

Fiddlers Ferry Development Framework – Site Wide Biodiversity Net Gain Strategy v7.0

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Overview to BNG approach

The Site Wide Biodiversity Net Gain (BNG) Strategy, established through the Fiddlers Ferry Development Framework (DF), relates to the entire Fiddlers Ferry Allocation Site ('FF Allocation Site'), which has been identified through the Warrington Local Plan 2021/22 – 2038/39 as a mixed-use opportunity, comprising approximately 101ha of employment land ('FF Employment Area') and a minimum of 860 new homes ('FF Residential Area') on land north of the St Helens Canal and the Warrington-Widnes rail line (collectively the 'FF Development Site'). The FF Allocation Site also includes land to the south of the railway / canal, comprising the ash storage lagoons associated with the former Fiddlers Ferry Power Station ('FFPS'), which will remain within the Green Belt ('FF Lagoon Area'). Additional land, located outside of the FF Allocation Site but which comprised part of the former FFPS and is in the ownership of Peel NRE, is also included within this Site Wide BNG Strategy.

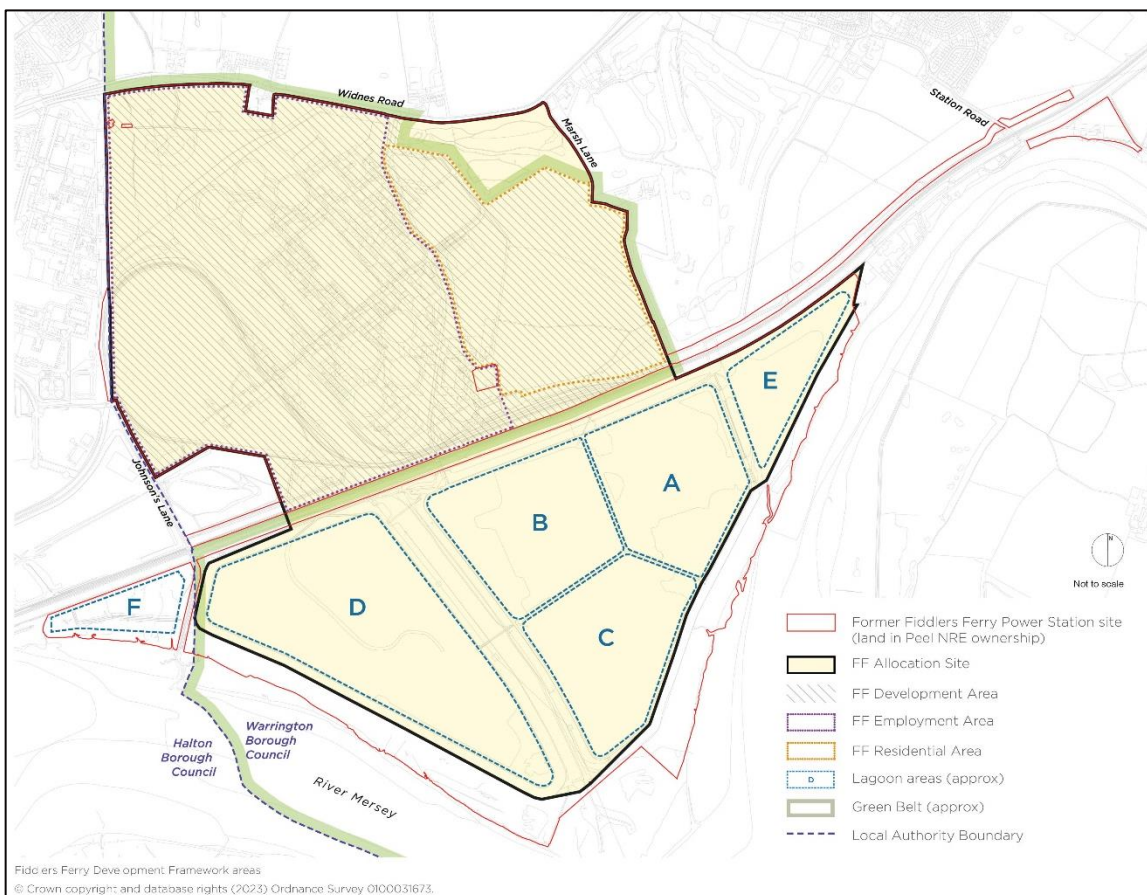


Figure 1: The FF Allocation Site Plan

The Site Wide BNG strategy is focused around retention of important areas of high ecological value within the FF Allocation Site where possible, habitat enhancement of these existing retained habitat features and creation of new habitats. Green corridors will be created within and around the new development, with links to the former SSE Fiddler’s Ferry Nature Reserve area (non-designated) and links to land around the lagoons, once restored. BNG relies on the application of the mitigation hierarchy to avoid, mitigate or compensate for biodiversity losses, which will be at the forefront of our approach.

Peel is committed to delivering a minimum of 10% biodiversity net gain across the entire FF Development Site, primarily focusing on onsite mitigation within each phase for any losses, but will include solutions elsewhere within the FF Allocation Site should there be any deficits. Additional BNG will be provided through the restoration of the lagoon area, where Peel have also committed to delivering 10% BNG.

The lagoon area, once restored, is an opportunity for significant BNG. This Site Wide BNG Strategy, and the DF as a whole, take this into account, alongside the opportunity for short term BNG in non-operational or areas without ash deposits (e.g former cooling tower settling lagoon (lagoon C)), as well as the requirement for ongoing ash extraction, future lagoon restoration once ash extraction comes to an end and future uses including nature conservation and recreation.

It should be noted that a detailed BNG metric has already been undertaken and submitted as part of the FF Employment Phase 1 application (LPA ref. 2023/00392/EA).

Key Strategic Areas

The key strategic areas, which will form the basis of the Site Wide BNG Strategy, include:

1. Former SSE Fiddlers Ferry Nature Reserve area;
2. Green corridor along the eastern and railway boundary;
3. Vyrnwy aqueduct green corridor; and
4. Ash lagoons to the south of the railway line / canal.

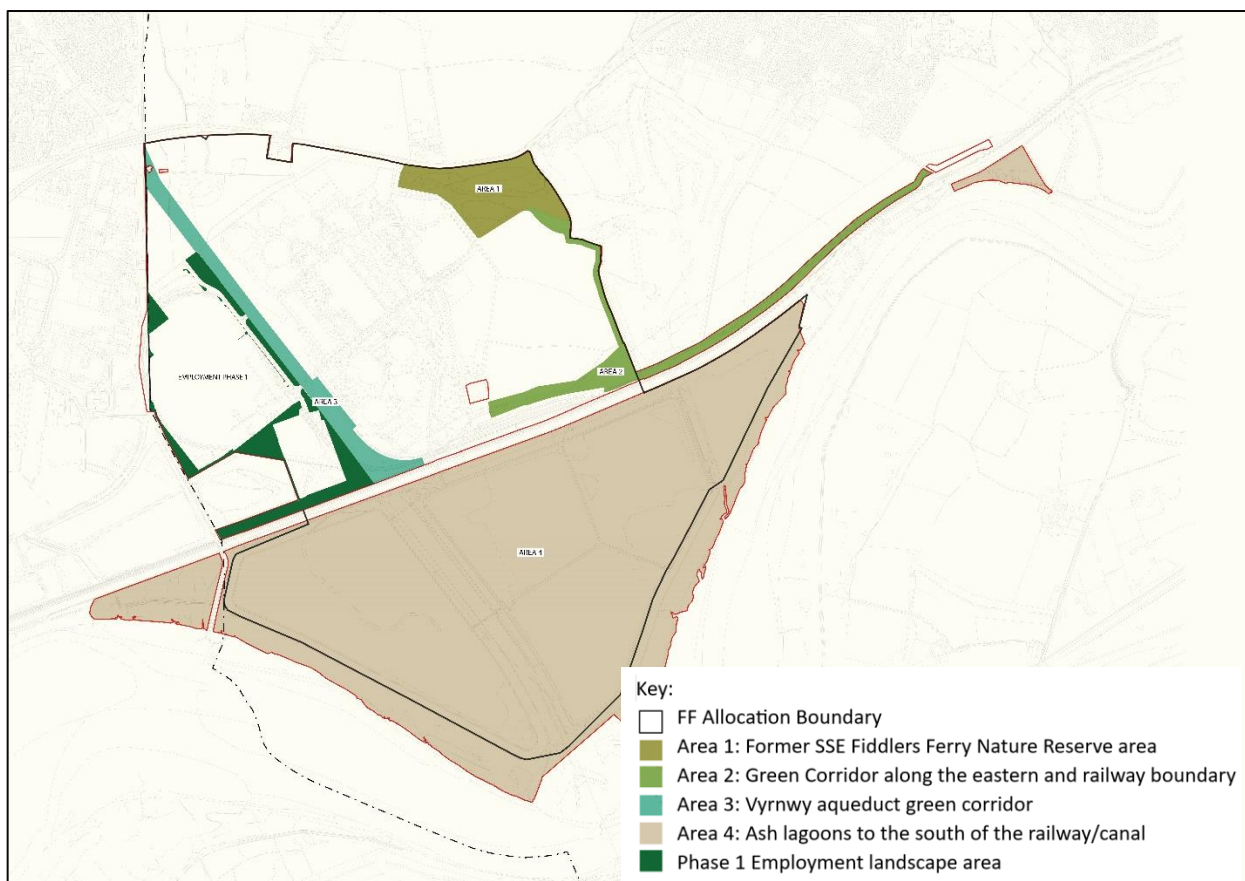


Figure 2: Key Strategic Areas for BNG

Area 1: Fiddler's Ferry Nature Reserve Area

Within the northeast of the FF Allocation Site there is an area of land (approximately 8.4ha) that was historically set aside from the main power station development; known as the former SSE Fiddlers Ferry Nature Reserve area. Although not technically a statutory or non-statutory designated wildlife site, the area does offer good ecological value. The pond and grassland habitats within this area is known to support a range of dragonflies, damselflies and historically had records of great crested newts.

Following a UKHAB habitat survey in 2022 this 'nature reserve' area was determined to consist of a combination of lowland mixed deciduous woodland, other broadleaved woodland, other neutral grassland with scattered tall ruderal herbs and scrub and 2 small ponds. There has been little recent habitat management and therefore many of the habitats offer opportunities for enhancement. Full details of these habitats and current conditions are below:

- The **semi-mature broadleaved woodland** band (3.66ha) was recorded along the northern boundary of the 'nature reserve', adjacent to the A562. From past aerial imagery, the woodland appears to have been planted around the time of the power station opening (in the early 1970's), but it is now a mixture of planted and self-set trees. This woodland classifies as priority habitat of principal importance. Species include English oak, black poplar sp., silver birch, wych elm, wild cherry, ash, willow sp. and alder. There is a dense scrub layer including hazel, dogwood, hawthorn, dog rose, holly and blackthorn. Ground flora included wood avens, herb-robert, bramble, meadowsweet, common fleabane and willowherb. The woodland was classified as being in moderate condition.
- The **other broadleaved woodland** (1.91ha) lies within the southern half of the nature reserve and consists of dominant willow sp., with silver birch and alder. This woodland appears to have developed through succession from scrub habitat. The woodland was again classified as being in moderate condition.
- Between the two areas of woodland within the reserve lies an area of **other neutral grassland** (2.41ha). The sward height of the grassland is tall and areas are overgrown with scattered scrub and tall ruderals throughout. Hay meadow indicators are rare or absent. The grassland is considered to be moderately species-rich grassland, which due to lack of management is being overgrown with scrub species reducing its ecological value. Despite the encroachment of scrub species the grassland is still currently valued as being in good condition, although this is likely to change without future management.
- At the time of survey only **2 ponds** were present within the 'nature reserve' with one located by the Educational Centre and the other towards the south west, both ponds held water and were categorised as being in good condition. Having previously been recorded as supporting great crested newts (GCN) these ponds are both considered priority habitat of principal importance. There are however a number of other locations within the reserve where ponds were previously recorded but were no longer found to be present, being completely vegetated over and no longer holding water.

This 'nature reserve' area will remain within the Green Belt, but is a fundamental part of the BNG and landscape strategies for the FF Allocation Site. Habitat enhancement and management measures will be implemented, focusing on enhancement of the existing woodland habitat to achieve fairly good/good condition woodland and maintaining the current condition of the grassland and pond habitats. Where ponds were previously present, new pond creation will be considered, to create a stepping stone effect of aquatic features through the reserve. These measures will help to ensure the continued value of the site for invertebrates and great crested newts. There may be a need to widen Marsh Lane on the eastern edge and any loss of woodland will be compensated for through a combination of woodland enhancement measures, increasing the value of the retained woodland, and woodland creation. Detailed principles for the habitat enhancement and management measures are set out within the Development Framework itself, which will inform the detailed design submitted pursuant to a future application for planning permission.

Area 2: Green Corridor along eastern and railway boundary

As well as retention of the Fiddlers Ferry Nature Reserve area itself, significant green corridors will provide connections across the FF Allocation site and linking to the wider area, specifically along the eastern boundary and along the railway boundary up to Station Road, using former operational land that accommodates pipework from the pump house which adjoins but is outside the FF Allocation Site. The existing habitat within the proposed eastern and railway green corridors was assessed as part of the 2022 UK Habitat survey and full details of the existing habitats within this area and habitat conditions are provided below:

- The majority of the eastern boundary of the FF Allocation Site is currently **arable** land in use for cereal crops and therefore considered of low ecological value with opportunities for alternative habitat creation.
- Small areas of **other neutral grassland** (0.77ha) scattered around the field margins including perennial rye grass, Yorkshire fog, cock's-foot, selfheal, autumn hawkbit, creeping thistle, black medick, white clover and common sorrel. This habitat does not qualify as priority habitat arable field margins. This habitat was assessed as offering moderate condition.
- In the southeast corner of the proposed FF Residential Area there is a block of **broad-leaved woodland** (2.54ha), which is situated adjacent to the railway line. The woodland is dominated by planted immature trees including alder, willow, ash, hawthorn, hazel, elder and field maple. The ground layer is dominated by rank grasses and tall herb species. The woodland was classified as offering moderate condition.
- **Mixed scrub** is present along the railway line boundary. The scrub habitat has developed through succession from bare ground and includes bramble and hawthorn species. This habitat was assessed as being in moderate condition.
- A band of **bareground** is also present along the railway boundary. This area of artificial unvegetated surface lies interspersed with areas of scrub and grassland. Parts of this area offers opportunities for habitat creation.

Within this strategic area new habitats such as woodland bands, scrub and species-rich grassland on the areas of existing arable land and bareground. While enhancing the existing woodland and scrub habitat present, to achieve fairly good/good condition habitats where possible. We would be looking for a natural/semi-natural end result, to tie in with the adjacent proposed residential development plans.

Area 3: Vyrnwy Aqueduct green corridor

Within the west of the FF Allocation Site there is a significant corridor which follows the line of the Vyrnwy Aqueduct and associated buffer. Given the restrictions preventing building over this area, it offers an opportunity to use this land as a green corridor for ecological benefits. The linear nature of this strategic area is important as it provides an opportunity to provide a green connection between farmland habitat north of the A562 and the land south of the canal associated with the River Mersey through the middle of the development.

A significant section of the aqueduct is currently actively farmed and it is proposed that this activity will cease in line with development phases, and the land used as a green corridor, but which will not prevent or restrict United Utilities' (UU) ability to manage, maintain or access its asset. The proposed management of the aqueduct will be a benefit to the protection of UU's asset as there will be no farming activity taking place directly over the pipelines as at present.

The existing habitats within the Vyrnwy Aqueduct corridor were assessed as part of the 2022 UK Habitat survey and full details of the existing habitats within this area and habitat conditions are provided below:

- The majority of the northern half of this corridor is **arable** land, in use for cereal crops and therefore considered to be of low ecological value with opportunities for alternative habitat creation.
- Within the southern section of this corridor there is areas of rank and unmanaged swards of **other neutral grassland** (1.28ha), lying adjacent to access roads and the railway. The dominant rank grasses

include cock's-foot, false oat-grass, creeping bent, Yorkshire fog and meadow foxtail. The sward was considered to be fairly uniform. The other neutral grassland was assessed as being in moderate condition.

- An area of wetland dominated by common reed is present within the southern part of the corridor, forming **marshy grassland**. The grassland is being encroached by willow scrub along the aqueduct valley. The grassland is considered to be in poor condition.
- **Mixed scrub** is present at the most southern end of the aqueduct corridor as it approaches the railway. The scrub habitat has developed through succession from bare ground and includes bramble and hawthorn species. This habitat was assessed as being in moderate condition.
- A band of **bareground** is also present within the southern end of the aqueduct corridor. This area of artificial unvegetated surface includes tracks, the railway ballast and areas for storage. This area offers opportunities for habitat creation.

Given the habitats present along the Vyrnwy Aqueduct corridor we would look to create grassland habitats within the existing areas of arable land and woodland habitat where there is bareground to the south. We would look to include habitat enhancement measures for the grassland habitats bringing them up from poor/moderate to better condition. We have been provided with UU's Standard Conditions for Working in Proximity to Pipelines and the proposed strategy is fully in line with this document.

Area 4: Ash Lagoons to the south of the railway line / canal

Located between the St Helens Canal and the River Mersey are a series of lagoons which were used for the storage of ash generated by FFPS. This ash is now being extracted and reused in a phased manner, as it presents a valuable aggregate resource. The lagoon area is designated as the 'Upper Mersey Estuary' Local Wildlife Site (LWS) and a number of other locally designated wildlife sites lie immediately adjacent including:

- Astmoor Saltmarsh and Swamp LWS;
- Norton Marsh and Upper Moss Side Fields LWS;
- St Helens Canal LWS;
- St Helens Canal Disused A LWS;
- Upper Mersey Estuary Intertidal Areas and Mudflats LWS; and
- Widnes Warth saltmarsh LWS.

It is considered that the ash lagoon area with its adjacent saltmarsh and mudflats in the Mersey Estuary, provides an ideal strategic location for further ecological benefit. It should be noted that some elements of the FF Lagoon Area are situated outside the FF Allocation Site but will be included within the overall restoration and habitat enhancement works – this includes Site F, which is located within Halton Borough.

The ash lagoons and surrounding area (including the pumphouse location) have been subject to a detailed UKHAB survey and condition assessment in late May 2023. This survey was specifically undertaken in late May to ensure any saltmarsh habitat was identified in line with seasonal restrictions. Historical survey work over the area has been obtained and thoroughly reviewed to ensure we have as complete an understanding of the ecology of the area as possible. The results from the UKHAB survey, along with any existing ecology information on the area, has been used to determine the BNG baseline position and identify potential areas for habitat enhancements/creation. A BNG metric (**Appendix 1**) and report (**Appendix 2**) have been prepared which set out the current baseline habitat types and conditions for the lagoon area in detail. In summary, the lagoon area is dominated by approximately 41ha of urban habitat offering no existing ecological value and provides opportunity for habitat creation. The remaining habitats surrounding these 'urban' categories include higher distinctive habitat such as woodland, coastal saltmarsh, wetland, scrub, grassland and open water. The overall baseline biodiversity value of the land south of the railway line/canal totals 1396.90 habitat units for area-based habitats, 7.46 units for hedgerows and 1.01 units for watercourses. The biggest habitat contributor is the saltmarsh contributing 497.59 units. Therefore, Peel are committing to the delivery of an additional 140 biodiversity units within the lagoon area, to hit the 10% BNG target.

The storage of ash on land to the south of St Helens canal was first consented as part of the original planning permission for the power station in September 1963 (LPA ref. 64/2/145). A series of subsequent planning permissions for the extension and alteration of the ash storage lagoons have been granted, with the extant consent for ash disposal and excavation approved in March 1990 (LPA ref. 88/22513) ('the 1990 Permission').

In 1987, as part of European Year of the Environment, The Groundwork Trust and Mersey Valley Partnership were commissioned by the Central Electricity Generating Board (as operator of FFPS at the time) to carry out a study into creative nature conservation and large-scale environmental improvement of the power station. This resulted in the "Energy for Wildlife" report, which contained a series of recommendations for improving the environmental aspects of the FFPS site. As part of the 1990 Permission, an Agreement made pursuant to Section 52 of the Town and Country Planning Act 1971 ('s.52 Agreement'), was entered into between the Central Electricity Generating Board and Cheshire County Council (dated 30th March 1990). The s.52 Agreement sought to ensure that a flexible approach to site development and the progressive implementation of the recommendations of the Energy for Wildlife report was adopted by both parties (and their successors in title).

The following summarises the recommendations of the Energy for Wildlife report in terms of management and restoration:

- Programme of progressive restoration should be adopted for the lagoons (as specified in the Management Plan and Rolling Programme).
- Greater community use encouraged subject to operational requirements of the station and ash disposal on the lagoons.
- Use of the marsh and ash lagoons for nature conservation should be optimised during the operational life of the station subject to operational requirements and ash disposal on the lagoons.
- Final use of the lagoons would include for nature conservation following the completion of ash deposition or removal.
- Maintenance of the different habitats that currently exist.

Clause 2 of the s.52 Agreement requires a five-year rolling programme and management plan for the land south of the railway/canal to be submitted to Cheshire County Council (now succeeded by Warrington Borough Council) for approval not less than six months prior to the end of each five-year period, and such approval not to be unreasonably withheld.

In accordance with Clause 2 of the s.52 Agreement, an updated Lagoon Management Plan (LMP) will be submitted to WBC. To ensure that full consideration is given to preparing a high quality, deliverable Restoration Plan, a substantial programme of site investigations and technical assessment work is required to be completed, including further ecological surveys and design work. The detailed Restoration Plan will be presented within a further updated version of the LMP, submitted pursuant to the extant planning permission for ash extraction (LPA ref. 88/22513) and its associated s.52 Legal Agreement. The detailed Restoration Plan for the Lagoons will be focused on nature conservation and recreational use, as well as maximising opportunities to achieve a 10% BNG above the existing baseline.

The programme for ash extraction within the lagoons is based on market demand and therefore an exact programme of works cannot be set out in advance. However ash extraction will be phased allowing for a phased restoration plan, with contours and landform to be agreed via the existing requirements to prepare a lagoon management plan (which is effectively a working programme for extraction of ash followed by restoration). Within the lagoon area there are certain locations that Peel will look to bring forward ahead of the rest of the lagoon restoration providing short-term BNG value. These locations are as follows:

- Restoration and enhancement of Lagoon C, which is no longer needed as a settling lagoon;
- Non-operational Mersey foreshore saltmarsh;
- Surrounding low level fringe habitats;
- Site E – an ash stockpile which could be excavated in the next 2 to 5 years pending a successful processing trial and appropriate permissions; and

- Management of and enhancement of vegetation on exterior bunds (whilst bund areas form part of the retaining structures to the lagoons).

Additional Onsite Green Corridors

It is proposed that there will be a number of additional smaller green corridors across the FF Allocation Site, including the green wedge between the FF Employment Area and FF Residential Area, and east to west through the residential and employment areas and along the canal boundary, acting as both routes for people and wildlife. It is proposed that these green corridors will provide links to the more strategic landscape areas discussed above. These green corridors will likely include linear habitats such as hedgerows/trees, along with smaller pockets along the corridor with opportunities for grassland habitats, ponds or other wetland features such as swales. A green corridor along the northern boundary of the FF Allocation Site will also be created, likely to be formed from a combination of hedgerow, tree lines and grassland areas.

BNG Solution Hierarchy

BNG enhancements associated with development within the FF Development Site will be delivered in line with the following hierarchy:

- 1.) On-site BNG delivery within the boundary of that phase of development within the FF Development Site.
- 2.) BNG delivery on other land within the FF Development Site.
- 3.) BNG delivery within the FF Lagoon Area (in addition to existing restoration requirements), where this is achievable in conjunction with ash extraction and phased restoration and provides appropriate biodiversity units to mitigate losses within the FF Development Site.
- 4.) BNG delivery on other land outside of the FF Allocation Site, but which formed part of the former power station site.

Summary

Peel is committed to delivering a minimum of 10% BNG across each development phase and across the entire FF Development Site. Peel will look to deliver BNG within the red line boundary of each development phase, mitigating for any habitat losses as close to the impact as possible. Where necessary, solutions elsewhere within the FF Allocation Site and beyond will be included should there be a deficit in biodiversity units.

Additional BNG will be provided through the restoration of the lagoon area, where Peel have also committed to delivering 10% BNG. Given that the programme for ash extraction of the lagoon area is based on market demand and therefore not fixed, in the immediate term we propose to look at habitat parcels around the lagoons not in the active ash extraction areas to achieve early BNG.

Given the site complexities it will take time to design and work up a deliverable detailed restoration plan for the whole site. This restoration plan will be developed and delivered via the Lagoon Management Plan. Consultation with WBC and other relevant stakeholders will ensure most effective restoration scheme is developed in terms of BNG units and that the benefits to the Mersey Estuary SPA and surrounding local wildlife sites are fully exhausted.

The delivery of a minimum of 10% BNG is an achievable goal, with multiple mitigation options available to ensure it can be delivered in line with the proposed planning programme, with significant potential for additional BNG within the southern lagoon areas as part of the phased restoration.

Appendices:

Appendix 1: Lagoon Area BNG baseline BNG metric

Appendix 2: Lagoon Area BNG baseline report