



AQUIND Limited

AQUIND INTERCONNECTOR

Outline Landscape and Biodiversity Strategy - Low Resolution

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1. OUTLINE LANDSCAPE AND BIODIVERSITY STRATEGY

1.1. INTRODUCTION

1.1.1.1 This Outline Landscape and Biodiversity Strategy (the 'Strategy') has been prepared on behalf of AQUIND Limited. It forms part of the application for a Development Consent Order ('DCO') that is being submitted to the Secretary of State ('SoS') for Business, Energy and Industrial Strategy ('BEIS').

1.1.2 BACKGROUND

1.1.2.1 AQUIND Limited is seeking to construct and operate the Project - an electricity interconnector between France and the UK, to allow the transfer of electricity across borders. The Proposed Development for the purposes of the DCO consists of the parts of the Project that are located in the UK and within the UK Exclusive Economic Zone ('EEZ'). The Strategy deals with the Onshore Components of the Proposed Development, which include

- Section 1 Lovedean (Converter Station Area);
- Sections 2 – 9 (Onshore Cable Corridor); and
- Section 10 Eastney (Landfall).

1.1.2.2 Both the Converter Station Area and the Landfall are based on a parameter envelope - see Converter Station and Telecommunication Building Parameter Plans (document reference 2.6) for the Converter Station Area and Landfall (Optical Regeneration Parameter Plan Sheet 1, document reference 2.11) for the Landfall. Both are considered to represent a worst-case scenario in terms of the effects of the development on landscape character.

1.1.2.3 A full description of the Proposed Development is given in Chapter 3 (Description of the Proposed Development) of the Environmental Statement ('ES') Volume 1 (document reference 6.1.3).

1.1.2.4 This Strategy seeks to provide the Local Planning Authorities ('LPA's) of East Hampshire District Council ('EHDC'), Havant Borough Council ('HBC'), Portsmouth City Council ('PCC') and Winchester City Council ('WCC') in consultation with the South Downs National Park Authority ('SDNPA') the confidence that AQUIND Limited will achieve the objectives defined in this document. It should be noted that the management, maintenance and monitoring activities identified in this, and any subsequent, strategy would allow for some flexibility as planting matures to respond

to unforeseen events such as flooding or the consequences of climate change.

1.1.3 PURPOSE OF THE STRATEGY

- 1.1.3.1 The purpose of the Strategy is to outline in draft, the measures that would mitigate the effects of the Proposed Development on landscape and biodiversity features and enhance the value of such features in accordance with relevant planning policies.
- 1.1.3.2 Mitigation and enhancement measures seek to protect and retain existing vegetation and habitats unaffected by the proposals and restore, where practicable, the landscape temporarily lost, such as through mitigation planting, as well as identifying additional areas to set aside for landscape and biodiversity enhancement.
- 1.1.3.3 The Strategy presents a coordinated approach to landscape, ecological and arboricultural requirements in order to minimise conflicts and maximise benefits between them.
- 1.1.3.4 The Strategy is accompanied by an outline planting specification for years 0 to 5 in Appendix 6.10.1 (Outline Specification) and Outline Landscape and Biodiversity Strategy Management Plans for the Converter Station and Landfall in Appendix 2 of this Strategy:
- Figure 6.10.1 (Outline Landscape and Biodiversity Strategy Management Plan - Converter Station Area); and
 - Figure 6.10.2 (Outline Landscape and Biodiversity Strategy Management Plan - Landfall).
- 1.1.3.5 The draft DCO (document reference 3.1) includes requirements that, following DCO consent a detailed Landscape and Biodiversity Strategy will be submitted for approval to the relevant discharging authority. The detailed/final strategy will be required to be prepared substantially in accordance with this outline Strategy. The detailed Landscape and Biodiversity Strategy will include detailed landscape mitigation plans, together with management, maintenance and monitoring plans.
- 1.1.3.6 The management, maintenance and monitoring plan would prescribe the maintenance regimes for all different landscape/habitats considering the aims, specific objectives and functions of each area of planting/habitat to ensure the full and successful establishment of the planting reviewed against specific targets/indicators.
- 1.1.3.7 The requirements for a detailed strategy could be discharged per work number or cumulatively with more than one Work Number.
- 1.1.3.8 As outlined above the Strategy has been prepared to respond to consultation comments relating to the need to provide information on the long-term management of existing and proposed planting within the Order Limits. This Strategy therefore includes the management and enhancement objectives and associated landscape prescriptions for the Converter Station Area and Landfall, as well as providing

background context and links to the overall Design Principles, outlined in the Design and Access Statement (document reference 5.5) and mitigation assumptions relating to the Onshore Cable Corridor.

1.1.3.9

The Strategy is structured as follows:

- Section 6.10.2: Local policy context
- Section 6.10.3: Existing landscape, arboricultural and biodiversity features;
- Section 6.10.4: Impacts, mitigation and enhancement;
- Section 6.10.5: Landscape and biodiversity design for mitigation and enhancement;
- Section 6.10.6: Site specific landscape management prescriptions; and
- Section 6.10.7: Monitoring, responsibilities and review requirements.

1.2. LEGISLATION, LOCAL POLICY CONTEXT AND GUIDANCE

1.2.1.1. This Strategy has taken into account current legislation, local policy and guidance relevant to landscape and biodiversity. For a comprehensive review of legislation, policy and guidance, and the impact of the Proposed Development on policy objectives, see the Chapter 15 (Landscape and Visual Amenity); Chapter 16 (Onshore Ecology) of the ES Volume 1 (document reference 6.1.15 and 6.1.16) and the Appendix 16.3 (Arboriculture Report) of the ES Volume 2 (document reference 6.3.16.3).

1.2.1.2. The National Policy Statement for Energy ('EN-1') Department for Energy and Climate Change (DECC, 2011) provides national planning policy that the SoS must have regard to when deciding the DCO Application, in addition other prescribed matters. Specific policy references of relevance to the Strategy are covered in Chapter 15 (Landscape and Visual Amenity), Chapter 16 (Onshore Ecology) and Appendix 16.3 (Arboriculture Report) as detailed above.

1.2.1.3. A summary of local policy only is provided below to show the local planning context for the Strategy.

1.2.2 LOCAL POLICY CONTEXT

1.2.2.1 The Converter Station Area spans two LPA areas, EHDC and WCC. Landfall lies within PCC.

1.2.2.2 EHDC, WCC and PCC Local Plans seek to conserve and enhance distinctive or important landscape, arboricultural and biodiversity features. Of particular interest to this Strategy is how the Proposed Development fits into the local landscape setting. Policies in relation to this and the local policy context of relevance to the Converter Station Area and Landfall are summarised below.

Section 1 – Lovedean (Converter Station Area)

1.2.2.3 The following policies are of relevance to this Strategy:

- East Hampshire District Local Plan: Joint Core Strategy. (East Hampshire District Council and South Downs National Park Authority, Adopted June 2014):

- CP20 Landscape requires new development to protect and enhance natural and historic features which contribute to the distinctive character of the landscape; incorporate new planting to enhance the setting and maintain, manage and enhance the green infrastructure networks;
- CP21 Biodiversity requires development to protect and enhance sites and features; achieve a net gain in biodiversity by ensuring adverse impacts are avoided where possible or, if unavoidable are appropriately mitigated for; and
- CP28 Green Infrastructure permits development which enhances and maintains the network of green infrastructure.
- East Hampshire Local Plan, Second Review, adopted version. (East Hampshire District Council, 2006). Policy UI1 New Utility Infrastructure in the Countryside states that development will be permitted if measures are taken to ameliorate the environmental impact.
- Winchester District Local Plan Part 1 Joint Core Strategy, adopted version. (Winchester City Council and South Downs National Park, March 2013):
 - Policy MTRA 4 Development in the Countryside should not cause harm to the character and landscape of the area or neighbouring uses, or create inappropriate noise/light;
 - Policy CP13 High Quality Design ensures a landscape framework has been developed to maximise the potential to improve local biodiversity;
 - CP15 Green Infrastructure supports proposals which demonstrate a net gain in green infrastructure, allows for adaptation to climate change, links areas of biodiversity and protects existing green infrastructure network;
 - CP16 Biodiversity supports development which delivers a net gain in biodiversity;
 - CP19 South Downs National Park ('SDNP') ensures new development is in keeping with the context and setting of the SDNP; and
 - Policy CP20 Heritage and Landscape Character requests management plans to enhance and protect the distinctive landscape.
- Winchester District Local Plan Part 2 Development Management and Site Allocations, adopted version March 2017. (Winchester City Council and South Downs National Park, March 2017):

- Policy DM15 Local Distinctiveness ensures proposals enhance or conserve trees; hedgerows and corridors which contribute to local distinctiveness;
- Policy DM23 Rural Character ensures development takes in to account the impacts on the visual, physical and tranquillity factors impact upon the rural character; and
- Policy DM24 Special Trees, Important Hedgerows and Ancient Woodlands states development will not result in the loss or deterioration of these features and requests management schemes to ensure their long-term protection.
- Winchester District Local Plan Review, adopted version. (Winchester City Council, 2006):
 - Policy DP4 Landscape and the Built environment prohibits development which detracts from the loss of public views; trees and hedgerows; open areas; area of ecological importance and the landscape framework;
 - Policy DP11 Un-Neighbourly Uses ensures development is well screened by vegetation or landform and is of a size capable to contain the land use; and
 - Policy DP14 Public Utilities requests a landscaping/restoration scheme including a provision for management.
- Winchester City Council, SPD, High Quality Spaces (Winchester City Council, March 2015) covers an area which lies outside of the SDNP to encourage high quality design which considers the local distinctiveness and follows sustainable design principles.

1.2.2.4

Whilst the Proposed Development is not located within the SDNP, the Converter Station Area is located very close to the National Park boundary. Figure 15.1, ES Volume 2 (document reference 6.2.15.1) illustrates the boundary of the SDNP.

Section 10 – Eastney (Landfall)

- The Portsmouth Plan – Portsmouth Core Strategy, adopted version. (Portsmouth City Council, 2012):
 - Policy PCS9 The Seafront ensures new development contributes to the revitalisation of the seafront, this includes protecting the open nature of the area and improving the quality of the open spaces; and
 - Policy PCS13 A Greener Portsmouth is in regard to protecting, enhancing and developing the green infrastructure network.

1.2.3

GREEN INFRASTRUCTURE ('GI') STRATEGIES

1.2.3.1

The Partnership for Urban South Hampshire Green Infrastructure Strategy (PUSH GI Strategy) provides a framework for locally prepared GI strategies including EHDC,

WCC and PCC detailed below. Key objectives, of relevance to the Strategy, include:

- Protect and enhance biodiversity;
- Provide mitigation for the impact of development;
- Create new areas of GI to serve new developments;
- Maximise multifunctionality of new and existing GI; and
- Enhance quality of landscape and maintain distinctiveness of settlement pattern and promote sense of place.

1.2.3.2 East Hampshire Green Infrastructure Strategy, 2019 (East Hampshire District Council, May 2019) was produced to support the new Local Plan and summarises key opportunities to promote GI within the administrative area. The Strategy outlines how the design and maintenance for the Converter Station Area fulfils many of these opportunities, including:

- Increased woodland planting to improve connectivity and strengthen the landscape character; mitigate visual impacts of the Converter Station and improve structural diversity of woodlands;
- Achieving a biodiversity net gain;
- Utilising locally sourced plants and materials where appropriate;
- Improving the coverage and condition of semi-improved grasslands;
- Implementing Sustainable Drainage Systems where appropriate to improve water quality and prevent water run-off; and
- Securing a sustainable and long-term management plan.

1.2.3.3 Winchester City Council Green Infrastructure Study, 2010 (Winchester City Council, Local Development Framework, May 2010) summaries the baseline of the administrative area and defines a strategy to enhance the GI assets within the district up to 2026. The study, working at a strategic level and in partnership with Hampshire County Council, has set up city-wide principles, covered in the PUSH GI Strategy. The LPAs' study seeks to promote woodland planting to encourage connections between habitats; reinforce the local character and enhance biodiversity through creation of new woodlands and active management.

1.2.3.4 PCC addresses the GI network through the Local Plan, Policy PCS13 'a greener Portsmouth'. The policy states that the City Council will work collaboratively to encourage a net gain in GI from new development to help deliver a greener Portsmouth and support the wider PUSH GI Strategy.

1.3 EXISTING LANDSCAPE, ARBORICULTURAL AND BIODIVERSITY FEATURES

1.3.1.1 A summary of the existing landscape, arboricultural and biodiversity context of the Converter Station Area and Landfall is provided below. A more detailed description is presented in Chapter 15 (Landscape and Visual Amenity), Chapter 16 (Onshore Ecology) and Appendix 16.3 (Arboriculture Report) including background associated with the Onshore Cable Corridor, the route of which would be determined at detailed design.

Section 1 – Lovedean (Converter Station Area)

1.3.1.2 The Converter Station Area is situated just on the edge of the SDNP, west of the existing Lovedean Substation and spans a number of small fields divided by hedgerows. A new Access Road would connect the new Converter Station with Broadway Lane to the east and run to the south of the existing Lovedean Substation.

1.3.1.3 Surrounding the Converter Station Area are mixed agricultural fields bounded by hedgerows with hedgerow trees. Some hedgerows have been grubbed out increasing the sense of openness in certain locations. Hedgerows are mixed in terms of condition and management.

1.3.1.4 Fields surrounding the Converter Station Area are used by off-road vehicles and horseculture (see Glossary (document reference 1.7)), resulting in the introduction of post and wire or electric fences. The existing Lovedean Substation, associated pylons and overhead lines are dominant features in the local landscape, as are the linear belts of woodland (formerly unmanaged hedgerows), ancient woodland (Crabdens Row, Crabdens Copse and Stoneacre Copse), small deciduous copses and occasional mature oak trees.

1.3.1.5 Existing planting (associated with Lovedean Substation extension and used for mitigation purposes) is located to the northwest and west of Lovedean Substation. The management of the mitigation planting is covered by an existing landscape management plan and as such does not fall under the remit of this document.

1.3.1.6 The existing vegetation and local topography helps to limit visibility of the Converter Station Area to short and middle-distance views, although the existing Lovedean Substation is notable in these views, especially in winter.

1.3.1.7 The baseline landscape features associated with the Converter Station Area includes a wide variety of planting and associated habitats, namely:

- Broadleaved woodland, semi-natural;
- Ancient woodland;
- Native hedgerows;
- Native hedgerows with trees;

- Grassland/scrub;
- Scrub;
- Mature trees;
- Arable farmland;
- Pasture; and
- Semi-improved grassland.

Section 10 – Eastney (Landfall)

- 1.3.1.8 The Optical Regeneration Station(s) ('ORS') and associated compound would be located in Fort Cumberland car park at Eastney.
- 1.3.1.9 Surrounding the Landfall is a mix of paths and small roads; a Site of Importance for Nature Conservation ('SINC')/open space to the east; Southsea Leisure Park with static caravans to the south and west; a children's play area to the west (Fort Cumberland Road Play Area) and numerous residential properties (typically 2-3 storeys). There are open views across the areas of public open space/common land, though views of Langstone Harbour and The Solent are only notable from higher elevations.
- 1.3.1.10 A mixed species hedge to the south, consisting primarily of unmanaged Leyland cypress trees, acts as a screen to the static caravans in Southsea Leisure Park. The hedge is in fair condition, although going bare at the base (G863, Appendix 16.3 (Arboriculture Report)).
- 1.3.1.11 Fort Cumberland Road borders the Landfall to the north, with Sustrans National Cycle Route No.2 (also known as the Shipwrights Way) following Fort Cumberland Road. Fort Cumberland, a Scheduled Monument, lies 225 m to the east of the ORS buildings.
- 1.3.1.12 Existing features associated with Landfall include the following:
- Grassland/scrub; and
 - A single mature tree.
- 1.3.1.13 Approximately 9 m of grassland/scrub planting separates Fort Cumberland Road from Fort Cumberland car park, with a mature Ash tree located within the grassland. The existing Ash tree (T6, Appendix 16.3 (Arboriculture Report)) is a semi-mature tree in fair condition (Category C).

1.3.2 EXISTING BIODIVERSITY FEATURES

Section 1 – Lovedean (Converter Station Area)

- 1.3.2.1 Important ecological features identified within the Converter Station Area include:
- Species-rich hedgerows, with and without trees. These have intrinsic ecological

value for the range of species they support, and also their function as corridors and refuges; they are considered important at a District scale;

- Semi-improved neutral and calcareous grassland;
- Two badger clans. The extent of their territories is not fully mapped but there are main and annexe setts located within the Converter Station Area;
- Bat activity. Nine species of bat active across the areas of mature woodland and hedgerows within the Converter Station Area, although no trees roosts were identified; and
- Breeding birds. Species were predominantly widespread UK species, but all wild birds are protected by Part 1 of the Wildlife and Countryside Act 1981; their presence and suitability of habitat to support them is considered within this Strategy.

1.3.2.2 There are important hedgerows, as classified by the Hedgerow Regulations 1997 (HM Government, 1997) present within the Order Limits of the Converter Station Area. For further information regarding their location and quality/health see sheet 1, Figure 16.4 of the ES Volume 2 (document reference 6.2.16).

1.3.2.3 Adjacent to the Converter Station Area Order Limits are two SINCs comprising two areas of ancient woodland - Crabdens Copse and Crabdens Row; considered important at the County scale. They are both relatively small areas of ancient woodland (12.2 ha and 12.1 ha, respectively), but represent relics of historically extensive woodland. Both are predominantly composed of English oak, ash and beech with a well-developed shrub understorey as well as bluebells.

1.3.2.4 Stoneacre Copse also lies adjacent to the Converter Station Area, is ancient woodland, 1.49 ha in size and a relic of a more extensive woodland that was present historically and listed as a Priority Habitat.

1.3.2.5 No reptiles were recorded within the Converter Station Area during surveys, but habitats within it provide suitable conditions for native UK reptiles.

Section 10 – Eastney (Landfall)

1.3.2.6 Surveys confirmed the presence of breeding birds at the Landfall. Species were predominantly widespread UK species, except a Black Redstart which was identified in close proximity to the Landfall but outside the Order Limits and not susceptible to effects of the Proposed Development.

1.3.2.7 No reptiles were recorded within the Landfall during surveys, but habitats within it provide suitable conditions for native UK reptiles.

1.3.3 EXISTING ARBORICULTURAL FEATURES

1.3.3.1 Appendix 16.3 (Arboriculture Report) outlines the categories used in relation to tree surveys, as follows:

- Category A arboricultural features are high value. These include significant specimen trees, ancient, veteran and notable trees or trees of an age that replacement is not feasible in a generation. Ancient woodland has been regarded as a high value finite resource which is of national importance.
- Category B arboricultural features are moderate value. These are good trees not quite making Category A due to defects or being of a younger age or size.
- Category C arboricultural features are low or basic value. These are generally unremarkable trees but may have value, particularly in larger groups. Replacement is considered practicable in less than 15 years.

1.3.3.2 A summary of the existing arboricultural baseline is provided below.

Section 1 – Lovedean (Converter Station Area)

1.3.3.3 A total of 27 high value features (woodland, groups of trees, trees and hedges) were identified in the Converter Station Area including:

- Ancient woodland (which just sit outside of the Order Limits including Crabdens Row, Crabdens and Stoneacre Copse) and associated groups (W630, W667, W669, W690, W714 and W887).
- Woodland group (identified as G689) forming part of the western boundary exhibiting ancient woodland characteristics. This group includes mature ash, oak, hazel coppice and hawthorn understorey, mixed with elder.
- Mature trees and hedges in excellent condition. Including an ash tree (identified as T532, located within G689 to the west of the Converter Station) which presented veteran characteristics.
- Along the western boundary, large mature trees are identified in groups and linear groups including G639 and G805 plus a hazel coppice hedgerow (H769), all of which are considered as high value (Category A features) based on the Arboriculture Report and in terms of landscape; emphasising the sense of enclosure and proving an important visual screening function.

1.3.3.4 A total of 22 medium value features were identified within the Converter Station Area including woodland, groups of trees, trees and hedges, including a line of hawthorn (H819) to the south and a number of trees and hedgerows which form either part of the western boundary or cut across the proposed Converter Station Area (H843, H794, T552, T553, T559, G576). Some of these features (i.e. G731 and G742) were in impaired condition, albeit still providing associated benefits in a wider ecosystem.

1.3.3.5 Low value features, such as agricultural hedges, are common throughout the area.

Section 10 – Eastney (Landfall)

1.3.3.6 Due to coastal winds and salt spray there is little tree cover at the Landfall. No high

features were identified within the Order Limits but a Category C semi-mature ash tree (T6) was identified, which provides some visual screening.

1.4 IMPACTS, AVOIDANCE AND MITIGATION

1.4.1.1 The following section provides a summary of the likely impacts of the Converter Station Area, Onshore Cable Route and Landfall on landscape and visual amenity, arboricultural and biodiversity features and the proposed mitigation measures identified as well as assumptions where the detailed design of the Cable Route has yet to be determined and route options remain open.

1.4.1.2 To allow for flexibility for the contractors to identify the most appropriate Onshore Cable Corridor, joint bay locations, and to facilitate and accommodate construction works it has been assumed at this stage that all arboricultural features within the Order Limits of the Proposed Development would be at risk of removal.

1.4.1.3 Measures to avoid, reduce or minimise the identified impacts, as well as measures to provide effective enhancements are proposed appropriately to address the loss and disturbance of existing landscape and biodiversity features. These are outlined below.

1.4.2 LANDSCAPE IMPACT, AVOIDANCE AND MITIGATION

Impacts

Section 1 – Lovedean (Converter Station Area)

1.4.2.1 Chapter 15 (Landscape and Visual Amenity) concluded that there would be significant effects on specific landscape character types and areas, the setting of the SDNP and on local landscape features in the immediate vicinity of the Converter Station Area. Equally, adverse effects would be experienced by a variety of local visual receptors within 3 km of the Converter Station, with the degree of effect varying according to their proximity, orientation and the presence or absence of intervening vegetation and built form.

Section 2 – 9 Onshore Cable Corridor

1.4.2.2 The assessment only considered construction effects associated with the Onshore Cable Route installation and such effects were temporary, short to medium term and localised.

1.4.2.3 There would be significant effects on LCT18 Forest of Bere Lowlands – LCA W3 Pasture and Woodland – Heath Associated in Section 3 and on Urban Character Area 17 – Milton West in Section 8 and 9. Some local landscape features which contribute to local character would experience significant effects. Installation works would impact on Denmead Gap, lowland meadows, mature trees including TPOs, specific walking routes and PRoWs, and designated open spaces. Along specific sections of the Onshore Cable Corridor study area, for the Landscape and Visual Impact Assessment ('LVIA'), there would be indirect intangible impacts on tranquillity

levels and openness.

1.4.2.4 All effects on visual amenity and visual receptors would be not significant.

Section 10 – Eastney (Landfall)

1.4.2.5 Impacts associated with the Landfall were limited to its immediate vicinity with significant indirect adverse effects on landscape character - tranquillity during construction and on openness during the duration of the operation of the Proposed Development. There would also be impacts on immediate visual receptors namely local residents and residents of Southsea Leisure Park as well as recreational and transport users.

Mitigation

General Mitigation Measures

1.4.2.6 Construction Stage environmental impacts of the Converter Station Area, Onshore Cable Corridor and Landfall would be managed through standard control measures secured through a Construction Environmental Management Plan ('CEMP'). An Onshore Outline CEMP is provided as part of the Application (document reference 6.9) and is referred to in Schedule 2 Requirement 15 of the DCO.

1.4.2.7 Standard construction practice measures which are embedded into the Landscape and Visual Amenity Assessment to control impacts on landscape character and visual amenity include:

- Appropriate location, organisation and phasing of construction activities.
- Maintenance of a tidy and contained site compound to reduce visual clutter.
- Design and layout of site construction areas to reduce adverse impacts arising from temporary security fencing and lighting.
- Measures to control working hours in specific locations to avoid disturbance to residential receptors both in terms of light and noise.
- Agreed site access points to limit impacts on existing vegetation both above and below ground.
- Retention and protection of existing vegetation with temporary fencing to demarcate the construction footprint refer to BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations, (BSI Standards Publication, 2012 British Standards Limited). Erection of hedgerow and tree protection measures following principles set out in Section 6.2 of BS 5837.
- Onshore Cable Micrositing used in addition to Trenching as referred to in the baseline section of the LVIA would be used to avoid specific features.
- Careful siting of temporary topsoil storage areas considering using use as a physical buffer between the construction works and more sensitive receptors

where practicable.

- Careful management and storage of topsoil and subsoil in accordance with Construction Code of Practice for the Sustainable Use of Soil on Construction Sites, (Department for Environment, Food and Rural Affairs, 2009).
- Where construction works obstruct a footway an absolute minimum unobstructed width of 1 m would be provided alongside the construction corridor and where this is not practicable, a safe alternative route. This would include provision of suitable crossing facilities where required, including the temporary replacement of existing pedestrian crossings that may need to be closed to facilitate construction see Appendix 22.1 (Transport Assessment) of the ES Volume 3 (document reference 6.3.22.1).
- Temporary screening for sensitive visual receptors through implementation of solid construction hoards whilst using natural existing screens (topsoil and existing vegetation) where practicable. Hoardings would be attractive, used to screen low level “clutter” and reduce noise.
- Hoardings would be well lit in poorly lit walkways and any gates positioned to minimise noise transmitted to nearby sensitive receptors.
- Large plant/equipment would be located away from most sensitive visual receptors where there are viable alternatives.
- Removal of temporary structures and stockpiles when no longer required.
- Prompt reinstatement of temporary construction areas (including trenches, Laydown Area, Works Compound and construction (including haul road) corridor on completion of the Onshore Cable installation as soon as practicable after sections of work are complete. Reinstatement would involve the careful handling of soils and a return to the existing habitat type.
- Implementation of mitigation planting alongside the construction programme where works would not affect planting and during winter (November – February as per Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) of the ES Volume 3 (document reference 6.3.15.7).
- Mitigation planting to replace hedgerows and trees lost following completion of the construction works.

Section 1 – Lovedean (Converter Station Area)

1.4.2.8

Embedded mitigation and enhancement measures specific to the Converter Station have focused on:

- The design of the Converter Station and associated infrastructure;
- Landform and drainage; and

- Retention of existing planting and new mitigation planting.

1.4.2.9 A parameter envelope was defined for the Converter Station Area allowing flexibility for siting, orientation and massing within this envelope. The detailed design of the Converter Station must be in accordance with the Design Principles and indicative landscape mitigation plan and would need to be approved by the relevant discharging authority in consultation with the SDNPA.

1.4.2.10 Section 1.4 of this Strategy goes into further detail on the nature of the embedded mitigation proposed with summary of enhancement measures detailed towards the end of this section.

1.4.2.11 Mitigation and enhancement measures must be read in conjunction with Chapter 15 (Landscape and Visual Amenity) and Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board).

Section 2- 9 Onshore Cable Corridor

1.4.2.12 General embedded mitigation measures which apply to the whole of the Proposed Development and of relevance to the Onshore Cable Corridor are detailed in paragraph 1.4.2.7. Below are general mitigation assumptions which will inform the detailed design and siting of the Onshore Cable Route, followed by specific mitigation assumptions for Sections 2 to 9. All assumptions are embedded during construction:

- All land temporarily impacted upon through the installation of the cable route would be reinstated with a compatible grass mix;
- Any street furniture damaged through the installation would be replaced;
- Road/footpath surfacing would be reinstated to the same quality and finish as before;
- Native hedgerows and hedgerow trees would be replaced with like for like species where practicable and in consultation with the relevant LPA;
- Trees would be repositioned at least 5 m away from the Onshore Cable Route where practicable; and
- All works which may affect the public realm coastal defences (considered in cumulative effects) would be reinstated to the same quality and finish as the future baseline.

Section 2 Anmore (Specific Assumptions):

- No mature trees would be affected by the cable routing. Trees are an important feature visually within this section.
- The impact on the deciduous copse to the field east of Saltbox Barn/Cottages would be avoided with a 15 m standoff.
- Sections of hedgerows and hedgerow trees where lost would be replaced where

practicable, with hedgerow trees repositioned at least 5 m away from the Onshore Cable Route.

- The preferred cable route would avoid impacting on the TPO'd oak tree (T393) (TPO - 2246 T1) to north of Anmore Road and a mature Category A oak tree (T409).

Section 3 Denmead/Kings Pond Meadow (Specific Assumptions)

- Through detailed design (a combination of Onshore Cable Micrositing and Trenchless Techniques - HDD) measures would be taken to limit the impact on mature Category A / B trees (predominately oak trees) where practicable.
- Sections of hedgerows and hedgerow trees where lost would be replaced with where practicable, with hedgerow trees repositioned at least 5 m away from the Onshore Cable Route.
- Cable works would run close to the edge of (G661, T300, T302 and T306) (TPO - 1350 G1) and (T299 and H799) (TPO - 1350 G6) would be reviewed at detailed design to minimise impacts considering Onshore Cable Micrositing.

Section 4 Hambledon Road to Farlington Avenue (Specific Assumptions)

- Works must be avoided in the footway or verge where there are mature trees (Category A/B) and where practicable.
- Through detailed design (a mix of Trenching and Onshore Cable Micrositing) measures would be taken to limit the impact on mature trees where practicable.
- Works would take place within Portsdown Country Park car park on top of Portsdown Hill.
- Mitigation trees to replace trees lost opposite the junction of Hambledon Road and Darnel Road, and to the north of Hambledon Road and south of Milton Road would be repositioned at least 5 m away from the Onshore Cable Route.
- Cable works would run close to the edge of a number of trees subject to TPO's. Opportunities must be reviewed at detailed design to minimise impacts, considering Onshore Cable Micrositing, where practicable.

Section 5 - Farlington (Specific Assumptions)

- Detailed design measures including Onshore Cable Micrositing would be taken to limit the impact on mature ornamental street and garden trees where practicable. These include Category A to C trees which form an important visual feature in this section.
- Cable works would run close to the edge of a partially pollarded poplar and hedgerow (H888 and T925) which are subject to a TPO (TPO – 201). Opportunities would be reviewed at detailed design to minimise impacts

considering Onshore Cable Micrositing, where practicable.

- Tree group G911 (category C trees) would be lost as a consequence of the cable route running through land forming part of Portsmouth Water's land to the south of Eveleigh Road.
- Sections of hedgerows where lost would be replaced with like for like species.
- Trees would be repositioned at least 5 m away from the Onshore Cable Route, where practicable.

Section 6 Zetland Field and Sainsbury's Car Park (Specific Assumptions)

- The Onshore Cable Corridor would result in the loss or partial loss of Category B tree groups or trees (G660, G910 and T73) and a Category C tree T74 within Zetland Field. Where practicable trees and shrubs would be replaced with like for like species, trees repositioned at least 5 m away from the Onshore Cable Route.
- Through detailed design, measures would be taken where practicable (considering Onshore Cable Micrositing) to limit the impact on remaining mature ornamental street trees (a combination of London Plane, sycamore, ash, lime, willow, hornbeam and poplar) within Zetland Field. The trees are important in terms of visual amenity and screening as well as generating a strong sense of enclosure for immediate residents overlooking the Field. Visually there is a strong connection between the Field and Fort Purbrook on higher ground.
- Through detailed design, measures would be taken where practicable (considering Onshore Cable Micrositing) to limit the impact on infrastructure planting including trees and shrub planting between the eastern edge of Eastern Road, the petrol filling station and retail car park.
- Due to Trenchless Techniques proposed there would be limited impact on tree and scrub planting on land along the southern edge of the retail park and forming the northern edge of the railway line.

Section 7 Farlington Junction to Airport Service Road (Specific Assumptions)

- Due to Trenchless Techniques proposed there would be limited impact on tree and scrub planting along the southern edge of the railway line.
- The Onshore Cable Corridor would run through Farlington playing fields west of the hotel. It is assumed that the access track to the cricket pavilion and hotel car park is sufficient to withstand heavy vehicular loading and therefore not impact on adjacent Category B tree groups (G680, G783, G706, G671 and G582). The trees form strong landscape features and include individual trees within Farlington playing fields, mature avenue trees running to the pavilion, within the car park and around the northern and western edge of the hotel. If any trees are likely to be affected by construction work traffic, they must be pruned back, monitored and

replaced where practicable with like for like species subject to agreement with PCC. Replacement trees will be repositioned at least 5 m away from the Onshore Cable Route.

- Trees and shrub planting (Category B G695, G711 and T70) running to the west of the Baffins Milton Rovers Football Ground (Kendall Stadium) would be lost by the cable routing. Planting around Baffins Milton Rovers Football Ground is a key landscape feature which serves an important contribution to visual amenity and screening. Limited opportunity would be available to introduce replacement tree planting beyond 5 m of the cable route on the western side of the Stadium. The Order Limits includes an access road to the east of the Baffins Milton Rovers Football Ground which runs to Andrew Simpson Watersports Centre passed Kendall's Wharf (a mineral aggregate wharf). Whilst the Onshore Cable Corridor would impact on Category C trees and shrubs (a mix of poplar, willow, lime, pine and sycamore - G663, W885, W886, G908 and G909) these trees and shrubs serve a limited visual amenity function.

Section 8 Eastern Road (adjacent to Great Salterns Golf Course) to Moorings Way (Specific Assumptions)

- Where there are mature trees in the footway or verge and, where practicable, consideration must be given to whether works in those locations can be avoided.
- Through detailed design, measures including Onshore Cable Micrositing, where practicable, would be taken to limit the impact on mature Category B trees.
- Through detailed design, measures including Onshore Cable Micrositing, where practicable, would be taken to avoid impacting on trees within Milton Common. Some scrub may be lost as a consequence.
- Replacement of planting if lost would be planted at least 5 m away from the Onshore Cable Route.

Section 9 Moorings Way to Bransbury Road (Specific Assumptions)

- Where there are mature trees in the footway or verge and where practicable consideration must be given to whether works in those locations can be avoided.
- Poplars to the east and west of Furze Lane and south of University of Portsmouth Langstone Campus (along Locksway Road) may be impacted upon as a consequence of the Onshore Cable Route based on the Arboriculture Report (these are predominately Category B trees). The trees which are subject to TPO's (TPO 1 to 24) form an important visual screen, amenity and legibility function. Opportunities must be explored to replace the trees with an alternative species on the eastern edge of sports grounds associated with the University in discussion with University and PCC. An allowance of 15 m has been made to the west of

the lane for mitigation planting, if required.

- Some Category B trees and shrubs (G900) within and edging Milton Lock Nature Reserve would be lost as a consequence of the Onshore Cable Corridor. The planting forms a screening function between the Nature Reserve and the adjacent pub car park.
- Whilst the Onshore Cable Corridor would be HDD across Milton and Eastney Allotments, there would be the loss of Category C trees to the south (T916, T917 and G899). From a visual amenity perspective these serve a limited screening function and are not considered to be key landscape features.
- Through detailed design, measures including Onshore Cable Micrositing would be used to limit the impact on Category A, B and C avenue trees running north/south within Bransbury Park and ornamental street trees to the south and western boundary of the Park. Trees include ash, birch, copper beech and London Plane. These trees serve an important function in terms of visual amenity albeit some are suffering from ash die back. Opportunities must be explored through detailed design to focus construction works towards the northern edge of Bransbury Road rather than through the north/south avenue within the Park as well as explore opportunities to remove diseased trees and replace with other ornamental species in agreement with PCC.

Section 10 - Eastney (Landfall)

1.4.2.13

General embedded mitigation measures which apply to the whole of the Proposed Development and of relevance to Section 10 Landfall are detailed in paragraph 1.4.2.7. Given that there is greater certainty over the location of potential structures and cable route in this location the following section outlines specific mitigation assumptions which will inform the detailed design.

- Introduction of temporary solid construction hoards around the landfall construction to minimise impacts on noise and therefore tranquillity as well as impacts on immediate sensitive visual receptors.
- The indicative landscape mitigation plan (document reference 6.1.15 Figure 15.50) illustrates the planting around the edge the ORS buildings to screen the compound and structures. These planting proposals include a native hedgerow and hedgerow tree planting which has been discussed with PCC. Planting would provide some screening function for receptors from the Southsea Leisure Park and residential properties overlooking the buildings from the north.
- Reinstatement of the existing gravel surface within Fort Cumberland car park and any street furniture (in the form of trip rails) replaced if removed or damaged.
- Works must be avoided in the footway or verge where there are mature trees (Category B) and where practicable.

- Through detailed design (a mix of Trenching and Onshore Cable Micrositing) measures would be taken to limit the impact on mature Category B trees along Henderson Road/Fort Cumberland Road where practicable. Trees include ash and cherry, and many are subject to TPOs. As referred to in the Arboriculture Report the northern (east boundary) side of Henderson Road and Fort Cumberland Road would be the preferred choice for arboriculture and landscape to avoid impact on existing trees in this section.
- Works would be avoided in the footway or verge where there are mature trees and where practicable.
- It is assumed that the Category C mature ash (T6) within to the northern edge of Fort Cumberland car park would be retained as this is an important landscape feature.

1.4.2.14 As outlined above all landscape mitigation and enhancement measures occur during the construction phase and are embedded. Mitigation generally refers to the mitigation of visual impacts, improvements on connectivity and fragmentation, whereas enhancement measures typically contribute to enhanced landscape character and improved quality of existing habitats. In specific locations, enhancements such as the introduction of hedgerow trees and new hedgerows will also contribute towards mitigating visual impacts.

1.4.3 BIODIVERSITY IMPACT, AVOIDANCE AND MITIGATION

Impacts

Section 1 – Lovedean (Converter Station Area)

1.4.3.1 Chapter 16 (Onshore Ecology) highlights the potentially significant effects of the Converter Station Area on sensitive ecological receptors. Of significant note is that badger sett closure would be undertaken under a Natural England licence and in accordance with an agreed detailed methodology.

1.4.3.2 A number of hedgerows within the Converter Station Area would also be affected. These have been identified as species-rich, and would fall under the Hedgerow Regulations (HM Government, 1997), as referred to above see Sheet 1, Figure 16.4 of the ES Volume 2 (document reference 6.2.16.4) for more details.

1.4.3.3 Construction of the Converter Station would lead to the direct, permanent loss of semi-improved calcareous grassland. Trenching, installation of access routes, laydown areas and compounds would lead to further direct, temporary loss and degradation of neutral and calcareous semi-improved grassland.

Section 2 – 9 Onshore Cable Corridor

1.4.3.4 Grassland at Kings Pond Meadow SINC comprises unimproved HPI-quality Lowland Meadow habitat and lesser-quality horse-grazed semi-improved grassland. This SINC would be directly affected by trenching and construction of an HDD compound.

- 1.4.3.5 Denmead Meadows is situated adjacent to Pond Meadow SINC and also composed of unimproved HPI-quality Lowland Meadow habitat. Denmead Meadows would receive direct impacts through open cut trenching.
- 1.4.3.6 Proposed 24 hour working at Farlington Playing Fields would produce nocturnal light that could lead to indirect disturbance effects on foraging and commuting bats.
- 1.4.3.7 Chichester and Langstone Harbour SPA is designated for its internationally important wintering intertidal bird community, and the site is functionally connected to Solent Waders and Brent Goose Strategy (SWBGS) sites, which are used as winter foraging areas. The Onshore Cable Corridor passes through six SWBGS sites and would result in reduced foraging habitat during construction. Chichester and Langstone Harbour SPA would therefore be adversely affected through direct impacts to the SWBGS sites. This SPA would also receive indirect impacts through irregular noise and vibration at HDD sites which is likely to disturb birds.
- 1.4.3.8 The Onshore Cable Corridor includes an option to run along a well-used path through Milton Common SINC. Construction access would also be required into the SINC, alongside trenching for the cable itself. Therefore, direct impacts of the Proposed Development would lead to the temporary loss of habitat within the SINC and potential alterations to soil structure which could affect the botanical community in the long-term.
- Section 10 – Eastney (Landfall)**
- 1.4.3.9 There would be no impact at the Landfall.
- Mitigation**
- 1.4.3.10 Chapter 16 (Onshore Ecology) outlines mitigative measures to reinstate and diversify habitats with embedded mitigative measures in the form of landscape planting to offset any loss of habitats and ensure features are not affected by indirect impacts of the Proposed Development, such as pollution prevention measures. Specific mitigation measures are as follows:
- Proposed Winter Restriction of Works Adjacent to Chichester and Langstone Harbour SPA**
- 1.4.3.11 Effects of the construction stage on Chichester and Langstone Harbour SPA and its wintering intertidal bird community would be avoided by restricting works within the winter season. Working restrictions comprise 8 principles that would be incorporated into working methods:
- 1.4.3.12 Principle 1: Construction works cannot take place in SWBGS (those categorised as either core, primary or secondary) sites that overlap with the Proposed Developments Order Limits during October – March. An exception is the gravel car park, boat yard and linking roadway within site P11 that is already disturbed by movements of cars, lorries and plant, and offers no functional habitat for brent geese or other waterbirds associated with Chichester and Langstone Harbour SPA. Work to establish and

dismantle an HDD compound will be undertaken here during this time, but will not involve piling whose percussive sounds would disturb birds using the adjacent playing fields.

1.4.3.13 Principle 2: No buffer zones are applied to SWBGS sites to limit works away from their boundaries, while those sites categorised as 'low use' are also not part of working restrictions.

1.4.3.14 Principle 3: Where HDD works are to take place underneath the SWBGS site (e.g. at Eastney Landfall) no direct impacts are considered to occur and the restriction does not apply. The following SWBGS sites overlap with the Proposed Developments Order Limits, running from South to North as follows:

- P25 – University of Portsmouth, Langstone Campus;
- P23B – University of Portsmouth;
- P23A – Milton Common north 1;
- P23R – Milton Common north 2;
- P11 –Baffins Milton Rovers Football Ground; and
- P08A – Farlington playing fields.

1.4.3.15 Principle 4: Elements of the Onshore Cable Route that are over 400 m from the SPA are not included in any restriction.

1.4.3.16 Principle 5: Construction noise events of <55 dB can occur unrestricted.

1.4.3.17 Principle 6: Construction works of 55 – 72 dB immediately adjacent to a major road and/or adjacent to industrial sites with notable levels of background noise can be undertaken unrestricted. It is considered that noise levels from the Proposed Development would be masked in these instances.

1.4.3.18 Principle 7: Regular/consistent construction noise (>70dB) and irregular/sudden construction noise 60-72 dB implies potential for impacts on the more sensitive species e.g. Brent geese and can only occur if effects do not overlap with areas of the SPA identified as supporting this species.

1.4.3.19 Principle 8: Irregular construction noise (>70dB) that is exposed to the SPA should be restricted during October – March. Vibropiling at HDD 2 and 3 will not be undertaken during the wintering period, with sheet piles inserted prior to the arrival of wintering SPA birds.

Soil Horizon Preservation

1.4.3.20 Mitigation for temporary loss of important grassland would be to maintain soil horizons and preserve grassland turf. Mitigation would be put in place at Kings Pond Meadow SINC, Denmead Meadows, Milton Common SINC and semi-improved grasslands in along the Onshore Cable Corridor.

Seed Harvesting and Reseeding

- 1.4.3.21 Where particularly sensitive HPI-quality Lowland Meadow habitat is present at Denmead Meadows, regrowth would be promoted by collecting seed from plants already present and reseeded using this collected seed following work. This would preserve the local mixture of meadowland plants unique to Denmead Meadows.
- 1.4.3.22 Using a specialist contractor, a seed harvester would be used to collect seed in the year prior to the onset of works. Re-seeding would take place using collected seed in spring following the completion of construction and decommissioning stage works.
- Improvements in remaining calcareous grassland**
- 1.4.3.23 Improvement of calcareous grassland at the Converter Station involves application of green hay. Green hay contains seed from a diversity of wildflower species and would inoculate retained grassland with new flora. The green hay would be sourced from Denmead / Kings Pond Meadow to ensure native plants of local provenance are used to colonise and increase the value of the grassland. Improvement using green hay would take place in late spring (June-July) in the year following completion of construction work.
- Ground Protection**
- 1.4.3.24 Use of bog matting, temporary membranes with Type 1 aggregate or similar ground protection solutions will be used to prevent compaction of grassland soils at Kings Pond Meadow SINC, Denmead Meadows, Milton Common SINC and semi-improved grasslands along the Onshore Cable Corridor. This mitigation measure would promote regrowth of vegetation to its original state.
- Lighting design for works at Farlington Playing Fields**
- 1.4.3.25 Farlington Playing Fields is unlit and construction lighting could result in disturbance of bat commuting routes and foraging areas located around the site's edge where scrub and woodland are located. These habitats are used by bats to navigate and find food; open areas are avoided as no physical features are present to reflect echolocation calls. Thus to avoid effects on bats trenching areas and compounds for HDD work will be set back from the edge of the playing fields by at least 10 m to maintain habitats there and preserve bat flight lines.
- 1.4.3.26 Lighting of construction work will be designed with reference to recommendations issued by The Bat Conservation Trust (2014) and Institute of Lighting Engineers (2009), and be cowled/hooded to avoid extraneous light spill, and focussed onto works areas only to maintain dark corridors on the edge of the playing fields and avoid disturbance of commuting and foraging bats.
- Precautionary methods to avoid effects on hedgehogs**
- 1.4.3.27 To avoid killing or injuring hedgehogs that may be present, hedgerows, scrub and other dense vegetation within the Converter Station Area where suitable habitat is present will be hand-searched for hedgehogs prior to its clearance. Piles of cut vegetation such as brash piles would also be searched as they can harbour sheltering hedgehogs. Hedgehogs found would be moved to a suitable release site away from

the development within scrub, hedgerow or other dense cover.

Precautionary methods to avoid effects on reptiles

- 1.4.3.28 To avoid killing or injuring reptiles that may be present, a Precautionary Method of Works (PMoW) would precede vegetation clearance and earthworks in habitats which could support these animals. The PMoW would detail how working methods during the construction stage of the Proposed Development can minimise the risk of killing or injury to reptiles.

Closure of Badger Setts under Licence

- 1.4.3.29 Badger Sett closure requirements are discussed in Chapter 16 (Onshore Ecology) and includes the following:

- Converter Station Area footprint (Option B(i)) would be closed using badger gates outside the badger breeding season (June-November inclusive).
- Setts would be closed using one-way gates so badgers can leave but cannot return to the sett. Following a 21-day period of monitoring to ensure badgers are not within them, the setts would be dug out.
- This process would avoid potential death or injury to badgers as a result of development, and work would be undertaken under a NE licence to allow legal sett closure.
- Badger sett closure applies only to the construction stage of the Proposed Development. Due to the mobile nature of badgers and their ability to dig new setts, a further plan of mitigation measures to offset effects on them may be necessary to permit decommissioning. Survey work and mitigation planning would be undertaken to inform this stage and ensure the Proposed Development would not affect badgers.
- In addition, open excavations would be fitted with mammal ladders (planks of wood at either end) to allow animals to climb out if they fall in, and prevent the trapping of animals including badgers.

Working Practices

- 1.4.3.30 Advance site visits, in pre-construction/site clearance phases, would reassess the ecological baseline and determine if any additional ecological mitigation is required, beyond that specified in this Strategy and the ES. The scope of the walkover would be to inform the detailed delivery of Construction Stage mitigation. Should any new constraints arise, these would be identified and communicated to the contractor.

- 1.4.3.31 An Ecological Clerk of Works would be required to deliver the environmental components of the Proposed Development as detailed in the Onshore Outline CEMP.

- 1.4.3.32 All Site staff would receive Toolbox Talks on the relevant environmental risks, legal requirements and working requirements to comply with legislation.

- 1.4.3.33 In addition to the above, an Ecological Management Plan would be produced which

will set out mitigation measures on ecological receptors.

1.4.4 ARBORICULTURAL IMPACT, AVOIDANCE AND MITIGATION

Impacts

Section 1 – Lovedean (Converter Station Area)

- 1.4.4.1 Appendix 16.3 (Arboriculture Report and accompanying Tree Constraints Plans Sheet 1 to 7 see Appendix 16.3, Appendix C) considers the impacts on the arboricultural resources to be moderate at the Converter Station Area during construction. Impacts include direct removal, ground compaction and construction within, or close to the Root Protection Areas ('RPA'), change in topography and drainage demands.
- 1.4.4.2 Based on the two Converter Station Options there would be the following impacts within and around the immediate vicinity of the Converter Station
- 1.4.4.3 High value features located within the proposed Converter Station locations, and therefore at risk of removal:
- Two tree groups (G639 (Option B(i) only), G705 (Option B(i) only – partial removal); and
 - One hedge (H769 (Option B(i) only – partial removal).
- 1.4.4.4 For medium value features those within the Order Limits, and therefore at risk of removal include:
- One tree group (G576);
 - Three hedges (H794 (Option B(i) only), H843, H853 (Option B(i) only – partial removal); and
 - One trees (T561).
- 1.4.4.5 There would also be an impact on the following features located within the Order Limits within the Converter Station Area:
- High value features at risk of removal include: six tree groups (G662, G689, G705, G823, G833, G839) and one tree group lies either side of the Order Limits (G574), one hedge (H769), four trees (T525, T526, T532, T566), and two woodlands (W690, W887).
 - High value features located within the 15 m buffer of the Order Limits and at risk of adverse impacts to RPAs include: seven trees (T522, T524, T528, T547, T548, T554, T564); and four woodlands (W630, W677, W699, W714).
 - Medium value features within the Order Limits and therefore at risk of removal: five tree groups (G576, G635, G638, G742, G774) and two tree groups partially the Order Limits (G729, G731), one hedge (H879), and one hedge partially within the Order Limits (H819), four trees (T507, T515, T563, T565) and one woodland

(W702).

- Within 15 m of the Order Limits, and at risk of adverse impacts to RPAs, are a further five arboricultural features (G729, G731, T523, W702, W716).

Section 2 – 9 Onshore Cable Corridor

1.4.4.6

The following impacts have been identified along sections of the Onshore Cable Corridor, refer to Appendix 16.3 (Arboriculture Report and Tree Constraints Plans Sheets 7 to 40, see Appendix 16.3, Appendix C):

Section 2 Anmore:

- Two HVDC Circuits are proposed to be installed, for which each excavated trench containing the HVDC and FOC Cables would be approximately 0.7 – 1m in width., within the north of the section, the Onshore Cable Route may be routed to avoid most RPAs of arboricultural features.
- Within the southern part of this section there are medium to high value features. Installation of the cables will need to avoid the two high value oak trees, T393 (TPO) and T409, where practicable, to reduce impact.
- Sections of two low value hedges, H805 and H893, would require assessment at detailed design stage to minimise impacts on these features.

Section 3 Denmead/Kings Pond Meadow

- With the exception of two high value features, T385 and H862, the majority of high value features found within this Section are situated on the boundary of the Arboricultural study area and would therefore be avoided.
- Options to pass through medium value (H844) and low value features such as H795, H873, H798 and H866 would be considered which would enable impacts to be kept low.
- The Onshore Cable Route may pass within the RPA of a high value tree (T385), tree group (G648) and through a high value hedge (H862). The high value tree (T385) and tree group (G648) is avoidable through the consideration of the cable routing within the Onshore Cable Corridor. H862 is not avoidable. Options to minimise trench width through this hedge, where practicable, should be considered.
- If construction activities are to utilise land south of Hambledon Road, this must be carefully considered to avoid impacts to medium value features in this area, most of which are subject to TPOs (1350G1 and 1350G6).

Section 4 Hambledon Road to Farlington Avenue

- G651 is a tree group of hybrid black poplar, both protected by a TPO (1303) and partially located within St John's Conservation Area, Havant, located on the

western side of the Order Limits. To avoid impacts, the RPA of these features would need to be avoided during construction. The RPA of TPO features located outside of the Order Limits and within the arboricultural study area should also be avoided, where practicable.

- Other trees within the section would be impacted by conflict with trenching within RPAs as space is constrained, as the Onshore Cable Route is likely to pass near or through multiple RPAs.

Section 5 - Farlington

- Due to the siting of arboricultural features along Havant Road, the likelihood of rooting areas extending into the carriageway is greater at this location. Therefore, constraints are imposed by available space within the street and care will be required to avoid impacts to tree roots where practicable. In accordance with general design principles for working around trees, care is also required to allow future space for tree planting after construction where mitigatory planting is deemed a requirement.
- Hedge H896 is a low value feature protected by a TPO. This feature runs parallel to a medium value feature, H895.
- Impacts are expected within the constrained highway areas as the cable passes near or through multiple RPAs. Detailed analysis of impacts as the cable route alignment is finalised must be carried out under supervision. This must be by a suitably qualified clerk of works to oversee construction works within RPA of retained arboricultural features.

Section 6 Zetland Field and Sainsbury's Car Park

- Constraints exist on the west side of Eastern Road where the footway passes closely to G720, a high value tree group. Trenches within the RPAs here have the potential to destabilise trees and put highway users and neighbouring property at risk. The footway on the east side is a further distance from the trees but some trees will still be impacted.
- Use of Zetland Field may be an option and, where practicable must avoid G591, G627 and G623, however, one low quality tree (T74) is at risk of removal, and medium value groups G910 and G660 are at risk of partial loss. Where practical, for this route option, minimal impacts to RPAs must be secured to retain arboricultural features. Future impacts to the operation of Zetland Field must be discussed with the local authority in this case.
- Impacts are expected within the constrained highway areas as the cable passes near or through multiple RPAs. Detailed analysis of impacts as the cable route alignment is finalised must be carried out under supervision. This must be by a

suitably qualified clerk of works to oversee construction works within RPA of retained arboricultural features.

Section 7 Farlington Junction to Airport Services

- North of where the bridge crosses the estuary, just south of the A27, the main constraints are medium value features located within and adjacent to Farlington Playing Fields. On the eastern side of the A2030 between Anchorage Road and Airport Service Road G695 and G711 are medium value features that present constraints to the laying of the Onshore Cable Route within the Onshore Cable Corridor.
- North of Kendal Stadium, the Onshore Cable Corridor will impact on low quality arboricultural features G663, W886 and W885. Detailed analysis of impacts as the cable route alignment is finalised must be carried out under supervision. This must be by a suitably qualified clerk of works to oversee construction works within RPA of retained arboricultural features.

Section 8 Eastern Road (adjacent to Great Salterns Golf Course) to Moorings Way

- The majority of features within this section are of medium to low value, many of which are third party trees.
- The north-east side of this section contains very few features and none of note. In the south-east section, Milton Lock Conservation Area is a significant constraint.
- Overall, impacts should be capable of being minimised in this section by the flexibility retained in the Onshore Cable Corridor that has scope to avoid tree rooting areas.
- Final details of route alignment would be agreed on site under the supervision of the Environmental Clerk of Works to avoid impacting on trees and groups of scrub within Milton Common where this option is pursued, with it being anticipated construction work would follow the existing footpath corridor.
- Multiple minor to moderate impacts are expected within the constrained highway areas as the cable passes near or through multiple RPAs. Final details of route alignment would be agreed on site under the supervision of the Environmental Clerk of Works.

Section 9 Moorings Way to Bransbury Road

- The Onshore Cable Corridor across Eastney and Milton Allotments is likely to result in the loss of low value arboricultural features (T916, T917 and G899). Impacts are also identified where this section encroached into Milton Locks Nature Reserve (G900). Arboricultural features within Bransbury Park (G697) may also be impacted and consideration of the layout of the Onshore Cable is

needed to avoid RPAs.

- Poplar trees along Furze Lane are protected by a TPO. The majority of these features are in good to fair condition and a minimum RPA radius of 7.2 m, with one (T2034) in poor condition. Impacts are expected due to the cable passing near or through multiple RPAs. Final details of route alignment would be agreed on site under the supervision of the Environmental Clerk of Works.
- Impacts are expected within the constrained highway areas as the cable passes near or through multiple RPAs. Final details of route alignment would be agreed on site under the supervision of the Environmental Clerk of Works.

Section 10 – Eastney (Landfall)

1.4.4.7

The following impacts have been identified associated within the Landfall (see Tree Constraints Plans Sheets 40 to 41 of Appendix 16.3 (Arboriculture Report), Appendix C).

- One semi-mature ash tree in fair condition (T6) would be retained. It must be noted however that Ash Dieback disease is in the area, and as such, this tree may be lost through natural processes associated with the Proposed Development.
- Impacts are expected within the constrained highway areas as the cable passes near or through multiple RPAs. Detailed analysis of impacts as the cable route alignment is finalised must be carried out under supervision. This must be by a suitably qualified clerk of works to oversee construction works within RPA of retained arboricultural features.

Mitigation

General Mitigation Measures

1.4.4.8

The following general embedded mitigation measures will apply to all of the Proposed Development. Where relevant specific mitigation measures are covered under the separate sections below:

- Ground protection would be used where RPAs are encroached upon and it is practicable to retain the relevant feature. For example, use of a no-dig construction for access routes must be employed;
- Onshore Cable Micrositing would be used, where practicable, for the installation of the cable, to avoid the removal of existing hedgerows and hedgerow trees, where practicable. This would be in accordance with BS 5837 including section 7.7 which focuses on trenching for underground apparatus including fibre optics;
- Where works need to be undertaken in close proximity to retained trees, such works would be in accordance with best practice:

- British Standard ('BS') 5837:2012 trees in relation to design, demolition and construction – recommendations. (BSI Standards Publication, 2012 British Standards Limited).
- Arboricultural Method Statements with associated RPA plans would be submitted as part of the detailed CEMPs and will accompany the detailed Landscape and Biodiversity Strategy. These would cover in detail the protection of root areas, protective barriers, precautions in respect of temporary works, sequence of activities, utilities, post construction and emergency remedial works. A Generic Arboricultural Method Statement ('AMS') is provided in Appendix 16.3 (Arboriculture Report, Appendix F).

Section 1 – Lovedean (Converter Station Area)

1.4.4.9

Appendix 16.3 (Arboriculture Report) refers to mitigation measures to minimise encroachment and avoid impacting on the arboricultural resource. The following measures are required:

- Works Compound and Laydown Area would be prohibited within 15 m of the ancient woodland and hedgerows. When storing materials, particularly liquids, slopes and drainage channels would be used to prevent spillages and flow into the buffer zone of the ancient woodland and hedgerows.
- Design will avoid positioning cables in conflict with RPAs of existing trees. Where significant incursion is unavoidable, trees would be appropriately replaced.
- Hedge removal for the Access Road would be minimised by only removing what is required to lay the Access Road and accommodate visibility splays. For example, if the Access Road is 7.5 m wide only 8.5-9.5 m of each hedge is required for removal. Also, where the Access Road is laid as a 2-way road, hedges can provide pinch points and reducing traffic flow to a single lane.
- Mitigation for the loss of hedgerows and hedgerow trees would be replaced with like for like species where practicable, with hedgerow trees repositioned at least 5 m away from the Onshore Cable Route.
- In line with the proposed Generic Arboricultural Method Statement (see Appendix 16.3 Appendix F), the process of construction of the Converter Station must minimise encroachment on the west side of the Converter Station, where practicable and impacts on the existing hedgerow and hedgerow trees.

Section 2-9 Onshore Cable Corridor

1.4.4.10

The Onshore Cable Corridor within the highway may be constrained by land ownership, buildings, under and over ground services, street furniture and traffic considerations. Therefore, options for avoiding trees would need to be carefully considered.

1.4.4.11

General mitigation measures for working around trees are as follows, with more specific mitigation assumptions (where relevant) detailed below:

- Onshore Cable Route would be diverted around or under RPAs, where practicable.
- Onshore Cable Route would avoid higher value trees as indicated in this Strategy, in particular, Category A trees.
- Consideration for cumulative impacts on lower value trees is needed. Where multiple trees are impacted their cumulative value may be greater than an alternative impact on a single high value tree.
- Tree roots are likely to be infrequent within the carriageway construction due to lack of soil available for root growth. However, roots may persist at greater depths where conditions are favourable. Where practical, cable routing in the carriageway would be considered favourable in comparison to areas where ground conditions are likely to result in more prolific root growth.
- Significant tree roots are likely to be frequent within footway, verge areas and other soft landscape areas where trees are present. Works in these areas must be avoided, where practicable.
- Onshore Cable Micrositing may present alternative solutions and mitigation of tree root impacts, where practicable. However, launch and retrieval pits for such alternatives would need to be designed to avoid impacts to trees identified for retention.
- Where features are to be removed, consideration for replanting with like for like species in the locality is required. Trees and hedgerow trees would require repositioning to at least 5 m away from the Onshore Cable Route.

Section 2 Anmore (Specific Assumptions)

- In general, it is expected that adverse impacts in this Section can be kept to a minimum due to the space available for the Onshore Cable Corridor in the fields. In these situations, there is scope to make adjustments to the route within the Onshore Cable Corridor to avoid RPAs.

Section 3 Denmead/Kings Pond Meadow (Specific Assumptions)

- Mitigation of impacts could be achieved by avoiding higher value features, where practicable. Where features are to be removed, consideration for replanting in the locality is required.
- Sections of hedgerows and hedgerow trees where lost would be replaced with like for like species where practicable, with hedgerow trees repositioned at least 5 m away from the Onshore Cable Route.

Section 4 Hambledon Road to Farlington Avenue (Specific Assumptions)

- Detailed analysis of impacts as the cable route alignment is finalised must be carried out under supervision. This must be by a suitably qualified clerk of works to oversee construction works within RPA of retained arboricultural features.
- High and medium value features would be avoided, where practicable and design and construction must follow BS 5837 as a minimum.
- Design must seek to avoid positioning cables in conflict with RPAs of existing trees, where practicable. Where significant incursion is unavoidable, consideration for replanting in the locality is required with like for like species positioned a minimum of 5 m away from the Onshore Cable Route.

Section 5 - Farlington (Specific Assumptions)

- Opportunities must be reviewed at detailed design to minimise impacts, where practicable. Final details of route alignment must be agreed under the supervision of the Environmental Clerk of Works.
- Medium value features must be avoided, and design and construction shall follow BS 5837: 2012 as a minimum.
- Design must, where practicable avoid positioning cables in conflict with RPAs of existing trees. Where significant incursion is unavoidable, consideration for replanting in the locality is required.
- In agreement with PCC, in the event that TPO feature H896 (201/1997) requires replacement, other than the poplar (T925), these features will be replaced with like for like species. For T925, alternative species such as beech, sweet chestnut or yew would be considered.

Section 6 Zetland Field and Sainsbury's Car Park (Specific Assumptions)

- High value features should be avoided where practicable, and design and construction must follow BS 5837 as a minimum. Where medium value features are at risk of removal, impacts should be minimised to secure the retention of as many features as practical.
- Design must avoid positioning cables in conflict with RPAs of existing trees. Where significant incursion is unavoidable, consideration for replanting in the locality is required.

Section 7 Farlington Junction to Airport Services (Specific Assumptions)

- Arboricultural features G663, W885, and W886, serve limited function in regard to local visual amenity. Design should avoid positioning cables in conflict with RPAs of existing trees, where practicable. Where significant incursion is unavoidable, trees must be replaced. To mitigate for the loss of these features it

is assumed a similar tree mix would be planted on either side of the access road into Kendall's Wharf and Andrew Simpson Watersports Centre allowing for easements associated with the Onshore Cable Corridor.

- For south of the road bridge on Portsea Island, alternate routes down the eastern side of Kendall's Stadium, would avoid impacting on medium value arboricultural resources (G695, G711 and T70) through traversing this portion of the route between RPAs of lower quality arboricultural resource, where practicable.
- Considered design is needed within this section to seek to avoid impacts to large groups of roadside trees, while balancing impacts on traffic congestion, for example, where cables may be positioned within the carriageway.
- Design of works to cross Langstone Harbour would need additional arboricultural input to mitigate any impacts.

Section 8 Eastern Road (adjacent to Great Salterns Golf Course) to Moorings Way (Specific Assumptions)

- Arboricultural impacts to Milton Locks Conservation Area must be minimised, where practicable, by adhering to the Arboriculture Method Statement at Appendix F of Appendix 16.3 (Arboriculture Report).
- Should the final details of the route alignment confirm the loss of TPO feature T59, this feature must be replaced with like for like species.
- Medium value features should be avoided where practicable, and design and construction must follow BS 5837 as a minimum.
- Design must avoid positioning cables in conflict with RPAs of existing trees. Where significant incursion is unavoidable consideration for replanting in the locality is required.

Section 9 Moorings Way to Bransbury Road (Specific Assumptions)

- Significant impacts on tree group G900 within Milton Locks Nature Reserve must be minimised. Tree group G697 within Bransbury Park must also be avoided.
- In general, high and medium value features must be avoided where practicable. Design must seek to avoid positioning cables in conflict with RPAs of existing trees. Where significant incursion is unavoidable, trees will be replaced.
- Through initial discussions with PCC, should the Proposed Development result in the loss of TPO features along Furze Lane, these features would be replaced with evenly spaced planting with a fastigate tree species in agreement with PCC. Opportunities would also be explored to remove trees in poor condition and, where appropriate, replace with other species in agreement with PCC.
- It would be possible to minimise the long-term impact on retained trees within

Bransbury Park through Onshore Cable Micrositing within the Order Limits, under the supervision of the Environmental Clerk of Works.

Section 10 – Eastney (Landfall)

- In general, medium value features must be avoided where practicable. Design and construction would follow BS 5837 as a minimum.
- Design must, where practicable avoid positioning cables in conflict with RPAs of existing trees. Where significant incursion is unavoidable, trees would be replaced. The northern (East bound) side of Henderson Road and Fort Cumberland Road would be a preferred choice to avoid impact on existing street trees in this section.

1.4.5

HABITAT ENHANCEMENT

1.4.5.1

This section summarises features which would be enhanced for the specific sections of the Proposed Development:

Section 1 – Lovedean (Converter Station Area)

- Calcareous wildflower grassland would be introduced elsewhere. Where practicable, seed from arisings gathered in Section 3 Denmead/Kings Pond Meadow would be integrated into the grassland mix.
- Maintain existing hedgerows/ hedgerow trees within the Order Limits in perpetuity through:
 - Restrictions on the removal of hedgerows and associated hedgerow trees and maintenance at existing heights;
 - Introduction of new hedgerow trees and hedgerow planting to gap up, where practicable;
 - Gapping up of existing hedgerows with new hedgerow planting; and
 - New hedgerow planting to replace hedgerows grubbed out.

1.4.5.2

Introduce new hedgerow planting to the north of the Converter Station to reflect the line of a former historic hedgerow.

1.4.5.3

It must be noted that the enhancement of existing habitats will alter the condition of the baseline.

Section 2 – 9 Onshore Cable Corridor

1.4.5.4

No enhancement measures are proposed.

Section 10 – Eastney (Landfall)

1.4.5.5

No enhancement measures are proposed. Embedded mitigation measures would include new planting in the form of amenity grassland, hedgerows and hedgerow

trees where practicable.

1.5 LANDSCAPE AND BIODIVERSITY DESIGN FOR MITIGATION AND ENHANCEMENT

1.5.1.1 The above section outlined the impacts of the Converter Station and Landfall, and gave an overview of embedded mitigation and enhancement measures. The following section outlines the design approach to all proposed planting (both embedded mitigation and embedded enhancement planting), including constraints associated with the landscape design and consideration of climate resilience.

1.5.2 DESIGN PRINCIPLES AND PHILOSOPHY

1.5.2.1 The Design and Access Statement explains the form and appearance of the Proposed Development and provides a tool to communicate how the requirements for good design and access provision have been considered. It also includes Design Principles, which will be followed to progress the final design, post consent. Design Principles cover a number of aspects including general principles, building design, and landscape design principles.

1.5.2.2 The fundamentals of the landscape design are anchored in the Landscape Design Principles discussed below.

1.5.3 LANDSCAPE DESIGN PRINCIPLES

1.5.3.1 A set of landscape design principles (included within the suite of Design Principles) for the Converter Station Area, which are also applicable to the Landfall, were prepared and refined following discussions and close consultation with the design team, LPAs (WCC, EHDC and HBC) and SDNPA. These Principles were used to inform the Parameter Envelope for both the Converter Station Area and Landfall as defined in the following documents:

- Converter Station and Telecommunication Building Parameter Plans Sheet 1 to 3 (document references 2.6 and 2.9);
- Optical Regeneration Station Parameter Plan; Indicative Landscape Mitigation Plans for the Converter Station Area (see Figures 15.48 and 15.49 of the ES Volume 2 (document references 6.2.15.48 and 6.2.15.49); and
- Indicative Landscape Mitigation Plans for the Landfall (see Figure 15.50 of the ES Volume 2 (document reference 6.2.15.50).

1.5.3.2 The Indicative Landscape Mitigation Plans for the Converter Station Area and Landfall seek to reduce potential landscape and visual effects and create positive new habitats as well as improving connectivity and creating links to existing ancient woodland. The plans also considered:

- Local landscape character assessments;

- Existing constraints for the Converter Station Area; and
- New planting constraints for the Converter Station Area.

1.5.3.3

The constraints for existing and new planting relates to offsets from security fencing, underground and overhead cables, badger sets, ancient woodland and hedgerows. It also identifies vegetation heights in relation to offsets. These constraints were in response to health and safety guidelines stipulated in Electricity Safety, Quality and Continuity Regulations 2002, as amended by the Health and Safety Executive (Health and Safety Executive, 2002), refined in discussions with engineers and outlined below.

1.5.4

SPECIFIC OFFSETS AND CONSTRAINTS

1.5.4.1

A number of fixed offsets / standoffs are required due to the range of utilities and landscape and ecological constraints present. These are as follows:

Existing Features for Converter Station Area

- Ancient Woodland and hedgerows – 15 m.
- Badger Setts – 30 m.
- Overhead lines – 30 m exclusion from 400 KV overhead lines and taken from the outermost conductor for all trees.
- SSE oil filled cables – 1 m on either side of centre line of cable for hedgerow planting and 5 m for tree planting.

Proposed planting constraints for Converter Station Area

- Hedgerows (growth up to 2 m) - set back 5 m from security fence.
- Scrub (growth up to 4 m) – set back 10 m from the security fence.
- Trees (up to 15 m height) – $1.5 \times 15 \text{ m} + 3 \text{ m} = 25.5 \text{ m}$ standoff from security fence.
- Trees (up to 25 m in height) – $1.5 \times 25 \text{ m} + 3 \text{ m} = 40.5 \text{ m}$ standoff from security fence.

Proposed planting constraints for the Landfall

- Hedgerow with trees will be set back 5 m from the Onshore Cable Route; and
- Trees will be set back 8 m from the ORS buildings.

Proposed planting constraints for the Onshore Cable Route falling within the Converter Station Area

- New cables can be planted over with hedgerows / scrub on the basis that they are housed within underground concrete ducting blocks.

- It is not permitted to plant over SSE oil filled cables.

1.5.4.2 Planting proposals beneath and adjacent to overhead lines are specified for slow and low-growing species of trees and shrubs see Indicative Converter Station Layout Plans for Option B(i) Sheet 1 (document reference 2.7) for the location of some of the existing constraints.

1.5.5 RESPONDING TO CLIMATE CHANGE

1.5.5.1 The requirement to consider climate change results from the 2014 amendment to the EIA Directive (2014/52) (European Parliament and Council, 2014). The Directive has been fully transposed into UK law in the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and came into force in the UK on the 16 May 2017 (HM Government, 2017). Underpinning the report are a number of studies of the available evidence by independent experts, the findings of which form the evidential basis of the UK Climate Change Risk Assessment 2017 Evidence Report, which in turn informs the government's ongoing National Adaptation Programme.

1.5.5.2 The assessment takes a three-step approach to ensure climate risks are assessed in a consistent manner and graded based on the level of urgency required in response:

- Considering the magnitude of risk now and in the future;
- Taking into account policies and adaption plans already in place to manage the risks; and
- Considering the potential benefits of further action.

1.5.5.3 The landscape design will incorporate the following resilience measures to future changes in landscape and biodiversity demands:

- All seed mixes and planting stock will be ordered as early as practicable to ensure that the supply can be met without risk of substitution;
- All seed mixes and planting stock will be sourced from a local British supplier of native plants who can source all identified stock locally (i.e. not a non-specialist nursery that buys in stock or an agricultural/ general merchant that buys stock from diverse sources, including non-British sources);
- All plant species will be common in the local vicinity to maximise the chance of successful establishment;
- All grassland wildflower mixtures (other than seed obtained from Denmead/Kings Pond Meadow) will be approved by the Department for Environment, Food and Rural Affairs (Defra) under the Seed (Registration, Licensing and Enforcement) (England) Regulations 2002 (Department for Environment, Food and Rural Affairs, 2002);

- No part of the order for planting will be substituted with stock of alternative species or origin and that any change must be mutually agreed;
- Existing on-site topsoil will be utilised where practicable for new proposed planting;
- Species mixes and densities will be proposed which encourage growth to maturity and in consideration of constraints with overhead cables;
- A diverse mix of species and ages of planting suited to local conditions will, in the short-term, be resilient to threats and associated with tree pests and diseases (such as Chalara/ash dieback) at a landscape level;
- Sustainable Urban Drainage System will be introduced where practicable including attenuation ponds in response to topography amendments and altered drainage demands;
- A range of floral species mixes will be planted to ensure maximum biodiversity and avoid monocultures; and
- A variety of habitats will be created appropriate to the local fauna and environment.

1.5.5.4 The above requirements will be incorporated into contractor specifications (an outline of which is included in Appendix 1 (Outline Specification) of this document) and contracts as appropriate to deliver genuinely native plantings in accordance with the biodiversity objectives of this Strategy.

1.5.6 PROPOSED PLANTING

1.5.6.1 With the above design principles, constraints and climate resilience in mind, the principles of the proposed planting include the following:

- Use of a mix of plant stock of local provenance where practicable, including larger trees in specific locations and native ‘pioneer’ species;
- Woodlands containing a mix of coniferous and deciduous trees, understorey and ground flora to aid screening. Areas of scrub would extend beyond woodland areas aiding low level screening;
- Native mixed species hedgerows would connect with existing hedgerows for instance along the PRoW south of the Access Road and along the southern edge of the proposed Access Road. The mitigation plans include the reinstatement of a former field boundary to the north of the Converter Station; and
- A mix of marshy grassland and marginal planting would be selected for the attenuation ponds and swales where practicable, with root protection barriers alongside the Access Road.

1.5.6.2 The proposed planting serves the following purposes:

- Reinstates historic field boundaries in some locations;
- Provides partial visual screening through a layering of vegetation (existing and proposed);
- Integrates the Converter Station Area into its surroundings;
- Improves connectivity in terms of biodiversity;
- Ties in with the adjacent ancient woodland (as far as reasonable practicable given the location of the overhead lines, Access Road and associated easements);
- Reinforces and enhances local landscape features; and
- Offsets vegetation lost as a consequence of the Converter Station Area.

1.5.7 PLANTING SCHEDULES AND PLANTING HEIGHTS

1.5.7.1 Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) contains a detailed breakdown of the proposed planting species and mixes to be used, but in summary, the habitats and mixes identified are outlined below. These are based on Phase 1 habitat types as per the Joint Nature Conservation Committee's ('JNCC') Phase 1 Handbook.

Converter Station Area

1.5.7.2 Within the Converter Station Area, the following planting types are proposed:

- Native hedgerow;
- Native hedgerow with hedgerow trees;
- Native mixed woodland (up to 15 m in height);
- Native mixed woodland (up to 25 m in height);
- Scrub;
- Scrub with scattered trees;
- Calcareous grassland;
- Marshy grassland;
- Attenuation pond; and
- Vegetated conveyance and infiltration swale (marginal planting).

Landfall

1.5.7.3 The following planting types are proposed for the Landfall:

- Native hedgerow;
- Native hedgerow with hedgerow trees; and

- Amenity grassland.

1.5.7.4 Table 13 in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) details the anticipated height of proposed species at 10 years, 20 years, and at maturity.

1.6 SITE SPECIFIC LANDSCAPE MANAGEMENT PRESCRIPTIONS

1.6.1 OVERVIEW

1.6.1.1 The Applicant's overall objectives of the landscape management for both the Converter Station Area and Landfall are to ensure the existing and proposed vegetation matures to maximise biodiversity benefits; reduce the visual presence of the Proposed Development and respects local landscape character.

1.6.1.2 Existing features would be enhanced and managed, whilst new features would be maintained and monitored to ensure they achieve an effective contribution to the Proposed Development.

1.6.1.3 Management guidelines for 0-5 years of aftercare of new planting, which would be managed by appointed contractors, are outlined in Appendix 6.10.1 (Outline Specification).

1.6.1.4 The following section, supported by the Outline Landscape and Biodiversity Strategy management plans (included in Appendix 6.10.2 (Outline Landscape and Biodiversity Strategy Management Plans) of this document), provides:

- General management prescriptions for landscape features; and
- More specific objectives for management areas defined within the Converter Station Area which include a mix of landscape features.

1.6.1.5 The management prescriptions follow the initial 5-year aftercare period. The strategy management plans would be reviewed periodically following site inspections to ensure the current management prescriptions are effective and if landscape targets need to be adjusted.

1.6.1.6 Each identified existing and proposed landscape feature will receive management prescriptions based on their species mix and intended mitigative purpose.

Converter Station Area

1.6.1.7 Management prescriptions are included for the following existing features within the Order Limits:

- Broadleaved woodland, semi-natural;
- Mature trees;
- Native hedgerows and native hedgerows with trees; and
- Scrub.

1.6.1.8 Management prescriptions are included for the following proposed features within the Order Limits:

- Native mixed woodland (up to 15 m);
- Native mixed woodland (up to 25 m);
- Native hedgerow; and native hedgerow with hedgerow trees;
- Scrub and scrub with scattered trees;
- Calcareous grassland;
- Marshy grassland;
- Attenuation ponds; and
- Vegetated conveyance and infiltration swale (marginal planting).

1.6.1.9 It must be noted that existing management regimes would be maintained for Ancient Woodland, National Grid mitigation planting (which also includes semi improved grassland), arable and pasture farmland, and such regimes are outside the responsibility of AQUIND Limited. Construction/operation works undertaken close to such areas will however need to consider indirect impacts. National Grid mitigation planting is covered by an existing landscape management plan and does not fall under the remit of this document.

Landfall

1.6.1.10 Management prescriptions are included for the following existing features within the Order Limits:

- Grassland/scrub; and
- A mature tree.

1.6.1.11 Management prescriptions are included for the following proposed features within the Order Limits:

- Native hedgerow and native hedgerow with hedgerow trees; and
- Amenity grassland.

1.6.2 PRESCRIPTIONS FOR EFFECTIVE MANAGEMENT

1.6.1.12 The management for each landscape area and individual features are detailed in the corresponding sections below. All planting must be undertaken in strict accordance with the following drawings:

- Figure 6.10.1 Outline Landscape and Biodiversity Strategy Management Plan - Converter Station Area; and
- Figure 6.10.2 Outline Landscape and Biodiversity Strategy Management Plan -

Landfall.

- 1.6.1.13 Each feature containing management prescriptions is identified with acronyms where appropriate, which are shown on the above figures and as outlined in the following Table 1.1.

Table 1.1 - Landscape features and their acronyms

Landscape Feature	Acronym
Existing broadleaved woodland, semi-natural	EW
Proposed native mixed woodland (up to 15 m and 25 m)	PW
Existing and proposed native hedgerows	EH
Existing and proposed native hedgerows with trees	PH
Proposed scrub	SC
Proposed scrub with scattered trees	ST

1.6.2 CONVERTER STATION AREA - LANDSCAPE FEATURES PRESCRIPTIONS

Existing broadleaved woodland, semi-natural (EW)

- 1.6.2.1 Established woodland provides intrinsic ecological value and, where practicable, it must be retained and protected during the Construction Stage and repaired, where appropriate.
- 1.6.2.2 Further investigation is required to determine the condition of trees and whether appropriate replacement planting must be introduced where there are suitable gaps in the woodland and where trees have failed and gaps are evident.
- 1.6.2.3 Any construction activity in the proximity of trees would incorporate a suitable root protection buffer, in consideration of the RPA in accordance with BS 5837:2012. An arboriculturalist would be consulted to advise on the appropriate specification and location of protective fencing.
- 1.6.2.4 The following Table 1.2 outlines the management activities for EW.

Table 1.2 - Management prescriptions for existing broadleaved woodland, semi natural (EW)

Proposed Management Actions	Timing
Remove and dispose appropriately of any identified invasive species.	Annually (between October – March)
Remove and dispose appropriately of any disease-ridden timber. Deadwood which is not disease-ridden can be partially buried in areas where it will not impede the rooting systems of retained	Annually (between October – March)

Proposed Management Actions	Timing
woodland scrub, ideally within areas with limited or no ground cover. The dead wood should be buried so approx. 50% is below ground.	

Proposed native mixed woodland (up to 15 m and 25 m) (PW)

- 1.6.2.5 The proposed native mixed woodlands, up to 15 m and 25 m in height, have a common objective to visually screen the Converter Station from the surrounding landscape receptors. Heights are limited due to offset constraints of existing infrastructure.
- 1.6.2.6 Using species of local provenance (see Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) for species information), the woodland would create a naturalistic and biodiverse woodland habitat appropriate to the local climate and site characteristics. Furthermore, the woodland will provide wildlife connections through the site and visual screening of the Proposed Development.
- 1.6.2.7 Areas of proposed woodland planting will receive protective deer fencing enclosing the space to ensure the successful establishment of the plant stock.
- 1.6.2.8 Species selection has considered the growing rate and mature heights to ensure the areas reach 15 m or 25 m as appropriate (see Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) for proposed planting palettes).
- 1.6.2.9 The following Table 1.3. outlines the management activities for PW.

Table 1.3- Management prescriptions for proposed native mixed woodland (up to 15 m and 25 m) (PW)

Proposed Management Actions	Timing
Inspect planting for signs of defects or poor health to determine if works are necessary to ensure good health.	Annually (between October - March)
Remove and dispose appropriately of any identified invasive species.	Annually (between October - March)
Remove and dispose appropriately of any disease-ridden timber. Any ash trees infected with Chalara ash dieback will be disposed appropriately. Deadwood which is not disease-ridden can be partially buried in areas where it will not impede the rooting systems of retained woodland scrub, ideally within areas with limited or no ground cover. The dead wood should be buried so approx. 50% is below ground.	Annually (between October - March)
Inspect any installed stakes or guards to ensure functional. Remove guards after a period of 3-5 years, or once they begin to split as they might hamper tree growth.	Annually (between October - March)

Proposed Management Actions	Timing
Inspect growth and height of woodland planting. A suitably qualified tree surgeon must be consulted if tree surgery is required to retain objective height.	Annually (between October - March)
Selective thinning of planting.	10 years after planting (between October - March)

Existing mature trees

1.6.2.10 See Appendix 16.3 (Arboriculture Report) for further information regarding location, condition/quality and species of existing trees. See Section 1.4.5 for a list of the existing woodland within the Order Limits.

1.6.2.11 Refer to general tree works section above for typical management objectives for individual existing trees.

Existing and proposed native hedgerows (and with trees) (EH) (PH)

1.6.2.12 Refer to strategy management plans (included within Appendix 6.10.2 (Outline Landscape and Biodiversity Strategy Management Plans) of this document) for location of named hedgerows; and to the Appendix 16.3 (Arboriculture Report), for species composition and quality.

1.6.2.13 Hedgerows would be managed to improve foraging and wildlife corridor value, whilst creating a functional boundary, connecting to the wider local landscape and maintained to a specified height to provide visual screening. Any supplementary or replacement planting will use species within the immediate vicinity for continuity and consistency across the length of the hedgerow habitat.

1.6.2.14 Where hedgerow trees exist, or are to be introduced, they must be clearly tagged to avoid flailing and to allow them to develop in to mature specimens.

1.6.2.15 Infill planting to existing hedgerows will receive tree or shrub guards to protect from damage of grazing rabbits and deer.

1.6.2.16 All pruning would promote bushy growth while providing continued habitat, to create a consistent landscape biodiversity feature.

1.6.2.17 The following Table 1.4 outlines the management activities for existing and proposed native hedgerows; with and without trees.

Table 1.4 - Management prescriptions for existing and proposed native hedgerows (and with trees) (EH)(PH)

Proposed Management Actions	Timing
Inspect new planting mulch matting and protection measures. Remove weed growth at base by hand for first two years.	Annually (between May – August)

Proposed Management Actions	Timing
Following establishment, all new and infill planting would be managed in accordance with the regime for existing hedgerows.	
Replace any dead or dying specimens.	Annually (between November - March)
Inspect any installed stakes or guards and adjust or replace to ensure they remain functional and stems of trees are not chafed. Remove guards after a period of 3-5 years or once split due to tree growth.	Annually (between May – August)
Cut hedges in to an ‘A’ shape. Cutting will be carried out in early Jan – Feb to maximise the retention of berries in the hedgerow.	Annually (between January – February)
Hedges must be pruned on one side per year alternating on a 2 or 3 year rotation cycle. Pruning must occur in Jan-Feb to maintain hedges at a maximum height of 3.0 metres.	Annually (between January – February)

Existing Hedgerows

- 1.6.2.18 Type 1 – maintain at 3-4 m in height, gap up with new planting as required to achieve continuous hedgerow.
- EH1, EH2, EH3, EH4, EH6, EH8, EH10, EH11, EH16, EH17, EH18, EH19, EH20, EH21, EH22.

- 1.6.2.19 Type 2 – maintain at 3-4 m in height, gap up with new planting as necessary to achieve a continuous hedgerow, but also include hedgerow trees where practicable.
- EH7, EH15, EH23, EH24, EH25, EH26, EH27, EH28, EH29, EH30.

Proposed Hedgerows

- 1.6.2.20 Type 1 – maintain at 3-4 m in height with no hedgerow trees.
- PH2
- 1.6.2.21 Type 2 – maintain at 3-4 m in height and include hedgerow trees.
- PH1, PH5, PH8, PH9, PH10
- 1.6.2.22 Type 3 – maintain at 3-4 m in height and include hedgerow trees unless constrained by proximity to Converter Station or overhead power lines.
- PH3, PH4
- 1.6.2.23 Type 4 – maintain at 2 to 2.5 m in height with new hedgerow trees.
- PH6
- 1.6.2.24 Type 5 – maintain at 2 to 2.5 m in height with no hedgerow trees.

- PH7

Proposed scrub (and with scattered trees) (SC) (ST)

- 1.6.2.25 Scrub planting would enhance the habitat mosaic associated with woodland areas to form a new understorey edging the proposed woodlands, improve habitat cover and connectivity for local wildlife and achieve a greater diversity of species and habitats.
- 1.6.2.26 Scrub areas closest to the Converter Station (SC-2,3,9), near to the ancient woodland (SC-1) and Telecommunications Buildings would be managed to restrict the successional development due to constraints associated with the Converter Station. Whilst elsewhere and beyond the offsets scrub would be allowed to naturally regenerate.
- 1.6.2.27 Scrub with scattered trees surrounding the Ancient Woodland (SW-1,2) will receive protective deer fencing enclosing the space to ensure the successful establishment of the plant stock see Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) for proposed planting palettes.
- 1.6.2.28 The following Table 1.5 outlines the management activities for SC and ST.

Table 1.5- Management prescriptions for proposed scrub (and with scattered trees)

Proposed Management Actions	Timing
Inspect planting for signs of defects or poor health to determine if works are necessary to ensure good health.	Annually (between October – March)
Replace any dead or dying specimens.	Annually (between November - March)
Remove and dispose appropriately of any disease-ridden timber.	Annually (between October – March)
Retain fallen deadwood where appropriate and does not pose a health and safety risk	Annually (between October – March)
Inspect any installed stakes or guards and adjust or replace to ensure they remain functional. Remove guards after a period of 2-3 years.	Annually (between October – March)

Proposed grassland (calcareous and marshy)

- 1.6.2.29 Species-rich calcareous grassland habitat would be established following topsoil removal or inversion and ground preparation. The seed mix sown would be appropriate to the local geographical context and native species of UK provenance. Seed harvested prior to works in Section 3 Denmead/Kings Pond Meadow (late June/early July and late August/early September) would be sown to supplement the species mix above as specified in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) following the completion of the construction works.

- 1.6.2.30 New marshy grassland would replace grassland lost with a mix to match species identified through the Phase 1 Habitat Survey. See Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) for proposed planting palettes.
- 1.6.2.31 Retain arisings in situ for three days during dry conditions to allow seed dispersal. Some arisings should be retained in low habitat piles as animal refuge areas on grassland boundaries.
- 1.6.2.32 No fertiliser will be applied to any areas to be established as wildflower grassland.
- 1.6.2.33 The following Table 1.6 outlines the management activities for the proposed grasslands.

Table 1.6 - Management prescriptions for proposed grassland (calcareous and marshy)

Proposed Management Actions	Timing
Two cuts undertaken each year, keep sward to 4-6 cm. If sowing in March / April in accordance with manufacturer's instructions, the first cut after sowing will take place after flowering in August-Oct. The sward will be cut to a height of 4-7 cm.	Twice annually (March – April and September – October)
Remove weeds by hand.	Annually (between May – August)

Proposed attenuation ponds

- 1.6.2.34 Subject to detailed design create and manage the attenuation ponds as part of a functional surface water drainage regime and generating a new habitat within the landscape. Ensure no herbicides or chemicals are used on or near aquatic locations. See Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) for proposed planting palettes.
- 1.6.2.35 The following Table 1.7 outlines the management activities for the proposed attenuation ponds.

Table 1.7 - Management prescriptions for proposed attenuation ponds

Proposed Management Actions	Timing
Prevent any individual species becoming dominant and encroaching into surrounding areas by removing unwanted plants by hand.	Annually (between November - February)
Ensure inlet and outlet channels are kept clear and any encroaching vegetation is removed.	Annually (between November - February)

Proposed Management Actions	Timing
Allow margins to naturally regenerate to encourage succession. Check and clear pond of rubbish. Remove leaf litter on a two-year rotation. No dredging works to be undertaken without appropriate ecological consultation.	Annually (between November - February)
Maintain suitable access routes for maintenance.	Annually (between November - February)

Proposed marginal planting

- 1.6.2.36 Subject to detailed design establish and maintain areas of marginal vegetation with no single species allowed to dominate, to maximise wildlife opportunities see ES Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) for proposed planting palettes.
- 1.6.2.37 The following Table 1.8 outlines the management activities for the proposed marginal planting.

Table 1.8 - Management prescriptions for proposed marginal planting

Proposed Management Actions	Timing
Physically remove invasive species and/or notifiable weeds.	Annually (between May – August)
Prevent encroachment into water body, ensuring that open water is maintained at all times to prevent stagnation.	Annually (between May – August)
Remove any dead plant material.	Annually (between May – August)

1.6.3 LOVEDEAN (CONVERTER STATION AREA) - MANAGEMENT AREAS

- 1.6.3.1 Management prescriptions have been identified for each landscape feature. Due to the mosaic of the planting design and breadth of management objectives for each landscape planting feature, certain areas within the Converter Station Area have been grouped together. These are referred to as management areas A to G, where a particular approach and set of management prescriptions is required to achieve specific landscape objectives in the longer term.
- 1.6.3.2 The location of the management areas is shown in Figure 6.10.1 Outline Landscape and Biodiversity Strategy Management Plan - Converter Station Area in Appendix 6.10.2 (Outline Landscape and Biodiversity Strategy Management Plans) of this document.

Management Area A

- 1.6.3.3 Location: Approximately 25 m to the west and north of the Converter Station at its closest point.
- 1.6.3.4 Total area: 2.54 ha.
- 1.6.3.5 Total area of proposed planting: 1.43 ha, comprising:
- Native Woodland (up to 25 m) 1.15 ha.
 - Native Woodland (up to 15 m) 0.28 ha.
- 1.6.3.6 The management objectives of this area are to:
- Create a dense belt of native woodland comprising a combination of existing established hedgerows and hedgerow trees, and proposed native tree planting with understorey, with the intention of providing an effective screening function to reduce views of the Converter Station particularly for residents immediately to the north east.
 - Enhance landscape connectivity and provide habitat corridors.
 - Contribute to biodiversity in the wider area.
- 1.6.3.7 The constraint specific to this area is that planting within Management Area A is defined by its proximity to the Converter Station to the east and by overhead high voltage cables to the north.
- 1.6.3.8 Landscape features (or parts thereof) contained within Management Area A are:
- EH-7, EH-12, EH-13, EH-14
 - PW-5, PW-8, PW-9, PW-10

Management Area B

- 1.6.3.9 Location: East of the Access Road, approximately 65 m south of the Converter Station, adjacent to Stoneacre Copse Ancient Woodland.
- 1.6.3.10 Total area: 2.34 ha.
- 1.6.3.11 Total area of proposed planting: 1.94 ha, comprising:
- Native Woodland (up to 25 m) 1.03 ha;
 - Native Woodland (up to 15 m) 0.07 ha;
 - Scrub with scattered trees 0.59 ha; and
 - Scrub 0.25 ha.
- 1.6.3.12 The management objectives of this area are to:
- Expand and enhance the existing Ancient Woodland at Stoneacre Copse through the planting of a mixture of native woodland, successional scrub with scattered

trees, and scrub.

- Planting and management must seek to increase the structural diversity of the existing woodland habitat through the use of scalloped woodland edges, glades and rides.
- Enhance overall landscape connectivity and provide habitat corridors.
- Contribute to increased biodiversity in the wider area.

1.6.3.13 Planting within Area B is defined by its proximity to the Converter Station, Ancient Woodland at Stoneacre Copse to the east, by overhead high voltage cables to the north, and the Telecommunications Building compound to the west.

1.6.3.14 Landscape features (or parts thereof) contained within Area B are:

- EW-1;
- AW-1;
- SC-1, SC-9;
- ST-1, ST-2; and
- PW-14, PW-15, PW-16.

Management Area C

1.6.3.15 Location: Approximately 200 m to the north-east of the Converter Station, and 70 m to the south of Monarch's Way.

1.6.3.16 Total area: 1.51 ha.

1.6.3.17 Total area of proposed planting: 0.68 ha of Native Woodland (up to 25 m).

1.6.3.18 The management objectives of this area are to:

- Create a belt of native woodland by incorporating existing established hedgerows and hedgerow trees into proposed woodland planting and managing in accordance with the management prescriptions EW and PW.
- Once established, encourage growth of the woodland belt to strengthen the visual screening of the Converter Station for users of Monarch's Way to the north.
- Encourage growth to enhance landscape connectivity and provide habitat corridors.
- Prune and control species dominance to contribute to biodiversity in the wider area.

1.6.3.19 Planting within Area C is constrained by its proximity to overhead high voltage cables to the south and east.

1.6.3.20 Landscape features (or parts thereof) contained within Area C are:

- EH-5, EH-6; and

- PW-1, PW-2, PW-3.

Management Area D

- 1.6.3.21 Location: Approximately 550 m to the south-west of the Converter Station, at the corner of the arable field adjacent to the junction of Edneys Lane, Old Mill Lane and an un-named road.
- 1.6.3.22 Total area: 0.62 ha.
- 1.6.3.23 Total area of proposed planting: 0.58 ha comprising:
- Native Woodland (up to 25 m) 0.42 ha;
 - Native Woodland (up to 15 m) 0.09 ha; and
 - Scrub 0.07 ha.
- 1.6.3.24 The management objectives of this area are to:
- Create a native woodland copse through a combination of existing hedgerows and new tree planting.
 - Once established, the copse will effectively screen views of the Converter Station from Kimberley House to the south west.
 - Make a positive contribution to biodiversity in the wider area.
- 1.6.3.25 Planting within Area D is constrained by its proximity to overhead high voltage cables to the north.
- 1.6.3.26 Landscape features (or parts thereof) contained within Area D are:
- EH-15, EH-16;
 - PW-20, PW-21; and
 - SC-7.

Management Area E

- 1.6.3.27 Location: Approximately 220 m to the south-west of the Converter Station Area, and 25 m to the west of the Telecommunications Buildings.
- 1.6.3.28 Total area: 0.46 ha.
- 1.6.3.29 Total area of proposed planting: 0.23 ha comprising:
- Native Woodland (up to 25 m) 0.19 ha; and
 - Native Woodland (up to 15 m) 0.04 ha.
- 1.6.3.30 The management objectives of this area are to:
- Create a native woodland copse through a combination of existing hedgerows and new tree planting.
 - Once established, the copse will effectively screen views of the

Telecommunications Buildings from the west.

- Enhance landscape connectivity and provide habitat corridors.
- Make a positive contribution to biodiversity in the wider area.

1.6.3.31 Planting within Area E is constrained by its proximity to overhead high voltage cables and underground cables to the north, and by the Telecommunications Buildings to the east.

1.6.3.32 Landscape features (or parts thereof) contained within Area E are:

- EH-18, EH-19;
- PW-18, PW-19; and
- PH-2.

Management Area F

1.6.3.33 Location: Split into 2 areas, either side of the Access Road approximately 10 m to the south of the Converter Station.

1.6.3.34 Total area: 0.59 ha.

1.6.3.35 Total area of proposed planting: 0.23 ha comprising:

- Native Woodland (up to 25 m) 0.04 ha;
- Native Woodland (up to 15 m) 0.25 ha; and
- Scrub 0.22 ha.

1.6.3.36 The management objectives of this area are to:

- Establish areas of native woodland and scrub on the engineered ground to the south of the Converter Station with the intention of providing an effective visual screen.
- Enhance landscape connectivity and provide habitat corridors.
- Make a positive contribution to biodiversity in the wider area.

1.6.3.37 Planting within Area F is constrained by its proximity to the Converter Station to the north, and by overhead high voltage cables to the south. Particular care must be exercised when planting on the steep banks in this area.

1.6.3.38 Landscape features (or parts thereof) contained within Area F are:

- SC-2, SC-3; and
- PW-11, PW-12, PW-13.

Management Area G

1.6.3.39 Location: Approximately 550 m to the south east of the Converter Station, to the north and west of Broadway Cottages and adjacent to the site entrance and Access Road.

- 1.6.3.40 Total area: 0.38 ha
- 1.6.3.41 Total area of proposed planting: 0.37 ha comprising:
- Native Woodland (up to 25 m) 0.17 ha; and
 - Scrub 0.20 ha.
- 1.6.3.42 The management objectives of this area are to:
- Establish areas of native woodland and naturally regenerating scrub with the intention of providing an effective visual screen for the residential properties adjacent to the Order Limits.
 - Enhance landscape connectivity and provide habitat corridors.
 - Make a positive contribution to biodiversity in the wider area.
- 1.6.3.43 Planting within Area G is constrained by the Order Limits to the east, and by the Access Road to the north. High voltage cables run north-south through the area which require a 10 m offset for any planting.
- 1.6.3.44 Landscape features (or parts thereof) contained within Area G are:
- EH-27;
 - SC-8;
 - PW-23, PW-24; and
 - PH-3.
- 1.6.4 EASTNEY (LANDFALL) - LANDSCAPE FEATURES PRESCRIPTIONS**
- 1.6.4.1 Management of the planting at the Landfall would only be over a five-year duration after which it is expected that the maintenance of planting would be handed over to PCC Parks Department (subject to their agreement).
- Existing grassland/scrub**
- 1.6.4.2 This area would be protected during the Construction Stage to avoid soil compaction and minimise the impacts.
- 1.6.4.3 The existing grassland/scrub habitat should be left to regenerate naturally with minimal intervention.
- Existing mature trees**
- 1.6.4.4 One existing tree is located within the Landfall, the Arboriculture Report identified this as a Category C Ash (T6, Appendix 16.3 (Arboricultural Report)). The tree is semi-mature and reported in fair condition see general tree works section above for typical management objectives for individual existing trees.

Proposed native hedgerows (and with trees) (PH-8)

- 1.6.4.5 Planting proposals would be managed to encourage a dense planting feature to screen the ORS' from residents' properties to the north and partially screen views from Southsea Leisure Park.
- 1.6.4.6 Pruning would promote bushy growth while improving habitat for foraging and wildlife benefit. Hedgerow trees must be clearly tagged to avoid flailing and encouraged to develop to full maturity see Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) for proposed planting palettes.
- 1.6.4.7 The following Table 1.9 outlines the management activities for proposed native hedgerows, and proposed native hedgerows with trees.

Table 1.9 - Management prescriptions for proposed native hedgerows (and with trees)

Proposed Management Actions	Timing
Inspect new planting mulch matting and protection measures. Remove weed growth at base by hand for first two years. Following establishment, all new and infill planting would be managed in accordance with the regime for existing hedgerows.	Annually (between May – August)
Replace any dead or dying specimens.	Annually (between November - March)
Inspect any installed stakes or guards to ensure functional. Remove guards after a period of 3-5 years.	Annually (between May – August)
Cut hedges in to an 'A' shape. Cutting will be carried out in early Jan – Feb to maximise the retention of berries with the hedgerow.	Annually (between January – February)
Hedges must be pruned on one side per year alternating on a 2 or 3 year rotation cycle. Pruning will occur in Jan-Feb to maintain hedges at a maximum height of 3.0 metres.	Annually (between January – February)

Proposed amenity grassland

- 1.6.4.8 The objective for this area is to maintain a short-cut, attractive landscape treatment within the visibility splays of the car park access.
- 1.6.4.9 The feature would be managed to retain open visibility splays, free of litter and an accessible surface treatment to manage the native hedgerows; native hedgerows with trees and the existing mature tree.

1.7 MONITORING, RESPONSIBILITY AND REVIEW REQUIREMENTS

1.7.1 MONITORING OF PLANTING

- 1.7.1.1 The management of existing and proposed landscapes/habitats would be subject to

a detailed landscape and biodiversity strategy. This would encompass the management, maintenance and monitoring plans to ensure the full and successful establishment.

1.7.1.2 The plan would prescribe maintenance regimes, in agreement with the appointed contractors and neighbouring landowners. New planting would be subject to a five-year liability period to secure successful establishment, commencing on completion of landscaping works associated with each phase. All plants found dead or dying would be replaced in the first available planting season.

1.7.1.3 The plan would consider the management of the identified features in further detail, considering the objectives and functions and align with the Onshore Outline CEMP.

1.7.2 MANAGEMENT RESPONSIBILITIES

1.7.2.1 Access for landscape management would be agreed between existing landowners upon agreement of the detailed landscape and biodiversity strategy.

1.7.2.2 At the time of writing, it is anticipated that the management responsibilities of existing planting (hedgerows and hedgerow trees) would be undertaken by a local farmer with an agreed management plan which will be reviewed on a regular basis. An external landscape contractor would be responsible for all new planting. The confirmed management responsibilities will be provided in the detailed Strategy.

1.7.2.3 The local farmer and appointed external contractors would be responsible for:

- Correct instruction of all parties contributing to delivery of the detailed landscape and biodiversity strategy (including but not restricted to the Applicant's staff, Ecological and Environmental Clerk of Works, landscape contractors, construction contractors and management organisations);
- Compliance with detailed landscape and biodiversity strategy, relevant legislation and any related planning commitments;
- Keeping the appointed Ecological and Environmental Clerk of Works and each other informed of work activities that require support and supervision, so that it is clear when attendance at site is required;
- Enacting/enforcing recommendations made by the ecologist/landscape architect/arboriculturist, or otherwise agreeing an appropriate alternative course of action if it is subsequently determined that previous advice is not practicable or is out of date; and
- Keeping a record of measures taken to deliver the requirements of the detailed landscape and biodiversity strategy to provide an auditable record of compliance and part of the site records book as part of CDM requirements.

1.7.2.4 The appointed Ecological Clerk of Works would be responsible for:

- Advising the Applicant on ecological matters and requirements for compliance

legislation, providing support as instructed, and monitoring compliance on the final landscape and biodiversity strategy;

- Providing the Applicant with survey reports and other written evidence required by accordance with the agreed scope of works and contractual obligations; and
- Planning and undertaking ecological monitoring surveys (where necessary) which would be outlined in detail within the overarching management, maintenance and monitoring plan as part of the final landscape and biodiversity strategy.

1.7.2.5 The appointed Environmental Clerk of Works would be responsible for:

- Providing specialist site supervision in the form of walk over assessments relating to relevant landscape areas. This will be to assess landscape components and their condition, and identify the need for landscape enhancement as instructed and in accordance with the agreed scope of work and contractual obligations, once the Proposed Development has been completed;
- Undertaking a detailed analysis of impacts associated with RPAs once the cable route alignment is finalised;
- Monitoring and assessing the landscape related features of the detailed approved strategy for their effectiveness on an annual basis for the first five years following the completion of the development, informed by the management, maintenance and monitoring plan within the detailed landscape and biodiversity strategy;
- Ensuring that the landscape related features of the detailed approved strategy are reviewed every five years beyond the initial monitoring and assessment phase. The strategy must be amended accordingly to suit any changing landscape conditions and ultimately inform the landscape maintenance operations associated with the development throughout the operational life of the Proposed Development; and
- Ensuring that any reviews associated with landscape related features of the detailed approved strategy clearly identifies any changes to site conditions and circumstances, whether the aims and objectives of the final landscape and biodiversity strategy are being met, and where identified changes are needed to existing management practices and timeframes.

1.7.3 MANAGEMENT PLAN REVIEWS

1.7.3.1 A site walkover would be scheduled following any extreme weather event to inspect the overall health of the landscape features and structural integrity of the trees. Any trees noted to have suffered damage would be subject to an arboricultural survey by a suitably qualified arboriculturalist.

1.7.3.2 The outline landscape and biodiversity management strategy management plans (as shown in Appendix 2 of this document illustrate the objectives for the proposed

landscape features and would be reviewed appropriately to the current environmental conditions to consider unforeseen circumstances such as extreme weather events, climate change influences or changes in hydrology and natural drainage routes.

1.7.3.3

The Strategy and strategy management plans would be reviewed annually and any significant amendments to the Strategy or strategy management plans must be agreed between the project landscape architect, arboriculturalist, ecologist and appointed contractor. This approach will also be followed for the final landscape and biodiversity strategy and accompanying detailed management plans.

REFERENCES

- Bat Conservation Trust (2014). Artificial lighting and wildlife. Interim Guidance: Recommendation to help minimise the impact artificial lighting. Bat Conservation Trust, London.
- BSI Standards Publication. (2010 British Standards Limited). *BS 3998:2010 Tree Work. Recommendations.*
- BSI Standards Publication. (2012 British Standards Limited). *BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations.*
- Department for Environment, Food and Rural Affairs. (2002). Under the Seed (Registration, Licensing and Enforcement) (England) Regulations.
- Department for Environment, Food and Rural Affairs. (2009). *Construction Code of Practice for the Sustainable Use of Soil on Construction Sites.* BSI Standard Publication.
- East Hampshire District Council. (2006). *East Hampshire Local Plan, Second Review, adopted version.*
- East Hampshire District Council and South Downs National Park Authority. (Adopted June 2014). *East Hampshire District Local Plan: Joint Core Strategy.*
- East Hampshire District Council. (May 2019). *East Hampshire Green Infrastructure Strategy.*
- European Parliament and Council. (2014). Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment.
- Forestry Commission. (2006). *Technical Guide: Guidance relating to fencing specification.*
- Forestry Commission and Natural England. (5 November 2018.). *Guidance: Ancient woodland, ancient trees and veteran trees: protecting them from development.* UK Government.
- Health and Safety Executive. (2002). *Electricity Safety, Quality and Continuity Regulations (ESQCR).*
- HM Government. (1997). *Hedgerow Regulations.*
- HM Government. (2008). *Climate Change Act.*
- HM Government. (2008). *UK Climate Change Risk Assessment.*

- HM Government. (2017). The Infrastructure Planning (Environmental Impact Assessment) Regulations.
- HM Government. (2018). *A Green Future: Our 25 Year Plan to Improve the Environment*.
- HM Government. (Revised, 2017). *UK Climate Change Risk Assessment 2017*.
- HM Government. (Revised, 2019). *National Planning Policy Framework*.
- Institute of Lighting Engineers (2009). *Bats and Lighting in the UK. Bats and the Built Environment Series*. Institute of Lighting Engineers, Rugby.
- Landscape Institute. (May, 1996). *Technical Bulletin: Watering Restriction and Watering Specifications*.
- Planning Inspectorate. (2016). Advice note six: Preparation and submission of application documents.
- Portsmouth City Council. (2012). *Portsmouth Local Plan 2001-2011*.
- The National Joint Utilities Group. (16 November 2007). *NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity of Trees*.
- Winchester City Council. (2006). *Winchester District Local Plan Review*.
- Winchester City Council and South Downs National Park. (March 2013). *Winchester District Local Plan Part 1, Joint Core Strategy, adopted version*.
- Winchester City Council and South Downs National Park. (March 2017). *Winchester District Local Plan Part 2, Development Management and Site Allocations, adopted version*.
- Winchester City Council. (March 2015). *High Quality Spaces, SPD*.
- Winchester City Council, Local Development Framework. (May 2010). *Green Infrastructure (GI) Study*.

Appendix 1

Outline Landscape

Specification

Years 0 to 5

1.1. OUTLINE LANDSCAPE SPECIFICATION YEARS 0-5

1.1.1.1. The outline landscape specification years 0 to 5 summarises measures taken by the contractor during construction and post construction for the Converter Station Area and the Landfall. This timescale is based on a standard defects liability period. The outline specification will be revised post DCO consent and following detailed design.

1.1.1. OUTLINE SPECIFICATION: YEARS 0 - 5

1.1.1.2. The following outlines briefly the general landscape management guidelines for year 0 to 5.

Pruning Generally

1.1.1.3. All tree work and pruning to hedges must be in accordance with British Standards BS 3998:2010 Tree work – Recommendations (BSI Standards Publication, 2012 British Standards Limited).

1.1.1.4. Trees and shrubs must be pruned in the appropriate season to maintain health and vigour and to prevent encroachment on paths, parking areas etc. The removal of vegetation is normally to be timed for outside the bird nesting season (March to August inclusive) to prevent disturbance of breeding birds and to prevent committing an offence under the Wildlife and Countryside Act 1981 (amended). If this is not possible, a check for active nests will first be undertaken by an ecologist. Should any active bird nests be found, the pruning works must cease immediately and a disturbance-free buffer zone established around the nest until the young birds have fledged.

1.1.1.5. All dead, damaged or diseased tree branches will be removed and arisings removed from site.

1.1.1.6. All ash trees present on site would be regularly inspected for the presence of Chalara ash dieback. Should any ash tree become infected, these must be managed to best practice guidance (Forestry Commission and Natural England, 5 November 2018.) and left standing unless there is a safety issue. Felling would commence once the tree is unable to maintain a crown for three years. Any branches and leaves must be burned, buried or deep-composted on site if practicable. If they are removed from the site, they will be transported in a securely closed container to a place where they can be destroyed appropriately.

Scrub

1.1.1.7. All areas of scrub should be left to regenerate naturally with minimal intervention, unless otherwise stated.

Scattered Trees

- 1.1.1.8. Planting of native bare-root stock as detailed in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) must be undertaken between October and March. No planting will be carried out during periods of frost or if the ground is either too dry or waterlogged.
- 1.1.1.9. Tree pits will be dug to a size at least 1.5 times the size of the root ball of the specimen to be planted. Soils at the sides and bottom of the pits will be well cultivated and friable to allow roots to spread.
- 1.1.1.10. Specimens must be checked for good health before planting in a 50/50 mixture of existing soils and locally sourced high-quality peat-free compost, and fully firmed and watered in.
- 1.1.1.11. Newly planted trees will be staked and either guarded or fenced to prevent browsing damage. Fences and guards must be regularly checked to ensure they are functional. Tree guards will be removed after a period of 3 - 5 years, or once they begin to split due to tree growth, if sooner.
- 1.1.1.12. Fallen and standing deadwood which is free from infection, either robustly attached to the tree or located where it does not pose a health and safety risk will be preserved in-situ for the benefit of saprophytic organisms, invertebrates and to act as refuge opportunities for small mammals.
- 1.1.1.13. Dead wood free from infection can be partially buried in areas where it will not impede the rooting systems of retained woodland scrub, ideally within areas with limited or no ground cover. The dead wood must be buried so approximately 50% is below ground.
- 1.1.1.14. Where tree surgery is planned as part of the management plan, or for health and safety remedial works, the potential for bats to be present must be assessed prior to the works being carried out. Identification of features such as rot holes, split limbs or loose bark would be undertaken by a suitably qualified ecologist.
- 1.1.1.15. Any removal of vegetation or tree surgery works must be undertaken in accordance with the requirements of BS 3998:2010 'Tree Work Recommendations' (BSI Standards Publication, 2010 British Standards Limited) and BS 5837:2012 'Trees in relation to design demolition and construction - Recommendations' (BSI Standards Publication, 2012 British Standards Limited).
- 1.1.1.16. Ground protection must be used where RPAs are encroached upon, for example, use of no-dig construction methods must be employed.
- 1.1.1.17. Any pruning or necessary tree works are to be carried out in the appropriate season to maintain health and vigour and to prevent encroachment in paths, parking areas etc. The removal of vegetation would be timed to avoid the bird nesting season (March to August inclusive).

- 1.1.1.18. Works storage compounds and site welfare must be offset from arboriculture and biodiversity features as referred to in Section 6.10.5 see Indicative Converter Station Layout Plans Sheet 2 and 3 (document reference 2.7).
- 1.1.1.19. Where grass is used as a ground cover, a 500 mm minimum radius from the base of the tree must be left clear of turf and mulched to reduce the risk of completion and mechanical damage from mowing and strimming machinery (BSI Standards Publication, 2012 British Standards Limited).

Hedges

- 1.1.1.20. Ground will be cultivated to a depth of at least 300 mm to ensure the soil is friable, and stones larger than 50 mm removed.
- 1.1.1.21. Planting of native bare-root stock as detailed in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) will be undertaken between October and March. No planting will be carried out during periods of frost or if the ground is either too dry or waterlogged.
- 1.1.1.22. Specimens will be checked for good health before planting in a 50/50 mixture of existing soils and locally sourced high-quality peat-free compost, and fully firmed and watered in.
- 1.1.1.23. Planting must be undertaken in two staggered rows at 300 mm centres with 500 mm between each row.
- 1.1.1.24. Where hedgerow trees are specified, larger specimens will be planted randomly within the hedgerow, tagged clearly and allowed to develop into trees.
- 1.1.1.25. Planting mixes can be refined to exclude particular species based on specific requirements of livestock in the location.

Woodland

- 1.1.1.26. Ground will be cultivated to remove grasses and pernicious weeds that might compete with young trees.
- 1.1.1.27. Planting of native bare-root stock as detailed in Appendix 15.7 (Landscape Schedules, Planting Heights and Image Board) will be undertaken between October and March. No planting will be carried out during periods of frost or if the ground is either too dry or waterlogged.
- 1.1.1.28. Tree pits will be dug to a size at least 1.5 times the size of the root ball of the specimen to be planted. Soils at the sides and bottom of the pits will be well cultivated and friable to allow roots to spread.
- 1.1.1.29. Specimens must be checked for good health before planting in a 50/50 mixture of existing soils and locally sourced high-quality peat-free compost, and fully firmed and watered in.

- 1.1.1.30. Trees will be planted at average 1.5 m centres in random groups of between 3 and 5 of the same species and secured with suitable stakes and ties.
- 1.1.1.31. New plantings must be fenced to prevent browsing damage. Fences and guards must be regularly checked to ensure they are functional. Tree guards will be removed after a period of 3 - 5 years, or once they begin to split as they might hamper tree growth.
- 1.1.1.32. Access routes must be maintained through the woodland to allow for maintenance, and any invasive or non-native species that might threaten the habitat must be removed and disposed of elsewhere.

Calcareous and Marshy Wildflower Grassland

- 1.1.1.33. Annual and perennial weeds must be controlled by mechanical means, or by the use of a contact based herbicide such as Glyphosate.
- 1.1.1.34. Any stones and unwanted vegetation must be removed.
- 1.1.1.35. Ground must be cultivated to a fine tilth to achieve a suitable seed bed where there is good contact between the seed mix and the soil.
- 1.1.1.36. Seed must be sown at the rate show in Appendix 15.7 (Landscape Schedules, Plating Heights and Image Board) and lightly raked before rolling.
- 1.1.1.37. Watering will be undertaken regularly until the grassland is established, and particularly during periods of dry weather. Once established there will be no requirement for additional watering.
- 1.1.1.38. Two cuts must be undertaken each year. If sowing in March / April in accordance with manufacturer's instructions, the first cut after sowing must take place after flowering in August/ September/October. The sward must be cut to a height to 4-7 cm.
- 1.1.1.39. In subsequent years, the sward will be maintained thereafter to a height of 4-6 cm in March/April to remove excess grass and again in September/October to a height of 4 cm.
- 1.1.1.40. All arisings from calcareous and marshy grassland will be left in situ for three days during dry conditions to allow for seed dispersal before raking up and removing. Some of the arisings will be retained in low habitat piles as animal refuge areas on grassland boundaries. Weeds must be controlled by hand pulling to eradicate injurious or pernicious weeds as required between May to August. No fertiliser must be applied to any areas to be established as wildflower grassland.

Ponds and Pond Margins

- 1.1.1.41. Pond margins (attenuation basins) must be left to regenerate through natural succession with minimal intervention where practicable. The proposed waterbody must be checked and cleared of rubbish. Leaf litter will be removed on a two-year rotation. No dredging works to be undertaken without appropriate ecological consultation.

- 1.1.1.42. Ensure inlet and outlet channels are kept clear and any encroaching vegetation is removed.
- 1.1.1.43. Maintain suitable access routes for maintenance.
- 1.1.1.44. Ensure no herbicides or chemicals are used on or near aquatic locations.

Drainage Channels/Swales

- 1.1.1.45. Manage grassland in the same way as outlined for calcareous and marshy wildflower grasslands as above.
- 1.1.1.46. Remove any invasive species, notifiable weeds and any leaves or dead plant material to ensure the swale is able to function properly at all times.

General

- 1.1.1.47. All areas of planting and wildflower grassland will be maintained, to include:
 - Ample irrigation;
 - Weed control (herbicide application or hand weeding);
 - Litter picking;
 - Topping up mulch; and
 - Checking condition of protective fencing, tree stakes, ties and tree guards, and replacing/repairing as necessary.
 - 1.1.1.48. All tree planting is to be in accordance with the required standoffs for overhead and underground cables as shown on the landscape mitigation plans.
 - 1.1.1.49. All guards, stakes and ties must be inspected during the growing season and adjusted as necessary to ensure that they are secure and firm and that the ties are not chafing the stem of the trees. Stakes and ties will be removed and disposed of when plants become self-supporting.
 - 1.1.1.50. Planting which fails to thrive or dies during the 5-year maintenance period must be replaced during the next planting season.
 - 1.1.1.51. Infill planting to existing hedgerows will receive protective tree or shrub guards to prevent damage from rabbits and deer. Larger areas of new proposed woodland planting would be protected by an appropriate deer fence until trees are sufficiently established and mature to warrant removal. Guidance relating to fencing specification can be found in Forestry Commission Technical Guide (2006) (Forestry Commission, 2006). If required, suitable fencing details would be drawn up to accommodate badger gates.
- #### **Watering**
- 1.1.1.52. Water evenly and without displacing plant, seed or soil at a frequency necessary to ensure the establishment and continued thriving of all proposed planting.

- 1.1.1.53. All plants must be watered at rates in accordance with the Landscape Institute Technical Bulletin: Watering Restrictions and Watering Specifications (Landscape Institute, May, 1996) on the day of planting unless otherwise directed.

Weed Control

- 1.1.1.54. All existing and proposed landscape features, including temporary soil mounds used in the Construction Stage, must be kept free from weeds. Cutting or spraying would be undertaken as appropriate, to control plant growth, prevent the production of seed and the subsequent spread of weeds into adjoining land.
- 1.1.1.55. Weeds would either be cut prior to seeding to prevent further spread, or alternatively spot treated with a chemical spray approved by Natural England and the Environment Agency as suitable for use on weeds in or near waterbodies and as recommended by a BASIS qualified advisor.
- 1.1.1.56. Application of chemical spray must be carried out by a suitably qualified operative, under appropriate weather conditions as a suitable means of control for persistent weeds.

Replacement Planting

- 1.1.1.57. All plants which fail (within the five after care period) will be replaced in the next planting season with others of a similar size and species; as agreed by the project landscape architect.

Protected Species

- 1.1.1.58. If evidence of any protected species, nests, shelters, young or eggs are found at any point, all work will cease immediately. Before any further work takes place, a suitably qualified ecological consultant must be contacted to advise on how to proceed. Existing management regimes must be reviewed by the project ecologist and techniques which promote habitat development will be incorporated into the future programme.
- 1.1.1.59. As a precautionary measure, there must be no removal of trees, scrub, hedgerows or grassland between March and August inclusive to prevent disturbance of breeding birds.

Ground/Soil Protection

- 1.1.1.60. The depth and type of soil to be placed the Proposed Development will vary depending on the nature of the vegetation to be established. All soil handling, management and replacement would be carried out in accordance with established soil handling protocols.

- 1.1.1.61. Plant and vehicles will not cross any area of replaced and loosened ground or replaced topsoil except where essential and unavoidable works are required. RPAs of trees must not be crossed unless suitable ground protection measures are in place in accordance with section 6.2 of BS 5837:2012.

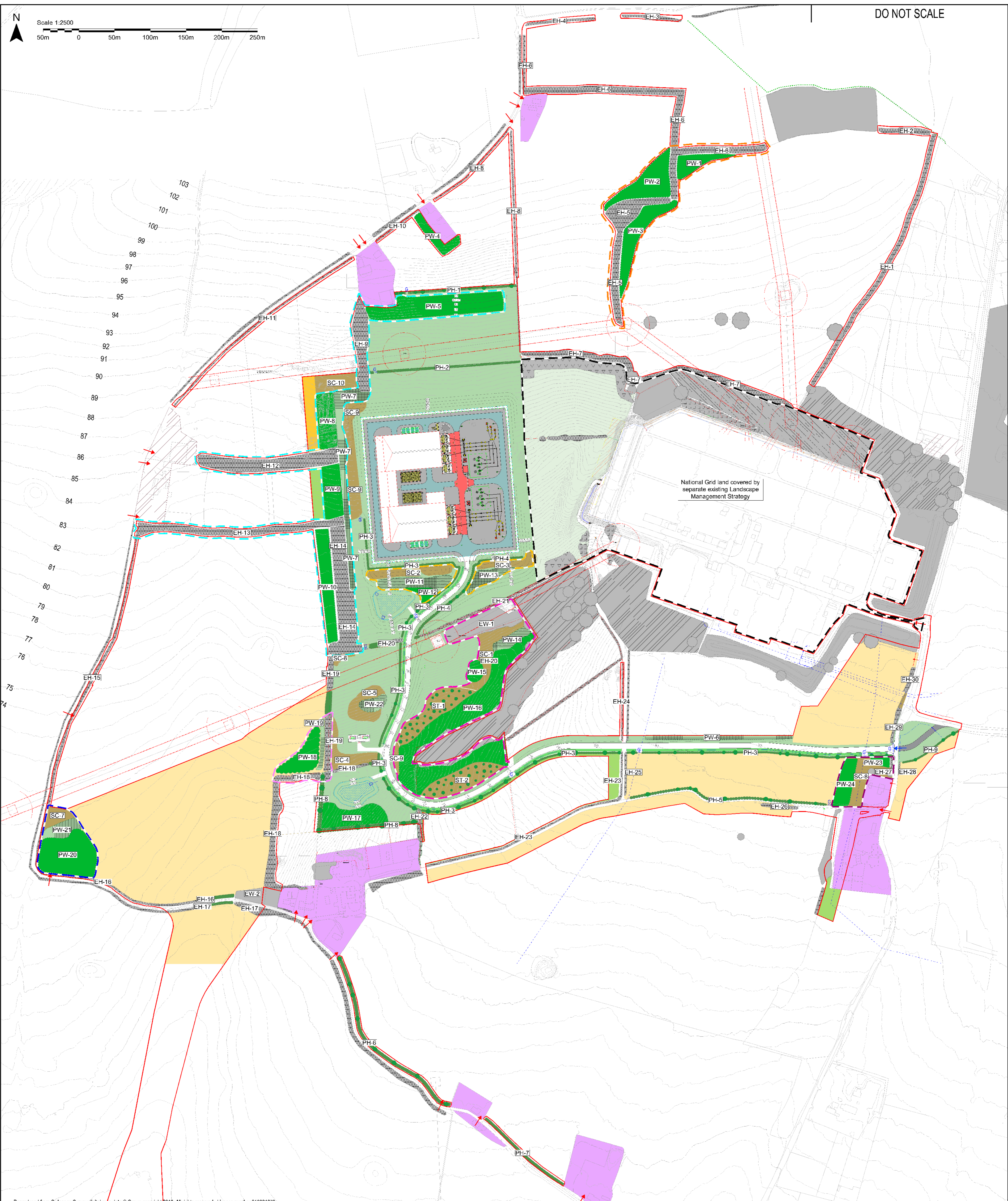
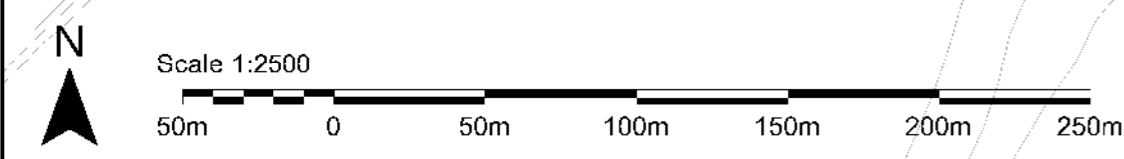
Appendix 2

Outline Landscape

and Biodiversity

Strategy

Management Plans



National Grid land covered by separate existing Landscape Management Strategy

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Legend Existing Order Limits Existing vehicular access point Existing ground level contour Existing non-residential development Existing residential development Existing underground cable route Monarch's Way (PRow) Existing gylon		Indicative existing overhead power lines Existing fencing Existing woodland (EW) Existing ancient woodland Existing native hedgerows (EH) Existing native hedgerows with hedger trees (EH) Existing grassland / scrub Existing scrub Existing National Grid mitigation planting Existing mature trees		Existing Existing arable farmland Existing pasture Existing recreation area Existing semi-improved grassland Bare ground		Proposed Proposed contours Proposed native hedgerow (PH) Proposed native hedgerow with hedger trees (PH) Proposed native mixed woodland (up to 15m) (PW) Proposed native mixed woodland (up to 25m) (PW) Proposed scrub (SC) Proposed scrub with scattered trees (ST) Proposed calcareous grassland Proposed marshy grassland		Proposed attenuation pond Vegetated conveyance and infiltration swale (marginal planting) Proposed access road Proposed additional access road Proposed gate Proposed vehicular access point Proposed fence		Landscape Management PH-6 Landscape Prescription Land covered by existing National Grid management plan Management Area A Management Area B Management Area C Management Area D Management Area E Management Area F Management Area G	
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01	06/11/2019	DW	FIRST ISSUE	AW	AF
REV	DATE	BY	DESCRIPTION	CHK	APP
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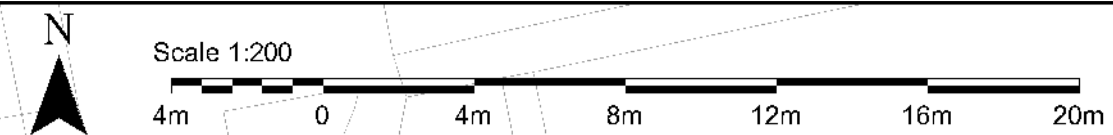
ARCHITECT:

PROJECT: AQUIND Interconnector

TITLE: Figure 6.10.1 Outline Landscape and Biodiversity Strategy Management Plan - Converter Station Area

SCALE @ A1: 1:2500	CHECKED: LG	APPROVED: AF
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DATE: 06/11/2019		
DRAWING No: EN020022-6.10.1	REV: 01	
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- Legend**
- Order Limits
 - Existing
 - Existing grassland / scrub
 - Existing mature trees
 - Proposed
 - Proposed native hedgerow (PH)
 - Proposed native hedgerow with hedgerow trees (PH)
 - Proposed tree
 - Proposed gate
 - Proposed fence
 - Proposed amenity grassland
 - Proposed grassland/scrub
 - Proposed gravel
 - Landscape Management
 - PH-9 Landscape Prescription

Notes:
 For planting specification refer to Appendix 15.7 of LVIA
 Infrastructure Planning (Applications: Prescribed
 Forms & Procedure) Regulations 2009 - Regulation 5(2)(a)

01	06/11/2019	AF	115	50%			
02							
03							
04							

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CLIENT:

PROJECT: AQUIND Interconnector

TITLE: Figure 6.10.2 Outline Landscape and Biodiversity Strategy Management Plan - Landfill

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