
- Waterbodies (ditches, ephemeral water bodies, lakes and ponds); and
- Bare ground.

2.10 These habitats will be enhanced through restorative land management.

Fauna

Great Crested Newts

2.11 TEP has undertaken detailed HSI assessments of all ponds identified on the Site. A total of 22 ponds were holding water at the time of survey and were subject to HSI assessment. Of these, the majority were found to have good or average suitability to support GCN.

2.12 The majority of these waterbodies are likely to contain at least some potential to support common amphibians and also GCN. There are also records of great crested newts being present within Moore Nature Reserve from survey undertaken in 2012.

2.13 GCN are protected under Schedule 5 of the Wildlife and Countryside Act (1981) as amended and the Conservation of Habitats and Species Regulations as amended (2012). Under this legislation it is an offence to intentionally kill, injure or capture great crested newts. It is also an offence to intentionally or recklessly damage, destroy or obstruct access to places used by GCN for shelter or protection or to disturb them whilst they are occupying these habitats.

- 2.14 Any works affecting this species will require a licence application to Natural England which in turn will need to demonstrate maintenance of the favourable conservation status of the species.

Birds

- 2.15 The Site's location on the River Mersey corridor and the presence of numerous bird watching hides on the Site, as well as the presence of extensive suitable habitat, means that a high number of bird records were identified during the Desk Study including birds with the following designations:

- Wildlife and Countryside Act 1981 (as amended), Schedule 1;
- Wildlife and Countryside Act 1981 (as amended), Schedule 9;
- Natural Environment and Rural Communities Act 2006, Section 41;
- Birds of Conservation Concern Red and Amber; and
- Cheshire Local BAP.

- 2.16 All UK wild birds are protected while at the nest. Effectively, this means that if removal of habitats (which can include buildings, trees, hedges, scrub and grassland) cannot be timed to avoid the bird breeding season (April to August inclusive), then a survey by a suitably experienced ecologist will be required to ensure no nesting birds will be affected. There is generally no process to gain a licence to disturb nesting birds; therefore, if active nests are present works will need to avoid the area of the nest until the young have fledged.

Bats

- 2.17 The Desktop Study identified numerous records of bat species within the Site, these include:

- Noctule recorded at Arpley Tip and foraging within the grasslands and along Lapwing Lane at Moore Nature Reserve;
- Common pipistrelle, soprano pipistrelle, pipistrelle species and Daubenton's recorded along Lapwing Lane and near Birchwood Pool in Moore Nature Reserve; and
- Common pipistrelle, soprano pipistrelle, pipistrelle species, brown long-eared, Daubenton's, whiskered and noctule all recorded within Moore Nature Reserve, with some records associated with Moss Wood, Birch Wood and Pump House Pool.

- 2.18 The desktop records and variety of suitable habitat across the Site indicate that the Site has potential to support a rich assemblage of bat species, all of which are listed under the Cheshire Local BAP.

- 2.19 Bats and their roosts are also protected under Schedule 5 of the Wildlife and Countryside Act (1981) as amended and the Conservation of Habitats and Species Regulations as amended (2012).

Badger

- 2.20 Records of badger were identified during the Desktop Study both on the Site and within 2km.

2.21 The habitats present across the Site offer foraging and dispersal habitat for badgers and the banks and woodland blocks offer suitable sett building potential.

2.22 Badgers and their setts are safeguarded under the Protection of Badgers Act (1991) to protect against baiting and deliberate harm or injury. Under this legislation it is illegal to interfere, damage or destroy a sett, obstruct access to a sett, or disturb a badger whilst it is occupying a sett.

Invertebrates

2.23 Records of Section 41 invertebrate species were returned within the Site, however a detailed survey has not yet been carried out to establish the composition of invertebrates. The mix of habitats present across the Site including woodland (with large amounts of dead wood), open water bodies and unimproved acid grassland are likely to support a diverse terrestrial and aquatic invertebrate population.

Invasive Species

2.24 The following invasive species have been identified on the Site:

- New Zealand pygmyweed;
- Himalayan balsam;
- Japanese knotweed;
- Giant hogweed;
- Cotoneaster;
- Japanese rose;
- Montbretia; and
- Rhododendron ponticum.

2.25 These species are listed on Schedule 9 of the Wildlife and Countryside Act (1981) as amended. Under this legislation it is an offence to plant or otherwise allow them to grow in the wild.

Social Factors

Public Amenity

2.26 The balance of both nature conservation and public amenity interests must be carefully managed due to the expectation that the public will visit Arpley Country Park for recreation purposes.

2.27 In Moore Nature Reserve, the Site will be managed principally to enhance potential for biodiversity therefore, public amenity management is crucial to prevent any conflict of interest.

Health and Safety

2.28 Peel Holdings (Land & Property) Limited will retain ultimate responsibility for the health and safety of the Site and will review health and safety as part of its regular inspections of the Site. The Site will be subject to informal inspections and formal annual inspection. Whenever the Site is visited, any deficiencies in safety provision will be noted and acted upon.

3.0 Management Intentions and Operations

Landscape Elements

- 3.1 The Site will comprise various landscape elements as shown on the Landscape Masterplan Proposal (Land Use Consultants ref: 10315_GA_PL_01) and the Landscape Masterplan (TEP ref: IN6929.01.001).
- 3.2 The landscape elements will be maintained inline with the management intentions provided in this Chapter and are divided into the main areas within the Site. Management operations for each landscape element will be further detailed in Habitat and Landscape Management Plans which will accompany planning application(s) for the Site.

Grasslands

- 3.3 The following types of grassland are, or will be, present at the Site:
- Acid grassland;
 - Grassland in glades and the woodland edge;
 - Marshy grassland;
 - Modified neutral grassland;
 - Seeded semi-improved grassland;
 - Species- rich grassland; and
 - Species- rich wet grassland.
- 3.4 The principal management objective will be to ensure these grassland areas are preserved by preventing ruderal species and succession of shrubs and tree saplings as this will compromise the integrity of the grassland composition and condition.
- 3.5 The timing and frequency of grass cuts will be determined by the management required to maximise conservation benefits of the desirable flora species.

Tall Ruderal Vegetation

- 3.6 Tall ruderal vegetation will be strimmed cyclically to ensure that woodland does not colonise these areas whilst preventing tall ruderal vegetation encroaching onto neighbouring grasslands which are also important habitats.

Woodlands

- 3.7 The following types of woodland are, or will be, present at the Site:
- Broadleaved plantation woodland;
 - Semi natural broadleaved woodland; and
 - Wet woodland.
- 3.8 The woodland will be managed for the benefit of birds, small mammals, amphibians and invertebrates. The management of woodland trees will be targeted towards enhancing ecological diversity, safety and amenity value as well as creating a varied age structure. In larger stands there may be potential to open up the canopy to allow for the growth of native woodland ground flora which may be lying dormant within the seed bank.

Scrub and Woodland Edge

- 3.9 Scrub and woodland edge are important habitats for birds and mammals. It is important that areas of scrub and woodland edge are preserved by preventing the encroachment of woodland and colonisation of tree saplings. Scrub and woodland edge will be routinely cut back to ensure the integrity of the edge habitats are retained.

Hedgerow

- 3.10 Management operations during the establishment phase (until branches of adjacent plants fully merge together) will comprise of weed control, watering (if required) and formative 'facing up' of the hedgerow to establish dense branch growth. New planting will be re-firmed as required.
- 3.11 The first cut to newly planted hedgerows is recommended within years 2 to 3 (dependant on growth), and will consist of 'facing up' either side of the hedge.
- 3.12 The hedge will be cut in an 'A' shape to maintain a wide base for bird nesting and roosting and if possible it will only be cut every two years.

Reedbeds

- 3.13 Reedbeds are an important aquatic habitat and management will focus on ensuring they do not dry up by regularly cutting back the vegetation on a cyclical basis which will also prevent dominant species from taking over. The cut litter will be removed from site to maintain water flow and prevent stagnation of water.

Waterbodies

- 3.14 The following types of waterbodies are, or will be, present at the Site:
- Ditches;
 - Ephemeral waterbodies;
 - Lakes; and
 - Ponds.
- 3.15 Ditches will be maintained for both functionality and as a habitat in their own right. Management will ensure ditches are able to support a diverse and healthy population of small mammals, amphibians, insects and waterfowl. Maintenance of ditches will include strimming the banks on an alternate basis and strimming the base of the ditch when it is not holding water.
- 3.16 Throughout the ponds and lakes, the maintenance of open water (approximately 35-60% of the surface area), prevention of dense shading and provision of dense stands of emergents, tall herbs and wet grasslands are important to support a diverse and healthy population of small mammals, amphibians, insects and waterfowl. Management will focus primarily on maximising the nature conservation potential of component features.

Bare Ground

- 3.17 Bare ground is an important habitat for invertebrates so the management of these areas will be to prevent encroachment of vegetation.

Hard Landscape Features

- 3.18 A number of hard landscape features are shown on the Landscape Masterplan Proposal (Land Use Consultants ref: 10315_GA_PL_01). These features will be regularly inspected. Any item(s) considered unsafe must be removed or made safe and replaced as soon as possible.

Invasive Species

- 3.19 A treatment plan for the invasive species will be devised to manage the invasive species identified in Moore Nature Reserve and Arpley Meadows Country Park. In the Port Warrington Expansion, invasive species will be eradicated within the developable areas and in the landscape buffers a long term treatment plan will be put in place.

4.0 Monitoring and Review

Ecological Monitoring

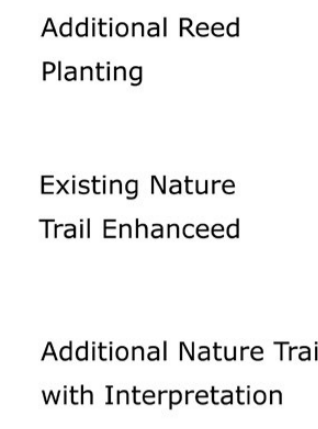
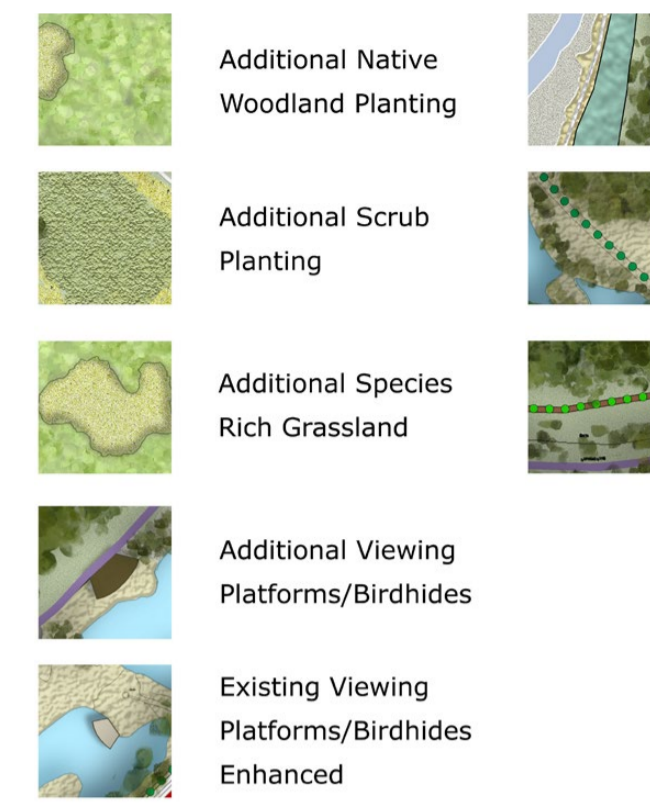
- 4.1 Monitoring of species and habitats will be crucial to monitoring the success of the habitat creation and enhancements and their management.
- 4.2 Habitat and Landscape Management Plans will accompany planning application(s) for the Site and will provide a schedule of routine ecological surveys to be undertaken.
- 4.3 The findings of ecological surveys will be used to update the management prescriptions of the habitats as required to ensure that the desired species are using the Site.

**APPENDIX A: Landscape Masterplans (Land Use Consultants ref:
10315_GA_PL_01 and TEP ref: IN6929.01.001)**

ARPLEY NATURE PARK

Masterplan Key

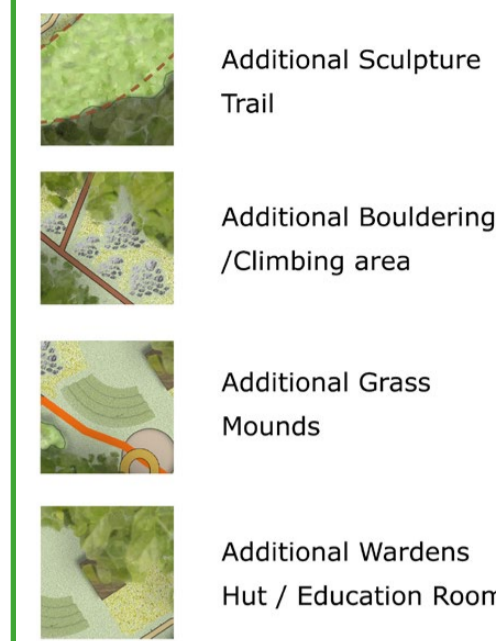
Ecological Enhancement Proposals



Country Park Features

- (A) Links to disused Canal Towpath
- (B) New Viewing Platform / Bird Hides
- (EB) Existing Platform / Bird Hides enhanced

Recreation Enhancement Proposals



Country Park Features

- (C) Forestry School / Outdoor Performance Area
- (D) Young Children's Play
- (E) Adventure Play Area
- (F) Sculpture Trail
- (G) Bouldering Rock Climbing Sculptural Feature
- (H) Wardens Hut / Education Room
- (I) Wardens Hut / Education Room

Additional Infrastructure



Country Park Features

- (J) Main Country Park Entrances
- (K) Proposed Car Parking
- (L) Secondary Pedestrian Entrances
- (M) Node Spaces
- (N) Gateways

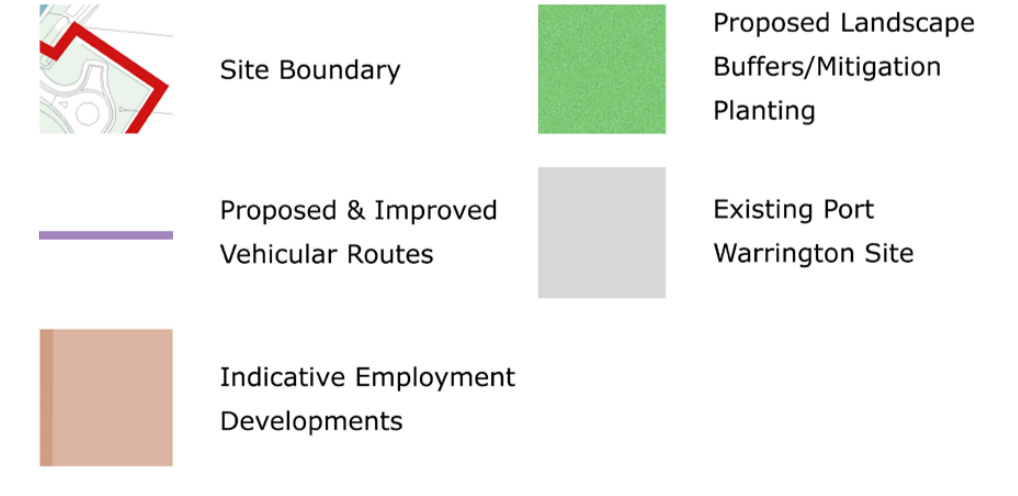
Proposed & Improved Vehicular Routes



Consented Enhancement Proposals



Warrington Waterfront Proposals Key



Project : Warrington Waterfront
 Client : Peel Land and Property
 Drawing Title : Landscape Masterplan Proposal
 Drawing Number : 10315_GA_PL_01





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