



# Five Estuaries Offshore Windfarm: Local Impact Report

Essex County Council

**PINS REFERENCE: EN010115**

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## **Glossary of acronyms and abbreviations**

BNGSWS - Net Gain Site Wide Strategy

DLUHC – Department for Levelling Up, Housing and Communities

DCO – Development Consent Order

dDCO – Draft Development Consent Order

EA – Environment Agency

ECAC - Essex Climate Action Commission

ECC – Essex County Council

ES – Environmental Statement

ExA – Examining Authority

LIR – Local Impact Report

LLFA – Lead Local Flood Authority

MW – Mega Watts

NPPF – National Planning Policy Framework

NPS – National Policy Statement

NPSNN – National Policy Statement for National Networks

NSR – Noise Sensitive Receptors

OLEMP - Outline Landscape and Ecological Management Plan

OS - Ordnance Survey

PA – Planning Act

PAMP - The Public Access Management Plan

PINS – Planning Inspectorate

SoS - Secretary of State

TDC – Tendring District Council

TCPA – Town and Country Planning Act

ZWBG - Zone Wide Biodiversity Gain Plan

## 1. Terms of Reference

### 1.1 Introduction

1.1.1 This report is the Local Impact Report (LIR) for Essex County Council (ECC) in partnership with Tendring District Council (TDC) and is asked to be read for and on behalf of each Authority.

1.1.2 In preparing this LIR regard has been had to the purpose of LIRs as set out in s60(3) of the Planning Act 2008 (as amended), DCLG's *Guidance for the examination of applications for development consent* and the Planning Inspectorate's Advice Note One, *Local Impact Reports* and the Planning Inspectorate's 'Example Documents'.

### 1.2 Scope

1.2.1 This LIR relates to the impacts of the proposed development as it affects the administrative area of Essex County Council and Tendring District Council and has been jointly produced by Essex County Council and Tendring District Council.

1.2.2 In summary, the Proposed Development includes a number of elements including, inter alia:

#### Offshore

1. An offshore wind turbine generating station with a generating capacity of over 100 megawatts, comprising up to 79 wind turbine generators with associated foundations and a maximum tip height of 420m above sea level at submission, which as far as ECC are informed at this time, will be reduced to 390 metres to tip.
2. Up to two offshore substation platforms with associated foundations.



3. A network of subsea inter-array cables including cable protection, connecting the wind turbines to each other and to the offshore substation platforms including cable crossings.
4. Up to two subsea export cable circuits including cable crossings, cable protection, sheet piled intertidal exit pits and trenchless installation works from the offshore substation platforms to shore, with an offshore cable route length of up to 84km.
5. Scour protection, as required, for foundations and cables.

#### Onshore

1. Up to two transition joint bays between Frinton-on-Sea and Holland-on-Sea to connect the offshore cables and the onshore cables.
2. Up to two buried export cable circuits from the transition joint bays at landfall along an approximately 22km route to a new electrical substation near Lawford and Ardleigh, including cable ducts, jointing and trenchless installation works. Landfall is taken by horizontal direct drilling under the existing sea defences.
3. The construction of a new electrical substation in the vicinity of Ardleigh together with associated equipment, accesses, landscaping and a temporary construction compound. At this time there remains flexibility within the DCO under the principles of the “Rochdale Envelope” to mean this will come forward either as an Air Insulated, or Gas Insulated facility.
4. Two buried 400kV cable circuits connecting the new substation to National Grid’s proposed East Anglia Connection Node substation, including cable ducts, jointing and trenchless installation works, and

horizontal direct drilling in specified locations, such as under the A120 and the railway.

5. Temporary construction areas and haul roads together with works to secure vehicular and/or pedestrian means of access for the Project.
6. Associated and/or ancillary works including archaeological and ground investigations, drainage works, highway improvements, works to alter the position of existing utilities, works to watercourses, landscaping and other mitigation and monitoring works.
7. Such other works as may be necessary or expedient for the purposes of or in connection with the construction, operation, maintenance or decommissioning of the Project.
8. If required, temporary stopping up, diversion or alteration of streets, roads and Public Rights of Way.
9. If required, the permanent and compulsory acquisition of land and rights for the Project.
10. If required, overriding of easements and other rights over or affecting land for the Project.
11. If required, the application and/or disapplication of legislation relevant to the Project including inter alia legislation relating to compulsory acquisition.

12. Such ancillary, incidental and consequential provisions, permits and consents as are necessary and/or convenient.

### 1.3 Purpose and Structure of the LIR

1.3.1 The LIR covers topics where ECC and TDC, who under agreement are represented jointly in this LiR, and have a both statutory function, local knowledge, and hold particular expertise.

1.3.2 The topics subject of this LIR cover:

- Climate Change
- Ecology
- Landscape
- Green Infrastructure
- Highways and Transportation
- Archaeology
- Cultural Heritage
- Socio Economics
- Health
- Flood Risk, Drainage and Surface Water
- Built Heritage
- Urban Design
- Public Rights of Way (PRoW)
- Tourism

1.3.3 The LIR is structured by first identifying the relevant local policies, secondly identifying the local impacts, and lastly addresses the extent to which the development proposals accord with these policies. For each topic area, the

key issues are identified on the extent the applicant addresses these issues by reference to the application documentation, including the DCO articles requirements and obligations where relevant.

- 1.3.4 The LIR has sought not to duplicate material covered in the Statement of Common Ground (SoCG).

## **2. Description of the Area**

### **2.1 Site Location**

- 2.1.1 Five Estuaries is a proposed extension to the existing 353MW Galloper Offshore Windfarm located approximately 27km off the Suffolk coast at its nearest point in the southern North Sea. The Five Estuaries extension would cover an area of 128 km<sup>2</sup> and would be located approximately 37km offshore, with a grid connection point near Little Bromley in Tendring, Essex. The project would comprise up to 79 additional turbines (up to 390m above sea level) across two separate seabed areas.
- 2.1.2 The onshore elements are located entirely within the administrative boundary of Tendring District Council in Essex. The offshore export cables will make landfall at Sandy Point between Holland-on-Sea and Frinton-on-Sea on the Essex coast. The onshore export cables will extend 22 km inland to join the landfall on the coast with the Onshore Substation, which will be sited to the east of Ardleigh, and between Lawford to the north and the A120 to the south.
- 2.1.3 This part of Essex has a distinct coastal landscape broadly characterised by the towns and resorts which extend along much of its coastline, where there are extensive beaches, sea walls and sand dunes, and with coastal marshes along the estuaries to the north and south. Inland from the coastline. The area is characterised by agricultural lowland landscapes which are typically flat to gently undulating and low-lying, providing extensive views across the landscape, punctuated by trees, hedgerows, and woodland. They provide a

rural backdrop to the coast where parts have been reclaimed from marshland. Further inland the farmed landscape covers a mix of shallow river valleys and low-lying plateaux, such that the elevation of the landscape seldom rises above 30m.

2.1.4 Adjacent to the project landfall is the Holland Haven Country Park, managed by Tendring Council, which is a Site of Special Scientific Interest (SSSI)

2.1.5 The landscape transitions from the beach and coastal landscape across a predominantly rural landscape which mostly comprises fields of arable crops with some enclosure from hedgerows and localised tree cover. The character of the site area is predominantly rural in nature, with a concentration of activity along the many transport routes traversing the area, including the A120, A133 and Colchester to Clacton-on-Sea railway. Away from the principal routes through Tendring the highway network is rural in character with narrow unlit roads with minimal pedestrian refuge for the most part.

2.1.6 The offshore components are located within the Southern North Sea Special Area of Conservation (SAC), the Outer Thames Estuary Special Protection Area (SPA) and Kentish Knock East Marine Conservation Zone (MCZ). Margate and Long Sands SAC is located immediately to the south of the offshore cable corridor. The Blackwater Crouch, Roach and Colne Estuaries MCZ are within 5km of the Proposed Development offshore Area of Search (AoS); the Kentish Knock East MCZ is within 7.2 km of offshore AoS and the Orford Inshore MCZ is within 14.4 km of the array areas.

2.1.7 North Essex, which Tendring forms in part, is a vibrant and attractive place to live and work. It has a rich archaeological, natural and built heritage that continues to influence local character, which is distinguished by its extensive legacy of human habitation from Palaeolithic times onwards. The area has

experienced significant population, housing and employment growth in recent years, and this is forecast to continue. It is necessary to ensure the area is focused on sustainable development which both respects local environments and provides new jobs and essential infrastructure. Areas within Tendring, such as Jaywick Sands, are shown as those being at the most deprived within the UK.

2.1.8 North Essex is anticipated to be an area of significant growth over the period to 2033 and beyond, embracing positively the need to build well-designed new homes, create jobs and improve and develop infrastructure for the benefit of existing and new communities.

2.1.9 It is the intent that the area will continue to be an attractive and vibrant area in which to live and work, making the most of its rich heritage, town centres, natural environment, coastal resorts, excellent educational facilities and strategic transport links which provide access to the ports, Stansted Airport, London and beyond. Rural and urban communities will be encouraged to thrive and prosper and will be supported by adequate community infrastructure.

2.1.10 Key sustainable development principles will be at the core of the strategic area's response to its growth needs, balancing social, economic and environmental issues. Green and blue infrastructure and new and expanded education and health care facilities enabling healthy and active lifestyles will be planned and provided along with other facilities to support the development of substantial new growth; while the undeveloped countryside and the natural and historic environment will be conserved and enhanced. Key to delivering sustainable development is that new development will address the requirement to protect and enhance the historic environment and settlement character.

2.1.11 It is against these aforementioned strategic goals that this DCO will fail to be considered. Whilst recognising that the area will undergo change as a result, such change must be balanced against the impact this will have in the host communities and on policies which seek to retain, conserve and enhance the unique character of the Tendring area.

### **3. Policy Context**

#### **3.1 National Policy**

3.1.1 When deciding DCO submissions s104(2)(d) of the Planning Act (PA) 2008 requires the Secretary of State (SoS) to have regard to any other matters considered both important and relevant. The National Policy Statements for National Networks (NPSNN) requires consideration to be given to policies and information in the development plan to matters including other developments which may give rise to cumulative impacts, non-designated heritage assets, impacts on land use and the preclusion of other development.

3.1.2 The national policy governing the principle of development for Renewable Energy proposals is the National Policy Statement (NPS) EN-3, and National Policy Statement (NPS) EN-5, which should be read together with the overarching NPS for Energy, EN-1.

3.1.3 In considering the developments impact on National Policy the applicants have submitted within their Planning Statement at Section 4 in the document reference 9.1 (at APP-231) and within their Policy Compliance Document reference 9.2 (at APP-232) an assessment of the policy compliance of this DCO.

3.1.4 Section 4 of APP-232 sets out the Policy considerations which need to be assessed by this DCO proposal. ECC are of the view that the Policies as set out are comprehensive and represent common ground between the parties.

#### **3.2 Statutory Development Plan (TDC and ECC)**



- 3.2.1 The Council's statutory Development Plan consists of the Tendring District Local Plan 2013-2033 and Beyond: North Essex Authorities Shared Strategic Section 1 adopted on 26<sup>th</sup> January 2021, and Tendring District Local Plan 2013-2033 and Beyond: Section 2 adopted on 25<sup>th</sup> January 2022. As such, the Local Plan is therefore considered to be up to date. The specific relevant policies in the Development Plan will be referred to within the relevant section in the LIR.
- 3.2.2 At the County level, the Essex County Council Minerals Local Plan (2014) (MLP) and Essex County Council Waste Local Plan (2017) (WLP) are also a material consideration in terms of Development Plan considerations.
- 3.2.3 Here it is important to state that the development here considered has been looked at in terms of its potential impact on policies within both the MLP and WLP and ECC have concluded after due consideration of both the Mineral Resource Assessment (APP-113) and Waste Resource Assessment (APP-114) that the DCO area, and the routes as safeguarded leading to and from it, raise no objection/comment from ECC as the Minerals and Waste Planning Authority.
- 3.2.4 Further Local policies documents considered within the Order limits to manage climate change and gas emissions are:
- 3.2.5 Essex County Council NSIP's Policy (2022). ECC will only support NSIPs that create resilience in Essex and not those that exacerbate existing, or make new, vulnerabilities, particularly in relation to ECC's commitment to deliver sustainable communities that level up the economy, environment and health and wellbeing across the county.

- 3.2.6 Essex County Council Everyone's Essex: our plan for levelling up the county, 2021 to 2025. 'Everyone's Essex' sets out 20 commitments to improve the lives of people of Essex between 2021 to 2025. The 20 commitments are divided into four key areas of economy, environment, health and family.
- 3.2.7 Net Zero: Making Essex Carbon Neutral – Essex Climate Action Commission. The Essex Climate Action Commission has set out recommendations for Essex County Council on tackling the climate change crisis across six core themes, with a trajectory of targets and milestones that need to be met for Essex to become a net zero county by 2050. The six core themes are: Land Use and Green Infrastructure, Energy, the Built Environment, Transport, Waste and Community Engagement.
- 3.2.8 The Developer's Guide to Infrastructure Contributions, Revised 2020. Essex County Council has produced a developer's guide to infrastructure contributions which details the scope and range of contributions towards infrastructure which ECC may seek from developers and landowners in order to mitigate the impact and make development acceptable in planning terms.
- 3.2.9 Essex Sector Development Strategy. The strategy has identified five economic sectors with significant growth potential that could be realised in Essex. They cover construction and retrofit, clean energy, advanced manufacturing and engineering, Digi-tech and life sciences.
- 3.2.10 Green Skills Infrastructure Review for Essex County Council, March 2022. A review of green skills and related infrastructure has been undertaken to identify skills gaps and business needs, the capacity of existing providers and growth plans and to identify how existing or improved skills infrastructure can

support the Essex Climate Change Commission's ambition to mitigate the effects of climate change.

3.2.11 Essex County Council Local Flood Risk Management Plan (2018). This document aims to manage the risk of flooding in the region and inform all groups and individuals who may have an interest in, or an ability to influence or manage flood risk.

3.2.12 Essex County Council Rural Strategy (2016). The Essex Rural Partnership brings together organisations in the public, private and voluntary sectors to co-ordinate action on the major economic, social and environmental issues facing rural Essex.

3.2.13 Essex County Council Local Transport Plan (2011). Assesses transport needs and challenges and sets out its transport aspirations over the 2011 – 2026 period. To improve maintenance of existing transport networks, support sustainable economic growth and regeneration; reduce carbon emissions.

### 3.3 Other Relevant Local Policy

3.3.1 The Council also has a number of Supplementary Planning Documents, comprising the Essex Coast RAMS SPD (2020) which is of relevance here.

## **4. Assessment of Impacts**

### 4.1 Overview

4.1.1 The following sections identify for each topic heading listed below, the relevant policies, the key issues and impacts raised by the proposed development.

- Principle of Development
- Climate Change
- Ecology
- Landscape
- Green Infrastructure
- Highways and Transportation
- Archaeology
- Cultural Heritage
- Socio Economics
- Health
- Flood Risk, Drainage and Surface Water
- Built Heritage
- Urban Design
- Public Rights of Way (PRoW)
- Tourism

## 5. The Principle of Development

### 5.1 National Policy

5.1.1 National Policy Statement (NPS) EN-1, part 3 sets out the Governments position that there is a significant need for new major infrastructure. NPS EN-3 sets out the relevant considerations for Renewable Energy Infrastructure in particular and is heavily linked to the criteria set out in NPS EN1. NPS EN-5 taken together with the overarching NPS EN-1, provides the primary policy for decisions taken by the SoS on applications it received for electricity networks infrastructure.

### 5.2 Local TDC Development Plan Policies

5.2.1 Policy SP1 (*Presumption in Favour of Sustainable Development*) (App 1) of the Adopted Local Plan Section 1 states that the Local Planning Authorities ‘will take a positive approach that reflects the presumption in favour of sustainable development contained within the National Planning Policy Framework.’

5.2.2 Policy SP6 (*Infrastructure and Connectivity*) (App 2) of the Adopted Local Plan Section 1 identifies the need for all development to be supported by the provision of infrastructure, services and facilities.

5.2.3 Policy SP7 (*Place Shaping Principles*) (App 3) of the Adopted Local Plan Section 1 states all new development must meet high standards of urban and architectural design. Development frameworks, masterplans, design codes, and other design guidance documents will be prepared in consultation with stakeholders where they are needed to support this objective.

- 5.2.4 Policy SPL 2 (*Settlement Development Boundaries*) (App 4) of the Adopted Local Plan Section 2 seeks to encourage sustainable patterns of growth and carefully control urban sprawl, each settlement listed in Policy SPL1 is defined within a 'Settlement Development Boundary' as shown on the relevant Policies Map and Local Map. Within the Settlement Development Boundaries, there will be a general presumption in favour of new development subject to detailed consideration against other relevant Local Plan policies and any approved Neighbourhood Plans. Outside of Settlement Development Boundaries, the Council will consider any planning application in relation to the pattern and scales of growth promoted through the Settlement Hierarchy in Policy SPL1 and any other relevant policies in this plan.
- 5.2.5 Policy SPL 3 (*Sustainable Design*) (App 5) of the Adopted Local Plan Section 2 states all new development (including changes of use) should make a positive contribution to the quality of the local environment and protect or enhance local character.
- 5.2.6 Policy HP 1 (*Improving Health and Wellbeing*) (App 6) of the Adopted Local Plan Section 2 ensures the Council will work to improve the health and wellbeing of residents in Tendring by requiring a Health Impact Assessment (HIA) on all development sites delivering 50 or more dwellings, all development in Use Class C2 (*Residential Institutions*) and all non-residential developments delivering 1,000 square metres or more gross internal floor space. The HIA should be carried out in accordance with the advice and best practice published by Public Health England and locally through the Essex Planning Officers Association.
- 5.2.7 Policy HP 2 (*Community Facilities*) (App 7) of the Adopted Local Plan Section 2 states the Council will work with the development industry and key partners to deliver and maintain a range of new community facilities.

5.2.8 Policy HP 3 (*Green Infrastructure*) (App 8) of the Adopted Local Plan Section 2 states Green Infrastructure will be used as a way of adapting to, and mitigating the effects of, climate change, through the management and enhancement of existing spaces and habitats and the creation of new spaces and habitats, helping to provide shade during higher temperatures, flood mitigation and benefits to biodiversity, along with increased access. All new development must be designed to include and protect and enhance existing Green Infrastructure in the local area, as appropriate.

5.2.9 Policy HP 4 (*Safeguarded Open Space*) (App 9) of the Adopted Local Plan Section 2 requires Development that would result in the loss of the whole or part of areas designated as Safeguarded Open Space, as defined on the Policies Map and Local Maps will not be permitted unless the following criteria are met:

- a. the site is replaced by the provision of new site at least equal in quality and size and accessible to the community, which the existing site serves;
- b. it is demonstrated that there is no longer a demand for the existing site;
- and;
- c. the development of the site would not result in the loss of an area important to visual amenity.

5.2.10 Policy PPL 1 (*Development and Flood Risk*) (App 10) of the Adopted Local Plan Section 2 ensures that all development proposals should include appropriate measures to respond to the risk of flooding on and/or off site.

5.2.11 Policy PPL 3 (*The Rural Landscape*) (App 11) of the Adopted Local Plan Section 2 states The Council will protect the rural landscape and refuse planning permission for any proposed development which would cause overriding harm to its character or appearance.

5.2.12 Policy PPL 4 (*Biodiversity and Geodiversity*) (App 12) of the Adopted Local Plan Section 2 requires proposals for new development to be supported by an appropriate ecological assessment. Where new development would harm biodiversity or geodiversity, planning permission will only be granted in exceptional circumstances, where the benefits of the development demonstrably outweigh the harm caused and where adequate mitigation or, as a last resort, compensation measures are included, to ensure a net gain, in biodiversity.

5.2.13 Policy PPL 5 (*Water Conservation, Drainage and Sewerage*) (App 13) of the Adopted Local Plan Section 2 requires all new development to secure adequate provision for drainage and sewerage and should include Sustainable Drainage Systems (SuDS) as a means of reducing flood risk, improving water quality, enhancing the Green Infrastructure network and providing amenity and biodiversity benefits.

5.2.14 Policy PPL 7 (*Archaeology*) (App 14) of the Adopted Local Plan Section 2 ensures that any new development which would affect, or might affect, designated or non-designated archaeological remains will only be considered where accompanied by an appropriate desk-based assessment. Proposals for new development which are not able to demonstrate that known or possible archaeological remains will be suitably protected from loss or harm, or have an appropriate level of recording, will not be permitted.

5.2.15 Policy PPL 8 (*Conservation Areas*) (App 15) of the Adopted Local Plan Section 2 states new development within a designated Conservation Area, or which affects its setting, will only be permitted where it has regard to the desirability of preserving or enhancing the special character and appearance of the area.



5.2.16 Policy PPL 10 (App 16) (*Renewable Energy Generation and Energy Efficiency Measures*) of the Adopted Local Plan Section 2 states Proposals for renewable energy schemes will be considered having regard to their scale, impact (including cumulative impact) and the amount of energy which is to be generated. All development proposals should demonstrate how renewable energy solutions, appropriate to the building(s) site, and location have been included in the scheme and for new buildings, be designed to facilitate the retro-fitting of renewable energy installations.

5.2.17 Policy CP1 (*Sustainable Transport and Accessibility*) (App 17) of the Adopted Local Plan Section 2 seeks to ensure new development is sustainable in terms of transport and accessibility and therefore should include and encourage opportunities for access to sustainable modes of transport, including walking, cycling and public transport.

5.2.18 Policy CP 2 (*Improving the Transport Network*) (App 18) of the Adopted Local Plan Section 2 states Proposals for new development which contribute to the provision of a safe and efficient transport network that offers a range of sustainable transport choices will be supported. Major development proposals should include measures to prioritise cycle and pedestrian movements, including access to public transport.

5.2.19 Policy DI1 (*Infrastructure Delivery and Impact Mitigation*) (App 19) of the Adopted Local Plan Section 2 ensure that all new development is supported by, and have good access to, all necessary infrastructure. Permission will only be granted if it can be demonstrated that there is sufficient appropriate infrastructure capacity to support the development or that such capacity will be delivered by the proposal. It must further be demonstrated that such capacity, as is required, will prove sustainable over time both in physical and

financial terms. Where a development proposal requires additional infrastructure capacity to be deemed acceptable, mitigation measures must be agreed with the Local Planning Authority and the appropriate infrastructure provider.

5.2.20 In accordance with the instruction from the ExA at Preliminary Hearing a series of Appendices are provided at Appendix 1-19 to set out the above policies and their accompanying text.

### 5.3 Local ECC Development Plan Policies

5.3.1 The following Policies within the current Essex Minerals Local Plan 2014 (MLP) apply:

5.3.2 Policy 8 (*Safeguarding Mineral Resources and Mineral Reserves*) states Mineral Safeguarding Areas are designated for mineral deposits of sand and gravel, silica sand, chalk, brickearth and brick clay considered to be of national and local importance, as defined on the Policies Map. The Mineral Planning Authority shall be consulted on:

- a) all planning applications for development on a site located within an MSA that is 5ha or more for sand and gravel, 3ha or more for chalk and greater than 1 dwelling for brickearth or brick clay; and
- b) any land-use policy, proposal or allocation relating to land within an MSA being considered by the Local Planning Authority for possible development as part of preparing a Local Plan (with regard to the above thresholds).

Non-mineral proposals that exceed these thresholds shall be supported by a minerals resource assessment to establish the existence or otherwise of a mineral resource of economic importance. If, in the opinion of the Local

Planning Authority, surface development should be permitted, consideration shall be given to the prior extraction of existing minerals.

5.3.3 The ExA is asked to note that the following due consideration of the development proposed has no material impact on policy 8, as set out above.

## **6. In Combination Effects**

6.1.1 At this time this single DCO is at Examination, with the comparative project at North Falls being at the Relevant Representation stage at the time of writing this LiR. N2T is however less progressed and at this time this project has recently concluded its statutory consultation phase, which ECC has raised significant objections to. To allow the Examining Authority to contextualise this objection a copy of the recent response to the stat con is attached as an Appendix 20 to this Local Impact Report.

6.1.2 Without N2T being consented, and in place, Five Estuaries are wholly reliant on this connection point. This connection was not of the applicants choosing, more correctly this was imposed on the applicants by Grid, as it is also correct with North Falls.

6.1.3 Hence the situation as proposed by these three separate, but interconnected projects, means that a total of 3 substations will be created at the connection point, one for Five Estuaries and one each for North Falls and Norwich to Tilbury.

## **7. Climate Change**

### **7.1 Local Policy**

7.1.1 ECC has assessed the development as proposed against its Net Zero: Making Essex Carbon Neutral – Essex Climate Action Commission policy document. It has concluded that we are in favour of this development as a significant investment in renewable energy.

7.1.2 However, we remain interested in any proposals as the applicants put forward during Examination which would secure low carbon initiatives which can be introduced to offset carbon impacts within, for example, a Community Benefits commitment, discussions on the same will continue.

## **8. Ecology**

### **8.1 Adequacy of Information Provided**

8.1.1 ECC Place Services, who represent the joint Authorities in the consideration of ecological matters, along with those on landscape, heritage, archaeology and biodiversity which follow in this LiR, have taken an active part in topic group meetings which have informed the design of the onshore element of this Project and welcome the details shared with North Falls Offshore Wind Farm team relating to the onshore cable corridor which uses the same area of land to reach the proposed substation from the landfall for both projects on the Tendring coast. We are satisfied that the Environmental Statement (ES) in its component parts provides appropriate assessment of likely impacts on ecological features, particularly designated sites (both statutory and non-statutory) but also protected and priority species and habitats.

8.1.2 To account for potential changes to the detailed scheme design (once detailed design is known), it is noted that the Metric will have to be re-run, and the Biodiversity Net Gain Final Design Report shall be prepared.

## 8.2 Local Issues

8.2.1 The onshore section of the proposed Five Estuaries Offshore Wind Farm is considered to lead to likely environmental impacts on ecological features in Essex, and in particular Tendring District. We have considered the likely impacts of the proposed provisions and requirements within the draft Order in respect of onshore ecology. We consider the ecological information provided at DCO application stage to be adequate for assessment. We welcome the embedded mitigation and compensation measures and commitments made to be secured by Requirements of any DCO made e.g. outline Management Plans such as Code of Construction Practice (CoCP) (APP-253) & Outline Landscape and Environmental Master Plan (OLEMP) (APP-254) to be finalised in consultation with the LPAs. Development consent obligations would minimise impact on the local authority's area although we seek compensation for all impacts not just significant ones to reduce the residual impacts on the habitats of Essex for the enjoyment of residents and visitors as well as the wildlife they support.

8.2.2 We appreciate the willingness to identify 10% offsite Biodiversity Net Gain (BNG) despite this not being a mandatory requirement for NSIPs yet and seek to continue to work with the applicant's team to secure effective and functional BNG in line with the emerging Essex Local Nature Recovery Strategy (LNRS). We seek reassurance that BNG habitats created or enhanced will have a minimum of 30 years secured for management not just their establishment phase to avoid being considered as losses from the development.

8.2.3 We also highlight the need to deliver Environmental Net Gain (EnvNG) as required by the Regulator and again seek reassurance on its long-term

management to ensure its promised benefits are delivered for the local community.

8.2.4 ECC notes the submissions made by other parties (such as the German Federal Maritime and Hydrographic Agency with the Exa Ref RR-035]) in relation to the potential impacts of offshore wind farms on the migratory bat the Nathusius' Pipistrelle (*Pipistrellus nathusii*). We highlight that national and local bat survey information, particularly through volunteer participation in the National Nathusius' Pipistrelle Project, indicates that the presence of this migratory species is now established in Essex, including the coast near the landfall for the cable corridor.

8.2.5 ECC has both seen and supports the position as will be made in Suffolk County Council's Local Impact report of the impact on this species of bat. We therefore recommend that the ExA seeks Natural England advice on the SoS's obligations under this treaty in relation to Nathusius' Pipistrelle to help understand the extent to which potential harm to these bats could engage an exception under paragraphs (3) and (4) of section 104 of the Planning Act 2008. In saying so we note that these issues, impacts, and potential mitigation measures are set out in detail in Appendix 1 of the UK Government's Offshore Energy Strategic Environmental Assessment 4 (OESEA4)<sup>1</sup>.

8.2.6 ECC notes that under Section A1a.7.3 of the OESEA4 Appendix 1 highlights a precautionary mitigation measure of imposing between 25 August and 10 October a turbine cut-in wind speed (i.e. the wind speed at which the turbine starts generating electricity) of 5.5 to 6.0m/s during an easterly wind and 5m/s during low temperatures and westerly winds. Such could be suitable for this DCO project and we note that offshore wind farms typically have cut-in speeds of between 3.5 and 4.0m/s, so the adjusted cut-in speeds could only reduce generation by a small amount over a specific time frame during the migratory

periods. We are open-minded as to whether an adjustment to cut-in speeds which is tried and tested should be secured as a design parameter in the text of the DCO or by inclusion in a suitable control document secured by a Requirement of any consent issued.

### 8.3 Conclusion

8.3.1 We are confident that the Ecological Impact Assessment can be included in a Statement of Common Ground with the LPAs and look forward to discussions to progress this ahead of Examination.

## 9. Landscape

### 9.1 Local Issues

#### Onshore Substation

9.1.1 The proposed onshore substation represents a significant negative feature in the local landscape during construction and for up to 15 years operationally, being up to 15m in height and occupying up to 58,000m<sup>2</sup>, the equivalent of approximately eight full scale football pitches.

9.1.2 There are concerns regarding the approach to identifying landscape value. Para 2.11.26 of the LVIA (APP-084) states 'The value of 7A Bromley Heaths LCA is medium. This reflects the fact that there are no national, county or district level landscape planning designations covering this area, which would otherwise denote a special scenic value.' Value of landscapes is not judged solely on their designations and local landscape designations have not been government policy for around 20 years. The LVIA should be amended to reflect this.

9.1.3 It is agreed that significant negative effects would arise on the local landscape and its setting during construction and at operation. Para 2.11.32 (APP-084)

confirms that *‘The combination of the medium-high sensitivity of the local landscape and the high, medium-high or medium magnitude of change that will arise as a result of the OnSS will lead to a major or major/ moderate effect...’*

- 9.1.4 Para 2.11.31 of the LVIA (APP-084) states ‘Mitigation planting around the Substation Zone will gradually reduce the magnitude of change on local landscape character from high, medium-high or medium to medium-low, low, negligible or no change over an approximate period of 10 to 15 years.’ There is concern that it would take up to 15 years for mitigation planting to take effect and disagree that mitigation planting would reduce the negative effects on the immediate landscape and its setting to non-significant.
- 9.1.5 Whilst the mitigation planting can reduce the visual effects it does little to reduce the landscape effects on the site itself and its immediate setting as this is changed permanently from an open productive agricultural landscape to a semi-industrial environment surrounded by trees. Para 2.11.15 confirms that agriculture is the defining characteristic of this character area *‘... in particular the “extensive arable landscape of large productive fields” presents the defining characteristic of this landscape’*. We would argue the magnitude of effect remains at major or major/moderate in or near the OnSS.
- 9.1.6 Figure 2.1.13, Indicative Landscape Mitigation Plan is missing from Volume 6, Part 7, annex 2.1 Landscape and Visual Assessment Figures (APP-180).
- 9.1.7 In terms of visual effects from the OnSS, the consensus of Table 2.14: Summary of effects for LVIA (APP-084) is generally agreed, i.e. that the significance of visual effects is Major or Major/Moderate for VP 1-5 both at construction and up to 15 years post operation. However, we would suggest



that the beneficial effects of planting after 5-10 years is somewhat overestimated and that views through or over the planting would remain especially in the winter months.

9.1.8 There are disagreements over the assessments contained within Table 2.14: Summary of effects for LVIA, which states that the Magnitude of Change after 15 years would be either negligible or low and that the residual effects would not be significant. Much of the success of the planting would depend on the nature of the aftercare in the OLEMP, how replacement planting is monitored, especially in the final year of a maintenance period and whether the mitigation planting is maintained for the life of the installation. We understand that the OLEMP is an iterative document and would wish to comment further on this document.

9.1.9 For VP1, it is disagreed with the statement contained within Para 2.12.15 that *'The magnitude of change after an approximate 5-to-10-year period will be negligible.'* This judgement, in our considered opinion, confuses blocking a view of an open agricultural landscape with a linear hedgerow and tree belt as being a negligible change, when a high magnitude of change in the view remains. As the key character of the landscape is that it is open and agricultural, this enclosed view should still be judged as a moderate negative effect.

#### Cable corridor and landfall

9.1.10 The direct impacts of the cable corridor will comprise a 60-72m width for open trenching within a 90m overall corridor.

9.1.11 The LVIA (APP-084) acknowledges there are likely negative landscape and visual effects during construction from undergrounding the cable route as it reaches landfall and along the corridor up until it reaches the substation. This includes potential impacts on agricultural and coastal land, hedgerows and trees, most of which are in open countryside (Section 2.10). These impacts would include temporary construction compounds, access and haul roads, plant, materials, spoil heaps and vehicles. Some of these effects would remain at the operational stage such as the loss of trees and hedgerows. The LVIA does not assess the impacts of the project on the landscape of the coastal landfall and within the cable corridor at the construction stage, although individual elements are assessed (See 2.10). It states '*... it is considered that the construction of the proposed onshore ECC and landfall will not become a prevailing or defining element or characteristic within the context of the existing landscape character and, therefore, do not have potential to give rise to significant effects and are, therefore, not assessed in the LVIA*'.

9.1.12 We disagree with this approach of disaggregating landscape elements from the overall character of the local landscape and suggest that localised significant landscape effects could arise at the construction stage along the landscape of the corridor. These potential localised effects should be identified separately, but alongside, the character area as a whole. The elements should be assessed in combination with the agricultural landscape in which they're found and not disaggregated from their context.

9.1.13 Due to the sensitivity of occupants of residential properties and recreational footpath users both within and close to the construction pathway along the cable corridor, there are likely significant visual impacts upon these receptors during construction. This is confirmed in Table 2.10: Assessment of Visual Effects of Landfall and Onshore ECC that establishes that the visual effects of the Landfall and Onshore ECC are all Significant at the Construction stage.

## 9.2 Cumulative Effects

- 9.2.1 The applicant quotes GLVIA3 (Landscape Institute and Institute of Environmental Management and Assessment, 2013) in the Environmental Statement, Vol 6, Part 3, Chapter 2 Para 2.14.2 (APP-084) which defines cumulative landscape and visual effects as those that *'result from additional changes to the landscape and visual amenity caused by the proposed development in conjunction with other developments (associated with or separate to it), or actions that occurred in the past, present or are likely to occur in the foreseeable future.'* However, it is clear that the overhead element of the Norwich to Tilbury (N2T) proposals have not been included and cumulative effects of the Tendring Colchester Borders Garden Community may have been underestimated within the LVIA.
- 9.2.2 The Environmental Statement, Vol 6, Part 7 Annex 2.1: Landscape and Visual Impact Assessment Figures 2.13 Cumulative Developments (APP-180) identifies EACN as Cumulative Development 3, however it does not identify the overhead pylons exiting from EACN as part of that proposal. It is also noticeable that the full extent of Cumulative Development 12, Tendring Colchester Borders Garden Community, is not shown on the plan. The N2T pylons form an essential element in association with Five Estuaries, North Falls and the East Anglian Connection Node (EACN) in order to distribute energy downstream.
- 9.2.3 There is one viewpoint selected within the Dedham Vale National Landscape, (VP 9), Essex Way, Dedham Road but this does not show the pylons as part of the cumulative visual effects (Figure 2 24 c). Table 2.12: Cumulative Developments identifies EACN but not the pylons exiting to the west as part

of N2T. The other viewpoint visualisations also do not show the pylons as part of the cumulative visual effects.

9.2.4 Table 2.12 identifies the Tendring Colchester Borders Garden Community (TCBGC) as '*Provision of suitable sites for gypsies and travellers with 30% affordable housing*' which looks like an error in drafting. TCBGC is a major allocation in the local plan, including 7,500 homes, that was adopted in the Section 1 Local Plan for Tendring District Council in 2021. A Development Plan Document (DPD) is currently undergoing a six-week consultation on proposed modifications and is progressing through the planning system. The TCBGC should be appropriately represented in plan form and assessed accordingly as there could be cumulative effects on the Tendring landscape.

9.2.5 Essex County Council and Tendring District Council would expect to see a compensation package offered for any residual significant landscape and visual effects as encouraged by national policy.

### 9.3 Conclusion

9.3.1 There is concern that there is the potential for significant residual adverse landscape and visual impacts during construction and during operation from the Onshore Substation on the local landscape character and visual receptors, due to its scale.

9.3.2 There is also concern that there is the potential for significant adverse landscape and visual impacts during construction from the works in the Cable Corridor on local landscape character and visual receptors.

9.3.3 We are concerned that it will take up to 15 years for the mitigation to take full effect, which is identified as half the expected life of the substation. We

disagree that the proposed mitigation planting will reduce all the negative effects on the immediate landscape and its setting to non-significant.

9.3.4 There are concerns that the cumulative effects of Five Estuaries with the proposed North Falls onshore substation, the East Anglian Connection Node (EACN), and the pylons that are proposed to connect to it from the Norwich to Tilbury (N2T) scheme would have a significant cumulative effect on both landscape and visual receptors.

9.3.5 The N2T pylons do not appear to be identified in the cumulative Landscape and Visual Impact Assessment but form an essential element in association with Five Estuaries, North Falls and the EACN in order to distribute energy downstream.

## **10. Green Infrastructure**

### 10.1 Local Issues

10.1.1 Having reviewed the Environment Statement (Including Preliminary Ecological Appraisal, Biodiversity Net Gain Indicative Design Stage Report), Habitat Regulation Assessment, Planning Statement, Outline Landscape and Ecological Management Plan (LEMP) and the associated documents which accompanied the planning application, ECC raise the following points:

10.1.2 ECC welcome that the Essex Green Infrastructure (GI) Strategy and Essex GI Standards have been reviewed, and that the development will demonstrate alignment with the strategy and standards principles through the design and core documents, such as the Environment Statement, Planning Statement, Biodiversity Gain Design Stage Report, and Outline LEMP.

10.1.3 ECCs GI team promotes the delivery GI through the '*Lawton Principle*' which advocates for a landscape-scale approach to conservation and the enhancement of connection between green sites- either through physical corridors or through '*stepping-stones*'. A bigger, better, and connected approach to GI delivery ensures that green space is accessible to all, enhances biodiversity (both through the delivery of new habitats and wildlife corridors) and improves the character and sense of place.

10.1.4 As identified from the Environmental Statement (ES), the project has the potential to alter habitats, either through fragmentation or loss. However, the Development Consent Order (DCO) (Work Nos. 10, 15B, 15C) outlines the creation of permanent ecological and environmental mitigation works and habitat compensation measures, including:

- Using trenchless crossing techniques to avoid impacting protected and important habitats.
- Mitigation planting and screening for the onshore substation, taking a landscape led approach.
- Retaining and protecting existing hedgerows and woodlands where possible.
- Enhancing and creating new hedgerows and woodlands, including maintenance.
- Creating swales, ponds, and wetlands.
- Landscaping and habitat creation, including wildflower meadow and glade.
- Biological enhancements such as bird and bat boxes, and hibernacula.

10.1.5 The proposed ecological mitigation measures and enhancements set out in the ES and the Preliminary Ecological Assessment (PEA) (APP-153, APP-154, and APP-155) will add to the GI and biodiversity value across the cable corridor of the project. Page 47 of the DCO for Work No 15b states that no work shall commence until a written landscape scheme and associated work

programme is produced in accordance with the Outline Landscape and Ecological Management Plan (OLEMP). Details of the GI Landscaping and BNG for the scheme, especially for the proposed planting ecology and landscape screening around substation to be provided through a GI/ Landscape Strategy and Plan. With details of planting schedule, advance planting around construction sites; and the timescale for the implementation of each aspect of Green Infrastructure within that phase of development and details of the quality standard of construction and maintenance. These measures should be secured through the addition to the Requirements as attached to the DCO.

## 10.2 Biodiversity Net Gain (BNG)

10.2.1 The Onshore BNG Indicative Design Stage Report (APP-257) summaries the potential net gains for both scenario 1 and 2, which will result in:

	<b>Scenario 1</b>	<b>Scenario 2</b>
<i>Habitat</i>	-13.35%	+8.55%
<i>Hedgerow</i>	+105.38%	+138%
<i>Watercourses</i>	0%	0%

10.2.2 The Environment Act (2021) BNG requirement for NSIPs is to achieve at least 10% measurable net gain from November 2025, which is to be secured for at least 30 years. Both scenarios do not meet the statutory 10% requirement for the habitat provision and will require either a review of onsite opportunities, offsite compensation or purchase of credits. It is recognised that onsite might not always be conceivable, and that off-site delivery could provide additional benefits and be used to protect areas of land that are of local natural and wildlife value. It is recommended that this is discussed with Tendring District Council, Essex County Council and Landscape/ecological specialists and for the Biodiversity Metric and Biodiversity Net Gain Plan is updated once the

landscape provision for both on-site and off-site is known and fixed for the preferred cable corridor and landfall site.

10.2.3 Schedule 2, Requirement 23 (Biodiversity Net Gain) of the draft DCO (APP024) (page 51) recommends a requirement for the production of a BNG Gain Plan prior to work commencing, which is supported. ECC would recommend that the proposal submits a BNG Site Wide Strategy for the whole project covering all sections (zones) and a zone-wide Biodiversity Gain Plan for each section to be approved. See below for details on proposed additional Requirement for the DCO. Again, it is recommended to take a similar approach to the Habitat Management and Monitoring Plans.

10.2.4 It is worth noting that the ECC Growth and Development Team (NSIP), Place Services (Ecology) and Essex Biodiversity Net Gain officer are exploring a project proposal to highlight the benefits to nature recovery in Essex of BNG being set at 20% rather than 10% for NSIPs.

### 10.3 Proposed Additional Requirements

10.3.1 The following additional requirements are proposed to form part of the DCO:

1) Additional Requirement 1

**Biodiversity Net Gain Site Wide Strategy and Zone Wide Biodiversity Gain Plan**

To produce a Biodiversity Net Gain Site Wide Strategy (BNGSWS) that sets a framework and principles for the whole of the Five Estuaries Windfarm project



for the delivery and enhancement of Biodiversity Net Gain. Then more detailed a Zone Wide Biodiversity Gain Plan (ZWBGP) for each phase of delivery.

Before or concurrently with the first application for the approval of reserved matters for each stage of the Five Estuaries delivery, a ZWBGP that accords with the principles set out in the BNGSWS shall be submitted to and approved in writing by the Local Planning Authorities. The ZWBGP shall include the following:

- i. Strategic aims and objectives of management, including securing biodiversity net gain using the most up to date DEFRA metric as at the date of the planning application submission.
- ii. Description and evaluation of the features to be managed.
- iii. Framework of management options to achieve aims and objectives as set out in the SWS.
- iv. Detail of the roles and responsibilities of personnel involved in delivery of the ZWBGP.
- v. Framework for the monitoring of ecological features, target condition and remedial measures.
- vi. Framework for long term monitoring and management including funding.

The approved ZWBGP shall be implemented in accordance with the details approved in writing by the local planning authority.

Reason: In order to demonstrate measurable biodiversity net gains and allow the local planning authorities to discharge its duties under the NPPF (2023) and in the interest of wildlife habitat protection and achieving enhanced biodiversity through a range of measures in accordance with Local Plan policies Plan.

## 2) Additional Requirement 2

## **Zone wide Habitat Management and Monitoring Plans**

Planning applications subject to mandatory BNG shall require a Habitat Management and Monitoring Plan to be submitted to and approved in writing by the local planning authority. To ensure that the net gain in biodiversity agreed upon in the Biodiversity Gain Plan/ Assessment shall be implemented in full within a 30-year period. The Habitat Management and Maintenance Plan shall include 30-year objectives, management responsibilities, maintenance schedules and a methodology to ensure the submission of monitoring reports. Each Habitat Management and Maintenance Plan shall demonstrate how it accords with the principles in the Zone Wide Biodiversity Gain Plans approved and should cover:

- Details of the management and maintenance operations, actions and work schedule for years 1 – 5 and with broader management aims for the lifetime of the BNG commitment of 30 years.
- Proposals for monitoring needed to measure the effectiveness of management, including methods, frequency and timing.
- Details of the roles and responsibilities for implementation and monitoring, as well as the legal, financial, and other resource requirements for BNG delivery, are secured.
- Including setting out the reporting procedures and options for remedial works and adaptive management to account for necessary changes in work schedule to achieve the required targets if needed.

Reason: In order to ensure measurable net gains are being delivered and effectively maintained and in accordance with LPA's BNG Policy, allowing the LPA to discharge its duties under the NPPF (2023).

### 10.4 Climate Focus Area

- 10.4.1 Five Estuaries Windfarm proposed cable corridor runs through the Essex Climate Action Commission's (ECAC) recommended Climate Focus Area

(CFA), which is formed of the Blackwater and Colne River catchment areas, as mentioned in our previous consultation response in April 2023.

10.4.2 The CFA requires developments to consider the following requirements to comply with the guidelines outlined in the NPPF:

- a) Biodiversity net gain to enhance biodiversity and the natural environment by creating Natural Green Infrastructure contributing to the CFA 30% by 2030 target and the wider Local Nature Recovery Network/Strategy.
- b) Flood and water management, for those properties at risk of flooding to include Integrated Water Management and Natural Flood Management techniques.
- c) Adopting Sustainable Land stewardship practices.

10.4.3 The DCO references the restoration and decommissioning of temporary construction areas (page 49 and 51), and the ES states that any removed hedgerows will be replaced as part of the reinstatement works, along with replacement tree planting within the project order. That this should be implemented within 12 months of completion of the relevant stages of works. The ES also mentions that as part of standard practice that any temporary land will be restored to agriculture land or other where practical. It is recommended to explore opportunities to work with landowners for Sustainable Land Stewardship, that could contribute to the CFA targets and Local Nature Recover Strategy.

## 10.5 Greater Essex Local Nature Recovery Strategy (GELNRS)

10.5.1 The Environment Act 2021 introduced a number of measures to support local nature recovery, including Local Nature Recovery Strategies (LNRS). These strategies are locally led and establish priorities for nature recovery. ECC is the 'Responsible Authority' for delivering the Greater Essex Local Nature

Recovery Strategy ([GELNRS](#)) working closely with the Essex Local Nature Partnership to provide direction and ensure key stakeholders are engaged.

10.5.2 Consideration should be given to the emerging GELNRS (currently out to public consultation) aims to deliver practical, county-wide initiatives for nature recovery and identifies areas of current particular importance for biodiversity and strategic opportunity locations where habitat creation or improvement can provide multiple benefits for nature and the environment. This will ensure a strong relationship between new development proposals and relevant strategic opportunity locations.

10.5.3 The GELNRS plays a crucial role in Biodiversity Net Gain (BNG) by offering a strategic approach to off-site BNG delivery. The GELNRS includes strategic opportunity maps highlighting areas with the highest potential for environmental benefits for new habitat creations across Essex. Sites of strategic significance offer a 15% uplift in biodiversity units compared to other sites, providing a 15% bonus on units purchased in these locations.

## 10.6 Restoration

10.6.1 There will be an expectation for restoration to contribute to sustainable land stewardship, climate change mitigation and adaptation, biodiversity and environmental net gain through the delivery of natural GI. If the restoration proposal is to return the site to arable land it will need to a better grade than before and demonstrate how it will deliver sustainable land stewardship with potential to link to Landscape recovery – a successor to the Countryside Stewardship scheme.

10.6.2 It is noted that Schedule 12, Part 1 (Removal of Hedgerows) of the draft DCO on pages 147-149 list the hedgerows to be recovered but does not state what will be replaced or where.

10.6.3 The following additional requirement is proposed:

### 3) Additional Requirement 3

#### **Restoration and Decommissioning plan**

It is recommended that a site wide restoration and decommissioning plan should be submitted to demonstrate how the site will be restored to a natural habitat post the operational life of the application site. The decommissioning plan should include details of the removal of all equipment, facilities and structures including any subsurface cabling and footings. Any access roads created for building or maintaining the system shall also be removed and re-planted with an appropriate landscape scheme. All other equipment and boundary fences to be removed from the project site.

Reason: To ensure that the site and its established GI is protected and restored in an appropriate manner consistent with the aims and aspirations of the original Landscape and Ecology Management Plan and GI strategic outcomes.

#### 10.7 *Outline Landscape and Ecological Management Strategy (OLEMS)*

10.7.1 ECC welcome the inclusion of an outline Landscape and Ecological Management Strategy and the proposed 5-year planting aftercare. However, it is recommended extending the aftercare period to a minimum of 10 years, considering the 30-year Biodiversity Net Gain (BNG) requirement where applicable.

10.7.2 Additional Measures for Requirement 12 of the draft DCO

10.7.3 ECC support the DCO Requirement 12 (Landscape and Ecology Management Plan) on page 48 and ES Chapter 4 for no work to commence until a written LEMP in accordance with the OLEMS for that stage has been submitted and approved by the planning authority. It is recommended that this is approved by a SuDS and landscape specialists. The OLEMS sets out the principles applied in the design of the landscape and ecological plans and

highlights that the aftercare and restoration will be the responsibility of VE and the landowners.

10.7.4 ECC recommend that the LEMP include all ecological mitigation measures proposed within the ES, PEA, substation landscaping, and restoration plans. Additionally, as noted in our previous consultation response from April 2023, the LEMP should specify who is responsible for GI assets (including any surface water drainage systems), the maintenance activities and frequencies, and appropriate monitoring to ensure the GI is maintained throughout the proposal's lifetime. The distinction between the maintenance of landscaping/planting and woodland planting (within the order limits) by private landowners and those owned by the applicant was unclear in the OLEMS. We also expect details on how management company services for the maintenance of GI assets and green spaces will be funded and managed for the development's lifetime. This is to ensure that appropriate management, maintenance arrangements, and funding mechanisms are established to maintain the high-quality value and benefits of the GI assets.

10.7.5 The LEMP to also include measures for early establishment of new trees to be considered at the time of planting, which is often insufficient leading to poor survival rate of young trees. This should include weeding, mulching and watering. All newly planted trees with a trunk diameter of 6cm or more will be watered for three years via a buried watering tube, irrigation bag or irrigation well; applying 60 litres per visit, at least 14 times between May and September. Mulch, stakes, ties and weed establishment will also be inspected and actioned as required. Stakes and ties should be removed 3 years after planting.

10.7.6 Additional Measures for Requirement 8 (Code of Construction Practice):

10.7.7 As part of the Code of Construction Practice (CoCP) referenced as part of the draft DCO Requirement (Code of Practice) on page 47 and ES or through the provision of a Construction Environmental Management Plan (CEMP) to ensure early establishment through advanced planting when opportunities for phased implementation arise, or evidence that substantive GI is secured as early as possible in the initial phases of delivery. Recognise, however, that it is crucial to plant when the planting will thrive the most to prevent poor growth and potential plant failure. Therefore, a CoCP or CEMP will be required to set out how retained GI, such as trees, hedges and vegetation, as well as any nature designated sites (e.g. SSSI's etc.) will be protected during construction and evidence of phased GI planting.

## 10.8 Woodland and Tree Planting

### 10.8.1 Essex Forest Initiative:

10.8.2 Moving forward, ECCs GI team recommends that Senior Forestry and Woodland Officer is consulted in relation to trees and woodland. There are opportunities to work with the Essex Forest Initiative to assist in tree planting for new development, including funding and advice. For more information, please contact [Environment@essex.gov.uk](mailto:Environment@essex.gov.uk) who would be very interested in discussing further.

### 10.8.3 Big Green Internet

10.8.4 There is a Big Green Internet project aiming to plant and connect the woodlands from Tendring to Epping Forest, which potentially the path of this proposal may well pass through and the opportunities to contribute and the potential effects should be considered. <https://thebiggreeninternet.co.uk/our-journey/>

## 10.9 Shoreline Management Plan

- 10.9.1 The following comments relate to Volume 6, Part 3, Chapter 6: Hydrology, Hydrogeology and Flood Risk of the ES (APP-088).
- 10.9.2 In ECC previous response to the Stage 2 consultation in April 2023, ECC highlighted several points regarding the Essex and South Suffolk Shoreline Management Plan (SMP). It is noted in the ES and DCO that consideration has been given to the long-term management intent, such as maintaining the current defence for the lifetime of the SMP at Frinton-on-Sea or adopting a dual policy of 'Hold the Line' and 'Managed Realignment' for the Holland-on-Sea shoreline area, as previously recommended in Shoreline Management Plan 2.
- 10.9.3 ECC also noted that the SMP indicates the "Hold the Line" policy for the period up to 2055 is contingent on sufficient funding. It highlights that long-term maintenance will be challenging and may require diverse funding sources. Additionally, the SMP states that even economically viable defences may not receive public funding, which the developer should consider.
- 10.9.4 The focus of this consideration is primarily on ensuring the resilience of installed infrastructure to flooding, rather than on the implications of managed realignment for the siting of the onshore cabling and associated infrastructure. This encompasses the impact on access and egress for construction and ongoing maintenance, as well as the environmental implications from such activities and the potential effects of a change in management at the landfall location. Managed realignment can create new habitats for plants, birds, and fish, which may require specific measures and restrictions to be implemented.
- 10.9.5 As previously highlighted, the ES and DCO states that material generated by horizontal drilling or other trenched excavations will be placed to avoid disturbing watercourse banks and prevent spillage into water features. While the amount of material to be produced remains unclear, it could be valuable



for coastal protection or habitat creation in Essex. The applicant should coordinate with the Environment Agency and Essex County Council, with input from local stakeholders, to determine optimal use and potential receiving locations.

10.9.6 In our previous response on page 38, section 6.4.10, we mentioned that ECC does not hold data regarding shoreline monitoring data. It can be sourced from Tendring District Council and/or the Environment Agency.

## **11 Highways and Transportation.**

11.1 The following forms a summary of the development transport and traffic impacts. A more detailed review has been undertaken of the submitted information and specific comments on the documents, including requests for further information or additional clarification on elements of the submission. The technical review is provided at Appendix 21. The outcomes of these requests may affect conclusions so far drawn on the impacts of the development set out below, most notably these include the following, all of which may alter any conclusions reached:

- **Assessment methodology and assumptions:** There are assumed levels of car sharing, shift patterns, HGV and LGV numbers and HGV routeing.
- **Absence of controls and mechanisms within the CTMP:** Without controls and monitoring within the management documents, the impacts may exceed those assessed.
- **Processes for approving the highway works:** We are currently in discussions with the Developer around Protective Provisions and have not reached agreement on the processes.

11.1.1 It is important to consider the temporal nature of the project, both in its own context and in the context of the cumulative impacts. The assessment method

is based on Scenario 1, which identifies the greatest peak impact in traffic; however, further clarity is needed on Scenario 3, which has the potential to result in greater temporal impacts, due to the removal and reinstatement of elements of the works, meaning residents are subjected to the same repeated impacts at certain locations for the projects. In terms of public perception and the length of the experience, the potential exists for these impacts to exceed the impact of the in-combination project delivery.

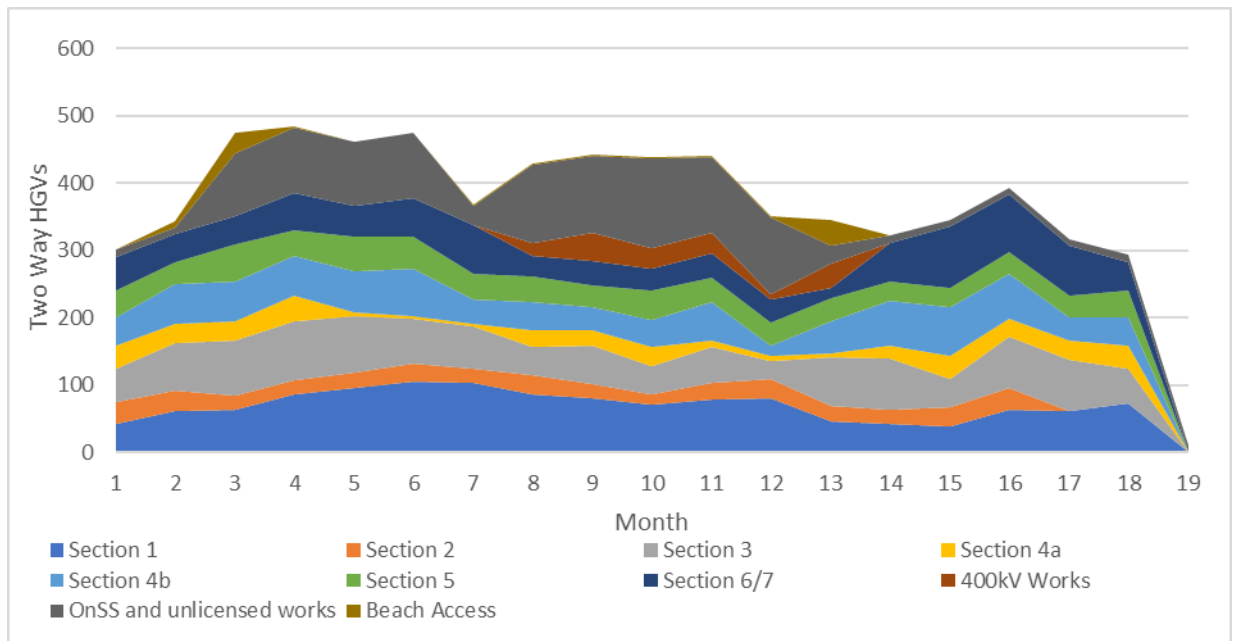


Figure T1 – Scenario 1: Two Way HGV Movements

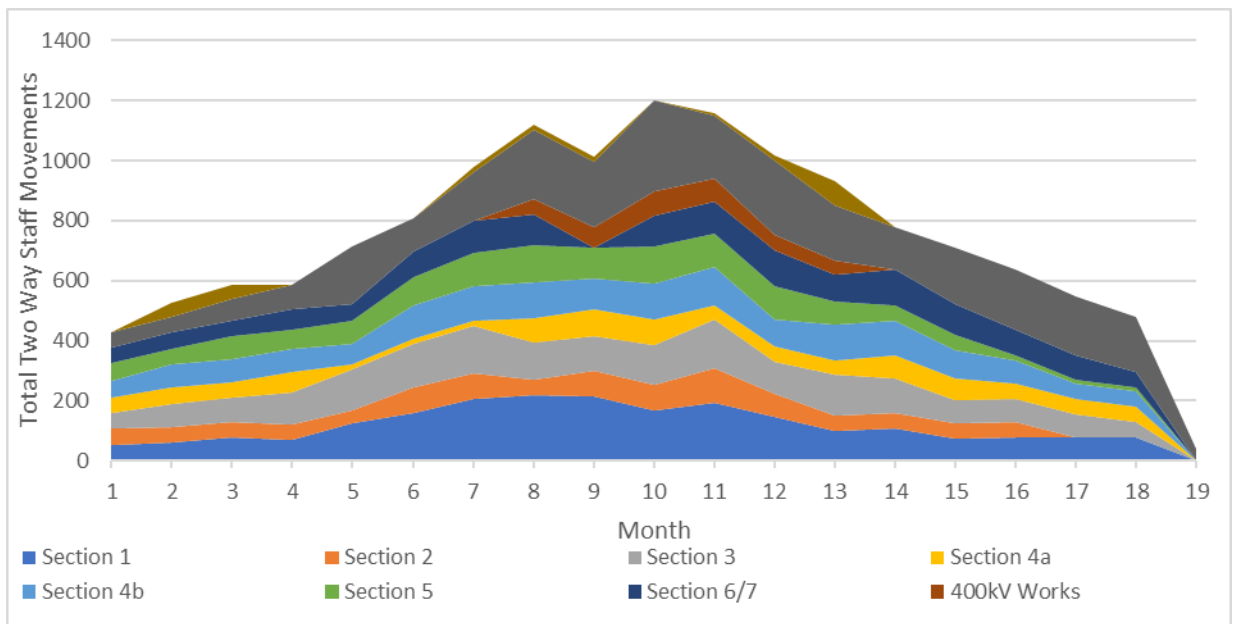


Figure T2 – Scenario 1: Two Way Construction Worker Vehicle Movements

11.1.2 As can be seen from Figure T1 and Figure T2 above, whilst the project does result in peak impacts, it will have a continuous impact throughout the 18 Month programme. For HGV movements, seven of the 18 months exceed 90% of the peak impact, and 14 months exceed 70% of the peak impact. For workforce vehicle movements, four of the months exceed 90% of the peak, and nine of the months exceed 60% of the peak month. As a result, whilst the impacts are temporal, they are significant for a considerable length of the project and not just focussed over a short timeframe.

11.1.3 It is considered that the development will have the following negative transport and traffic impacts on the local highway network, and, as above, the significance of these impacts would be greater if the impacts exceed those that have been assessed:

- Minor increases in delay and congestion on the A133 as a result of increased traffic movements, and particularly the proportional increase in HGV movements, as well as AILs.

- Increases in congestion, delay, severance through the built-up environment of Clacton on the B1027 and B1032, as well as reduced vulnerable road user amenity as a result of increased traffic and particularly the proportional increase in HGV movements.
- Minor increases in congestion and delay on the B1032 northeast of Clacton, as well as reduced vulnerable road user amenity as a result of increased traffic and particularly the proportional increase in HGV movements.
- Minor increases in congestion and delay on the B1033 west of Weeley, as well as reduced vulnerable road user amenity as a result of increased traffic and particularly the proportional increase in HGV movements.
- Increases in congestion, delay, severance through the community of Weeley and Weeley Heath on the B1441, as well as reduced vulnerable road user amenity as a result of increased traffic and particularly the proportional increase in HGV movements.
- Increases in congestion, delay, severance through the community of Weeley on the B1033, as well as reduced vulnerable road user amenity as a result of increased traffic and particularly the proportional increase in HGV movements.
- Increases in congestion, delay, severance on the B1414 Harwich Road, as well as reduced vulnerable road user amenity as a result of increased traffic and particularly the proportional increase in HGV movements.
- Increases in congestion, delay, severance through the community of Thorpe Le Soken on the B1414 south of the B1033, and on the B1033 east of the B1414, as well as reduced vulnerable road user amenity as a result of increased traffic and particularly the proportional increase in HGV movements.
- Minor increases in congestion and delay on the B1033 east of Weeley, as well as reduced vulnerable road user amenity as a result of increased traffic and particularly the proportional increase in HGV movements.

- Minor increases in congestion and delay on the B1035 north of Thorpe Green as well as reduced vulnerable road user amenity as a result of increased traffic and particularly the proportional increase in HGV movements.
- Minor increases in congestion and delay on the B1035 south of the A120 as well as reduced vulnerable road user amenity as a result of increased traffic and particularly the proportional increase in HGV movements.
- Significant increases in congestion and delay on Bentley Road, as a result of proportional increases in traffic and large proportional increases in HGVs.
- Significant reduced vulnerable road user amenity as a result of increased traffic on Waterhouse Lane, Little Bromley Road and Ardleigh Road.
- Very minor increases in congestion, delay, severance through the community of Great Bromley on the B1029, as well as reduced vulnerable road user amenity as a result of increased traffic.
- The following junctions are considered likely to see a worsening in their operation, as noted above the significance in the negative impacts may be greater if the assessed impacts are incorrect:
  - Increased delay on Harwich Road south approach to A120 / Harwich Road roundabout.
  - Increased delay on Bentley Road approach to A120, as a result of increased vehicle movements.
  - Increased delay at the B1035 approaches to the A120 / B1035 roundabout.
  - Increased congestion and delay at the following junctions on the A133.
    - A133 / A133 roundabout junction.
    - A133 / B1033 roundabout junction.
    - A133 / Progress Way roundabout junction.
    - A133 / Brook Way roundabout junction.
    - A133 / B1027 roundabout junction.

- Increased congestion and delay at the following junctions on the B1027 and B1032 in Clacton:
  - B1027 / Old Road mini roundabout junction.
  - B1027 / Oxford Road mini roundabout junction.
  - B1027 / Burrs Road mini roundabout junction.
  - B1027 / B1032 Holland Road mini roundabout junction.
  - B1032 / Kings Parade roundabout junction.
- Increased delay at the B1033 Colchester Road / B1035 Tendring Road priority junction.
- Increased delay at the B1441 Weeley Road / B1414 Harwich Road priority junction.
- Significant increased short-term delay as a result of traffic management required to deliver the highway works on Bentley Road.
- Increased short term delay as a result of the traffic management (either road closures or most likely one-way shuttle working) for the delivery of the highway accesses and haul road crossings at the following locations:
  - Clacton Road (AC-1 and AC-2)
  - Little Clacton Road (CR-1)
  - B1033 Thorpe Road (AC-3A and AC-3B)
  - Sneating Hall Lane (CR-2)
  - Damant's Farm Lane (CR-3)
  - B1414 Landermere Road (CR-4)
  - Golden Lane (CR-5)
  - B1035 Tendring Road (AC-4)
  - B1035 Thorpe Road (AC-5)
  - Lodge Lane (CR-6)
  - Wolves Hall Lane (CR-7)
  - Stones Green Road (CR-8 and CR-8A)
  - B1035 (AC-6 and AC-7)
  - B1035 Clacton Road (AC-8A and AC-8B)
  - Bentley Road (AC-9, AC-10 and AC-11)

- Payne's Lane (CR-9 and CR-9A)
- Spratts Lane (CR-10 and CR-10A)
- Barlon Road (CR-11 and CR-11A)
- Ardleigh Road (AC-12)
- Increased delay and reduced road safety as a result of the use of the proposed construction accesses.
- Reduced road safety as a result of the use of the proposed crossing points.
- Increased delay associated with the impact of abnormal indivisible loads delivering to the project.
- Significant carbon emissions associated with the delivery of materials to the site, inclusive of the haul road.

11.1.4 Further discussions are needed to determine whether mitigation is required for the assessed impacts. However, based on proportional changes the Council believes that proportional localised mitigation should be considered at Links 23, 24, through Clacton, Link 27 through Weeley and Weeley Heath and Link 28 on B1414 Harwich Road.

11.1.5 In order to ensure that the impacts remain as those assessed, the most pragmatic approach is to ensure that appropriate management measures are in place to control and monitor construction traffic to avoid exceedance.

11.1.6 It is considered that the development will have the following positive transport and traffic impacts on the local highway network. Improved footway / cycleway provision along Bentley Road between the A120 and the proposed haul road during construction following construction of the improvements.

- Improved footway / cycleway provision along Bentley Road between the A120 and the proposed haul road during construction following construction of the improvements.

11.1.7 In addition to the above, it is considered that the development will have the following additional cumulative negative transport and traffic impacts on the local highway network:

- Significant worsening on the impacts on Bentley Road, as a result of proportional increases in traffic and large proportional increases in HGVs.
- Worsening on the impacts on delay and congestion on Bentley Road approach to A120 / Bentley Road junction.
- Worsening on the impacts on delay and congestion on the A133.
- Worsening on the impacts on congestion, delay, severance through the built-up environment of Clacton on the B1027 and B1032, as well as reduced vulnerable road user amenity, as a result of increased traffic and particularly the proportional increase in HGV movements.
- Worsening of the impacts on congestion and delay on the B1032 northeast of Clacton, as well as reduced vulnerable road user amenity as a result of increased traffic and particularly proportional increase in HGV movements.
- Worsening of the impacts on congestion and delay on the B1035 north of Thorpe Green as well as reduced vulnerable road user amenity as a result of increased traffic and particularly proportional increase in HGV movements.
- Significant worsening of the impacts on vulnerable road user amenity as a result of increased traffic on Waterhouse Lane, Little Bromley Road and Ardleigh Road.

11.1.8 In addition to the above, it is considered that the development will have the following additional cumulative temporal negative transport and traffic impacts on the local highway network as a result of Scenario 3, where works are removed and then reinstated:

- Contiguous impacts at the locations above as a result of repeated increases in HGV movements on highway network.



- Contiguous impacts at the locations above as a result of repeated increases in construction worker movements on the highway network.
- Additional total HGV and worker movements associated with the removal and reinstatement of works to deliver individual projects.
- Additional carbon emissions associated with HGV and worker movements associated with the removal and reinstatement of works to deliver individual projects.
- Repeated short term delay as a result of the traffic management (either road closures or most likely one-way shuttle working) for the delivery of the highway accesses and haul road crossings (identified above).

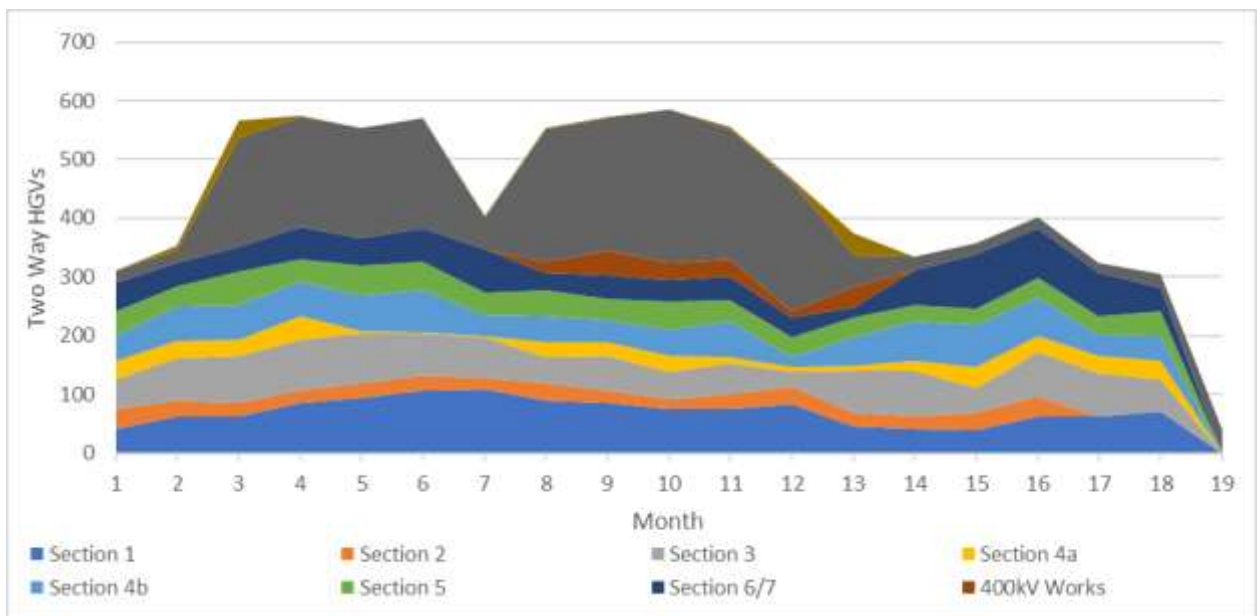


Figure T3 – Cumulative 1: Two Way HGV Movements

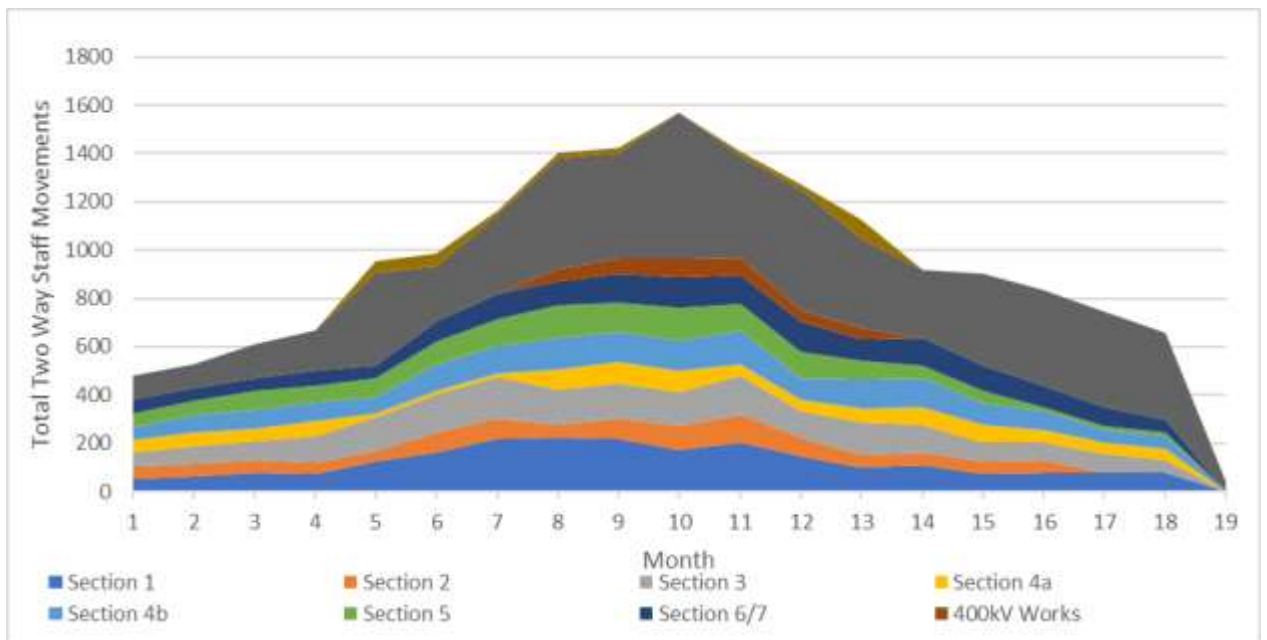


Figure T4 – Cumulative: Two Way Construction Worker Vehicle Movements

11.1.9 There is no reference to cable drums AILs within the Traffic and Transport [APP-090] chapter at paragraph 8.4.31, but it became clear at the hearing that there is a requirement for these to access the accesses on the local road network. There are concerns around the access for AILs for cable drums associated with all of the accesses on the route, particularly the number and frequency, what assessment has been undertaken of the routes, including whether a structural assessment has been undertaken to ensure the deliverability of their routes i.e. can the local road network accommodate these movements. If an assessment has not been undertaken of the routes, it may be that they are not deliverable, and so would have to use alternative routes with different impacts.

11.1.10 Detailed comments from the Highways & Transportation department can be found in Appendix 21.

## 12. Archaeology

### 12.1 Adequacy of Information

12.1.1 The application is supported by a suitable level of desk-based research, and non-intrusive evaluation surveys have taken place across much of the route. However, there remain small areas of the route where geophysical survey has not been completed and little or no data is available.

12.1.2 The research carried out so far has provided a reasonable account of the known archaeological and geoarchaeological remains within the proposed development area and onshore geophysical survey has identified further archaeological features and sites. This includes potential prehistoric ritual and settlement evidence, Roman roads and associated activity and later activity.

12.1.3 A geoarchaeological desk-based assessment (DBA) has also identified the potential for the presence of deposits which may contain Palaeolithic archaeological and geoarchaeological evidence that would contribute to national and regional research themes and priorities due to their rarity. The geoarchaeological DBA also highlights the potential for the presence of offshore submerged prehistoric land surfaces and relict channels which may contain archaeological and paleoenvironmental evidence.

12.1.4 Trial trench evaluation and geoarchaeological assessment has only taken place at the proposed substation site, the results are included in the DCO application under Volume 6, Part 6 Annex 7.8 and 7.9.

12.1.5 The Cultural Heritage chapter of the ES recognises that “As the conclusions of the DBA are predictive and probabilistic and the results of the geophysical surveys have not been ground truthed by intrusive investigation across the

entirety of the Onshore ECC route, there are some cases where the potential presence of heritage assets or their significance remains difficult to state with confidence” (7.4.16).

12.1.6 During consultation with the applicant, it was advised that a more extensive programme of trial trenching should be carried out across the onshore corridor in order to provide further information on the nature, complexity and significance of any heritage assets that may be located within the cable corridor.

12.1.7 Offshore geophysical survey data has been completed across much of the proposed route and windfarm location which has identified areas of archaeological potential on the seabed. Where these are of high potential they have been classified as Archaeological Exclusion Zones (AEZ), these areas will be avoided where possible. However, the ES states *“There is a likelihood that previously unidentified sites or features of archaeological interest or significance may be present in the areas where the data has not yet been obtained”* (11.6.7). Further surveys will be carried out to refine the AEZ’s and provide further data.

## 12.2 Local Issues

### *Construction Phase Impacts – Onshore*

12.2.1 In terms of archaeological and geoarchaeological remains, significant negative impacts are anticipated from the construction phase of the development, both from construction related activity and extensive lengths of underground cabling. The proposed cable route will be between 60 to 90m wide and extend across 22km of land within the Tendring District. The need to excavate a corridor with a significant width has the potential to identify many new areas of archaeological importance. There is high potential for the

groundworks required for the construction of the cable trench and associated works to disturb or destroy known and unknown archaeological remains and geoarchaeological deposits.

12.2.2 Further surveys would be required where ground disturbance is to occur in order to fully understand the archaeological impact of the development where there is likely to be a negative impact on the archaeological and geoarchaeological remains.

*Operation Phase Impacts – Onshore*

12.2.3 There will be little impact onshore from operation and maintenance.

*Decommissioning Phase Impacts - Onshore*

12.2.4 During decommissioning care will need to be undertaken to avoid areas where archaeological investigation has not been completed, otherwise further work will be required.

*Construction Phase Impacts – Offshore*

12.2.5 Geophysical assessment has revealed potential for significant archaeological remains upon the seabed including wrecks and prehistoric land surfaces.

12.2.6 Construction impacts offshore, specifically the intertidal zone, have potential to have significant negative impacts on archaeological remains from direct impacts such as sediment removal and the extensive lengths of buried cables and further indirect impacts.

*Operation Phase Impacts – Offshore*

12.2.7 Offshore both direct and indirect impacts to archaeological remains may be caused by disturbance to the seabed, however this is less likely to occur in the intertidal zone.

#### *Decommissioning Phase Impacts – Offshore*

12.2.8 Offshore, decommissioning is likely to cause further impact from direct and indirect impacts from equipment causing disturbance to the seabed within the intertidal zone.

### 12.3 Mitigation

#### *Mitigation - Onshore*

12.3.1 As detailed in the Archaeology and Cultural Heritage ES Chapter (Volume 6, Part 2, Chapter 7), the design proposed takes into account key areas of suspected archaeological sensitivity and seeks to minimise or avoid impact (7.9.1) by removing these areas from the scheme.

12.3.2 Of the remaining heritage assets identified through the various surveys the assessment has concluded that mitigation would reduce any effect to a minor adverse effect, which is not considered significant in EIA terms. It is difficult to assess the value of the buried archaeology as there has only been limited intrusive evaluation to confirm the significance of the deposits. In addition, there is potential for further archaeological remains to be present within the cable corridor that have not been identified by the surveys carried out and within areas that have not had surveys completed.

12.3.3 Non-intrusive surveys, such as geophysics, are considered insufficient as a methodology to provide an assessment of significance and therefore the potential adverse effect remains difficult to state with confidence. An assessment of effects on any heritage asset involves an understanding of the

heritage significance of an asset, with regard to subsurface archaeological remains this can only be confidently achieved through intrusive investigation such as the programme of trial trenching.

12.3.4 It is understood that, at present, the details of the proposed development retain a degree of flexibility and will not be finalised until the detailed design phase, post consent. The primary mitigation approach, both onshore and offshore, is avoidance and therefore should entail preservation in situ of any significant archaeological remains. However, the extent, nature and significance of the archaeological remains, both onshore and offshore, has not yet been fully determined and it is uncertain that avoidance will be a practical option given the engineering requirements of the proposed works.

*Additional measures*

12.3.5 Mitigation measures proposed to minimise the potential adverse effects to buried archaeological remains resulting from the construction phase are proposed to be achieved through preservation by record. (7.10.56)

12.3.6 The general mitigation strategy for onshore archaeology is defined in the Outline Written Scheme of Investigation (Volume 9, Report 23) which provides a comprehensive range of mitigation strategies. The OWSI does state that a programme of archaeological evaluation will be completed across the scheme post consent which will inform on the nature of the mitigation required however no details of the coverage of the trenching or the trench locations has yet been provided or agreed.

12.3.7 In order to provide an effective mitigation strategy for heritage, any 'gaps' in the datasets need to be completed and the results of the geophysical survey should be 'ground-truthed' through a programme of trial trench evaluation. Any identified or known assets within the construction corridor need to be fully assessed so that the significance and value can be determined and assigned. Further intrusive assessment by trial trenching would provide clarity on

significance and reduces project risk, particularly when targeted at key construction areas such as cable landing and direct drilling sites.

Mitigation – Offshore (Intertidal zone)

12.3.8 Commitment to avoid heritage receptors is supported, however the success of this will depend on the accuracy in the identification of Archaeological Exclusion Zones and the practicality of avoiding these by design.

12.3.9 Where avoidance is not possible, or in the case of not yet located marine heritage receptors, further mitigation and archaeological works are proposed in the Outline Marine Written Schemes of Investigation (Volume 9, Report 19) which is considered to provide a suitable approach to further investigation, recording and publication of any archaeological sites that may be revealed within the intertidal zone.

## 12.4 Cumulative Effects

12.4.1 There may be cumulative direct effects with the North Falls Offshore Wind Farm (OWF). The North Falls OWF will follow the same or very similar onshore ECC, substations and cable routes. It is unclear how much flexibility in design there will be, with both wind farms following similar designs, with regard to avoiding archaeological remains of high significance when no intrusive archaeological fieldwork has been undertaken. This would be of significance for any Palaeolithic sites on or offshore which are rare and highly significant.

## 12.5 The DCO

12.5.1 The Development Consent order does contain a requirement for archaeological work (11 Onshore Archaeology):



(1) No stage of the onshore works may commence until for that stage an archaeological written scheme of investigation in accordance with the outline onshore written schemes of investigation as appropriate for the relevant stage has been submitted to and approved by the relevant planning authority.

(2) The onshore works must be carried out in accordance with the approved details.

(3) Onshore site preparation works, including those necessary to allow production of any scheme required under sub-paragraph (1) must only take place in accordance the applicable details set out in the approved written scheme of investigation.

12.5.2 However, it is recommended that this needs further detail in part due to the limited level of intrusive evaluation undertaken to date. The requirements will need to make clear that two stages of archaeological investigation will be required, initially in the form of the intrusive evaluation work so far not completed, and then the mitigation phase to ensure that either the identified deposits are protected within the scheme or are appropriately excavated in advance of any development occurring in that area. It is also recommended that the role of Historic England and the Local Authority Archaeological Advisors are identified in their role in signing off the field work and post excavation work within each area of archaeological investigation.

## 12.6 Conclusion

12.6.1 The offshore windfarm and landward cable connection is likely to have considerable impact on the historic environment and especially the archaeological and geoarchaeological deposits, mainly from the construction phase of the development and the extensive lengths of cable trenching required both onshore and offshore. The Tendring District is particularly rich in prehistoric ritual remains which range from single monuments to extensive cemetery areas and the offshore environment has high potential for former prehistoric landscapes. Further information and intrusive surveys are required

in order to fully understand the impact of the development on archaeological remains.

## **13. Socio Economics**

### 13.1 Local Issues

13.1.1 Essex is home to some of the world's leading companies with concentrations of high-skill, high-wage jobs as well as two leading universities and cutting-edge skills providers. Economic growth is the engine that will drive and enable so many of ECC's wider ambitions – from levelling up to net zero – as set out in Everyone's Essex. As a strategic leader in the skills landscape, Essex County Council has clear ambitions to maximise skills and employment opportunities for its residents. We are also focused on supporting developers and businesses with their workforce development.

#### *Jobs and Skills*

13.1.2 The proposed development is a major project which could result in increased demand for construction skills and equipment at a time when other major projects may also commence with similar timeframes and result in labour shortages. Though we welcome this development as a positive change for skills and employment in the County, we are cognisant of the fact that various developments, happening at the same time, could create skills shortages in our economy. The Construction Growth in Essex 2020-2040 report produced by MACE on behalf of ECC suggested that major projects across the county will add 15,000 local labour demand at peak and that labour shortages are expected to peak in 2031. This has been referenced in the Five Estuaries Outline Skills and Employment Strategy, but no comment was made about how this will be considered for skills planning in the future. Therefore, we would welcome more evidence that the applicant has demonstrated extensive research of the local skills and employment needs alongside existing projects

in the area. This must be underpinned by the inclusion of a skills and employment review that outlines the skills and jobs requirements and potential impact on the local economy and jobs market.

13.1.3 The Outline Skills and Employment Strategy should clarify whether opportunities listed as FTE are new or existing vacancies. There was no attempt to indicate which of the two counties would benefit from the various opportunities listed in the strategy. This should be done via a travel to work analysis. If a split of these FTEs by county is impossible, that should be made explicit in the strategy.

13.1.4 We would expect the applicant to fully engage with local supply chains for labour, material, and equipment. This not only adds to local economic benefit but also reduced greenhouse gas and pollutants deriving from extended travel. We also expect the applicant to engage with the skills landscape in the county and work directly with partners in Essex to maximise skills and employment opportunities.

## 13.2 Adequacy of the Application/DCO

13.2.1 The proposed development is a major project which could result in increased demand for construction skills and equipment at a time when other major projects may also commence with similar timeframes and result in labour shortages. Though we welcome this development as a positive change for skills and employment in the County, we are cognisant of the fact that various developments, happening at the same time, could create skills shortages in our economy. The Construction Growth in Essex 2020-2040 report produced by MACE on behalf of ECC suggested that major projects across the county will add 15,000 local labour demand at peak and that labour shortages are expected to peak in 2031. This has been referenced in the Five Estuaries Outline Skills and Employment Strategy, but no comment was made about

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## **14. Health**

### **14.1 Local Issues**

14.1.1 The NPS EN-1 highlights the potential impact of energy infrastructure on the health and wellbeing of the population, while also emphasising the societal benefits of access to energy. We acknowledge that the Five Estuaries Offshore Wind Farm offers a key part of the transition to a low-carbon economy and transition to net zero, aligning with Everyone's Essex commitment to advancing sustainable energy across the County. This transition will ultimately benefit the health and well-being of their entire

population. However, we recognise that the construction and operation of phases such infrastructure can have direct and indirect impacts on health

14.1.2 ECC Wellbeing, Public Health and Communities have reviewed the relevant documents, including the Planning Statement (APP-231); Volume 6, Part 4, Chapter 2: Human Health and Major Disasters; Volume 6, Part 4, Annex 2.1 Human Health Baseline; Volume 6, Part 4, Chapter 2, Annex 2.2: Human Health Literature Review and Volume 9, Report 11: Equalities Impact Assessment. (APP-095)

14.1.3 The Planning Statement (APP-2321) concludes that no significant cumulative health impacts are anticipated, and there is the potential for positive impacts when this project is considered alongside other relevant development. For population health, the impacts are expected to be minor, short-term, and mainly related to construction. Human health effects due to changes in noise, air quality, ground or water contamination, physical activity, reduced access to health services, employment and the perception of risk have been assessed. The assessment finds that a combination of the mitigation measures and additional mitigation from relevant technical chapters can be used to control noted impacts to an acceptable level in EIA terms

14.1.4 Based on this review, we offer the following comments and recommendations to maximise the positive impacts of the project and mitigate potential negative effects, ensuring compliance with local health and well-being policies:

## 14.2 Previous Issues Raised in Relation to Human Health

14.2.1 Health Impact Assessment (HIA): Though a standalone HIA was initially requested, it was agreed that the Environmental Statement (ES) would address this issue.

14.2.2 Enhancement measures: Although the benefits of the projects are noted, further detail is needed on how these will be maximised for the local community. This would typically be addressed in a comprehensive HIA.

14.2.3 Concerns were raised by Tendring District Council about the potential health risks posed by EMF exposure.

14.2.4 Although exposure to EMF (all phases) has been scoped out of the assessment, we recognised that communities may be concerned about the potential effects associated with EMFs. We strongly recommend implementing mitigation measures that address perceptions of risk through clear and non-technical information provided through community engagement that provides transparent information about EMFs and their safety.

14.3 Human Health Baseline: Ref 6.4.2.1 (March 2024) (APP – 096)

14.3.1 The Human Health Baseline provides an overview of population characteristics in Tendring District, including unemployment rates and areas of deprivation. Several Lower Super Output Areas (LSOAs) are identified as having the greatest potential to be affected by the project. Notably, the most deprived domains for LSOAs include barriers to housing and services, living environments and employment.

- Section 1.1.20 provides data in relation to community safety, however, highest rate referred to as Lincolnshire, this needs to be clarified.
- Given local context and the baseline's focus on key areas of deprivation, mitigation measures should highlight how the substantial benefits of VE project will proportionately benefit the local residents of Tendring. The Chief Medical Officers report on Health in Coastal Communities notes that the area faces significant challenges in attracting good-quality jobs and reaching those most in need. We strongly recommend ensuring that the local residents have accessible

opportunities to benefit from the project, as outlined in the Human Health Literature review.

- The key health outcomes highlighted in the ES include both indirect and direct influences on physical health (e.g., cardiovascular conditions) and mental health conditions (e.g., stress, anxiety, or depression). However, the Human Health Baseline has not considered mental health indicators for Tendring. Given the ES chapter follows the recognised WHO definition of health, which includes mental health, this aspect should be reflected in the Human Baseline as well.

#### 14.4 Equalities Impact Assessment: ref 9.11 (March 2024) (APP – 241)

14.4.1 Employment opportunities: During the construction and operation phases, the project is expected to generate employment opportunities. We note that there is an outline skills and employment strategy that can be developed further with relevant key consultees into a final skills and employment strategy that will facilitate positive and meaningful commitments within the Essex region. We emphasise enhancing these positive benefits for the local communities of Tendring, particularly, LSOAs identified in the Human Health Baseline, to ensure equitable outcomes and reduce the disproportionate impacts on protected and vulnerable groups. The health baseline for Tendring places the district within the top 7% most deprived for employment and lower levels of education and qualifications. The project should consider approaches that enable and offer entry-level roles and training opportunities for the local population as part of the skills strategy.

14.4.2 Public Access and Management Plan (PAMP) (APP-258) presents measures to protect users of public rights of way (PRoW) and popular walking routes affected by the project. We recommend ensuring that the project does not negatively impact opportunities for physical activity, such as walking or

cycling. Routes should be accessible and inclusive, catering to the diverse needs of the community.

## **15. Flood Risk, Drainage and Surface Water**

### 15.1 Flood Risk, Drainage and Surface Water (Lead Local Flood Authority)

15.1.1 Essex County council as Lead Local Flood Authority (LLFA) is responsible for managing risk of flooding from Surface water, ground water and from ordinary watercourses.

15.1.2 ECC as LLFA is a statutory consultee on all major developments regarding surface water drainage design. ECC supports major planning applications to meet the increasing demand for housing and infrastructure and we aim to protect and maintain the existing natural features with the provision of additional green and blue infrastructure, best practices guidance, and multifunctional project design to mitigate any increase in flood risk due to proposed development.

15.1.3 The proposed development has been assessed in relation to, national planning policies, local standards and guidance documents and industry best practice standards (NPPF 2021, Suds Design Guide 2020, Ciria SuDS Manual C753, Flood and Water Management Act 2010).

15.1.4 The proposed Five Estuaries Windfarm Development works consists of largely greenfield land which requires appropriate flood mitigation and surface runoff management throughout the development site. The management of surface runoff from these sites should mitigate the increased risk of flooding.

15.1.5 The Flood Risk Assessment details how good practises will be employed during the construction phase to mitigate surface water run and how pollution will be managed. ECC as LLFA has engaged collaboratively with the



Applicants commissioned drainage consultants to scope the detail required to assess the proposed surface water drainage strategy and other supporting documents including Flood Risk Assessment, Ground Investigation report, water quality assessment, flood management during construction phase of the scheme. Essex County Council as Lead Local Flood Authority for the county of Essex supports the proposed scheme.

## 15.2 Flood Risk

15.2.1 The Flood Risk Assessment (FRA) (APP-038 and APP-039) has been produced to support the Five Estuaries Windfarm development. Field survey and desk-based assessments been undertaken to assess the risk.

15.2.2 The FRA has assessed flood risk from all sources including existing risk of flooding and any flood risk increased due to proposed scheme, further the document has addressed the impact of flood risk elsewhere and have proposed mitigation to this. The FRA has considered the risk of flooding for the construction and operational phases of the proposed scheme.

15.2.3 Essex County Council as LLFA is satisfied with the level of information provided to support that the proposed scheme would not increase risk of flooding from Surface water, Ground water and from ordinary watercourses during the operational phase of the development.

## 15.2.4 Surface Water Drainage Strategy Proposal

15.2.5 The Applicants have developed the Surface Water Drainage Strategy (APP-038 & APP039) to support the application for the Five Estuaries Windfarm Development project in accordance with the SuDS Guide. There is one substation and associated export cable corridor within the Essex County Council boundary and discussions have taken place to ensure that the development complies with the Essex Design Guide and best practises.

Surface water drainage system (SuDS) have been developed in accordance with local standards (SuDS Design Guide) and national planning policies (NPPF) and industrial best practice guidance (CIRIA SuDS Manual C753) to minimize the impact from the proposed scheme to quantity and quality of the surface water runoff and to maximise the amenity and biodiversity opportunities along the length of the proposed scheme where possible.

## 16. Built Heritage

### 16.1 Adequacy of Information

16.1.1 The Archaeology and Cultural Heritage ES Chapter (APP-089) includes a summary of the legislation and policy context in Table 7.1. This table does not mention paragraph 5.9.32 of the Overarching National Policy Statement for Energy (EN-1) which concerns the balancing exercise to be carried out where a proposal would result in less than substantial harm to the significance of designated heritage assets. Table 7.1 does refer to the paragraphs in EN-1 on substantial harm and states that the proposed development will not result in any substantial harm, but fails to mention that the proposal would result in less than substantial harm to the significance of a number of designated heritage assets.

16.1.2 Paragraph 7.5.19 of the ES Chapter confirms that '*minor negative effect*' equates to less than substantial harm at the lower end of the scale and '*moderate negative effect*' equates to less than substantial harm at the upper end of the scale. It is assumed that the word 'negative' here should actually refer to 'adverse'.

16.1.3 With reference to the summary of effects table (Table 7.12), it is therefore understood that the below designated built heritage assets have been assessed as experiencing less than substantial harm to their significance (at

the lower end of the scale). However, this is not explicitly mentioned within the ES Chapter:

- Great Holland Mill House, Grade II listed building (construction phase)
- Hempstalls Farmhouse, Grade II listed building (construction phase)
- Abbotts Hall, Grade II listed building (construction phase)
- Great Holland Lodge, Grade II listed building (construction phase)
- Church of St Mary, Grade II\* listed building (construction and operational phase)
- Bounds Farmhouse, Grade II listed building (construction phase)
- Jennings Farmhouse, Grade II listed building (operational phase)

## 16.2 Local Issues

16.2.1 Jennings Farmhouse is identified in the summary of effects table (Table 7.12) of the Archaeology and Cultural Heritage ES Chapter (APP-089) as only experiencing an effect during the operational phase, but the construction of the nearby proposed substation and associated works would have a negative and harmful effect during construction too and this should be accounted for.

16.2.2 It is agreed that the below designated built heritage assets would be negatively affected by the proposal and less than substantial harm would be caused to their significance through change within their settings:

- Great Holland Mill House, Grade II listed building (construction phase)
- Hempstalls Farmhouse, Grade II listed building (construction phase)
- Abbotts Hall, Grade II listed building (construction phase)
- Great Holland Lodge, Grade II listed building (construction phase)
- Church of St Mary, Grade II\* listed building (construction and operational phase)

- Bounds Farmhouse, Grade II listed building (construction phase)
- Jennings Farmhouse, Grade II listed building (construction and operational phase)

16.2.3 It is not agreed that the agricultural surroundings of Jennings Farm make a smaller contribution to its significance because the farmhouse no longer has an associated farm (paragraph 7.11.5). The agrarian landscape in which the farmhouse is located still allows an appreciation of the significance of the building as a farmhouse with a historic functional connection to its surrounding landscape. Furthermore, the proposed mitigation planting (as shown in Viewpoint 4 of Volume 6, Part 7, Annex 2.2, Figure 2.19a-d (APP-187)) would screen the proposed substation in views from Jennings Farmhouse but the screening itself would be harmful to some degree in curtailing the views of the open, agrarian landscape surrounding the historic farmhouse which has been found to contribute to its significance.

### 16.3 Conclusion

16.3.1 The proposed landward cable connection and substation has been identified as resulting in harm to a number of designated heritage assets, albeit the level of harm has not been explicitly stated. This harm would result from both the construction and operational phases of the development. The levels of harm identified (assumed to be low level less than substantial) are generally agreed, with the exception of harm also arising to Jennings Farmhouse during the construction phase and from the proposed screening. Given the nature of the development proposed, it is not considered that mitigation would reduce the harm identified.

## 17. Urban Design

### 17.1 Local Issues

17.1.1 From an urban design perspective, our points of concern for a project such as this relate to any above ground onshore structures. We will not comment on

any offshore, underground, or structures temporary for the construction period or pieces of infrastructure.

17.1.2 Looking to Route Section 7, as seen in the Onshore Project Description Document, there are a number of structures proposed. The order limits in this route section occupy a field to the north of Ardleigh Road and directly opposite Lawford Substation, which sits immediately south of the road. It also directly borders Badley Hall, a quaint and attractive older building, to its west, as well as Grange Road to its north and Hungerdown Lane to its north-west. The plans indicate space for a connection node to the National Grid, a substation area, space reserved for underground cabling, space reserved for access and drainage, an indicative location for the North Falls project's substation operational boundary, and space for a temporary construction compound. The latter area will not be considered in this response because it is a temporary structure related to the construction period.

17.1.3 It is understood that the size and locations of these areas are somewhat flexible due to the long term nature of this project and the rate at which relevant technologies advance. That being said, the plans as presented by the current application are considered to represent an inefficient use of space, with the North Falls Indicative Substation Operational boundary jutting out into the eastern portion of the order limits in an uncomfortable and disorganised manner. It would represent an improvement if, when the arrangements of these areas are considered in more certain terms, the applicant prioritises a space efficient arrangement which feels more organised and causes less visual degradation to the eastern portion of the field. However, it is appreciated that there may be overarching influences relating to connectivity or wider constraints that mean the indicative layout would need to be carried forward.

17.1.4 The Badley Hall building on the boundary for the area reserved for the National Grid connection node would be a key constraint for the proposal from an urban

design perspective given it is attractive in appearance which is in part due to its rural setting.

17.1.5 There is also the question of views of the substations and associated infrastructure from Ardleigh Road, Little Bromley Road, Hungerdown Lane, and Grange Road. Whilst, as before, we will leave detailed comments for a relevant landscape specialist, we would note that, from an urban design perspective, we would encourage the infrastructure and any hard surfaces to be screened from the public realm through the use of landscaping. The applicant has stated that there will be mitigation planting both onsite and offsite, which is positive to see albeit it is noted that this would still result in harm from a landscape perspective.

17.1.6 Finally, there is the Landfall Compound seen in Route Section 1. We are unclear whether this would be an above ground structure. If so, then we would recommend similar treatments as were listed above. It should be well screened to the public realm through the use of landscaping and any boundaries which are otherwise sensitive.

## 17.2 Conclusion

17.2.1 It is considered that there is limited harm from an urban design perspective as mitigation has been generally well considered. While we encourage screening to boundaries to reduce the harm to visual amenity from the public realm, it is appreciated that our landscape colleagues share alternative concerns with this which should be given substantial consideration.

## **18. Public Rights of Way (PRoW)**

### 18.1 Local Issues

18.1.1 The Outline Public Access Management Plan (PAMP) (APP-258) would seem to be the one that is most relevant to PROW. The Applicants appear to be setting out a mitigation/PROW temporary closure/diversion process which would be acceptable to the Highways Authority (HA) in respect of the affected PROW i.e. minimal diversion periods, avoidance of closures without alternative routes (subject to final PAMP), advance notice of closures, appropriate signage, before and after surveys, repair/restoration of affected PROW, ongoing ground condition surveys of crossing points etc. – all of which are sensible measures and welcome mitigation for the inconvenience to the public. ECC would however, like to request some small changes to appear in the Final PAMP, which would assist the HA and especially the public and user group's comprehension of the temporary changes.

18.1.2 The proposed suggestions are:

18.1.3 Closure notices and the final PAMP should include the PROW parish names and not just their codes. While we have these codes for our data bases, PROW are most commonly identified both internally and externally (by the public) by their parish name (e.g. Little Bromley) and then a path number (and ideally PROW type i.e. footpath, bridleway, restricted byway, or byway open to all traffic).

18.1.4 Two or so weeks of advance notice of temporary diversions through notices placed on site is welcome, but it would be helpful if the applicant could also commit to providing these details by email to the affected Parish Council clerks and also to user groups (Essex Ramblers and Essex Bridleway Association) as this will help disseminate the information more widely, help to limit disruption to longer, group walks as well as local ones and reduce the number of enquires unnecessarily received by my PROW Maintenance colleagues.

18.1.5 The temporary diversion/closure notices should have the applicants telephone number and email contacts to report any issues. The PROW Maintenance team are a small and very busy team and will not be in a position to monitor all the changes and therefore will expect the applicant to deal with enquiries relating to their diversions and/or closures.

18.1.6 To support the above suggestions, it would be really helpful if the applicant has a website address (included on the notices) where they provide details of forthcoming closures, who at the applicants to contact to report any issues such as failures to re-open PROW by agreed times, poor surface conditions, missing signage, or any safety-related issues. This would also help alleviate the issue of notices on site being removed or becoming illegible though the applicant would monitor that.

18.1.7 The Outline PAMP is somewhat non-committal regarding manned (PROW) crossings. It is always the RPOW teams preference that where vehicles and machinery are crossing PROW that banksmen should be present to safely manage and monitor this activity, giving priority to public rights and ensuring public safety. Where the applicants decide in the Final PAMP that a crossing can be unmanned ECC would expect an explanation as to why they view it so. Reasons such as 'PROW is low usage' would not in our view be mitigation as it only takes one user and one incident to result in a tragedy.

## **19.Tourism**

### **19.1 Local Issues**

19.1.1 As for the impact on tourism, which is identified as a key component of the Tendring District Local Plan 2013 – 2033 and Beyond, as was formally adopted by the Council in two sections – Section 1 in January 2021 and Section 2 in January 2022, Policy PP8 (Section 2 of the Plan) identifies tourism



as a key component to the areas socioeconomic profile is worth more than £276 million to the Tendring District. With the area containing a significant number of tourist destinations, and a wide variety of differing types of available accommodation, tourism is the main contributor to the local economic job profile, whether that is directly in hotels, caravan and chalet parks and tourist attractions or indirectly in shops, cafés and restaurants. The landward side of the construction works as proposed by this DCO proposal could have a significant impact on the areas attractiveness to tourism, with disturbance to both the attractiveness of the rural landscape and transportation as a result of the DCO within the wider Tendring peninsular.

19.1.2 TDC & ECC appreciate there must be functional separation between VE and NFOW because they are individual projects. The similarities in the proposals mean the cumulative impacts of both projects on the residents and landscape of Tendring will be the same, both significant and permanent. If they are granted consent the Councils request both the Examining Authority and the Secretary of State to ensure these transmission proposals are delivered in a coordinated way. The commonality between these projects must be considered in terms of those most heavily impacted. As stated in NPS EN5 this is expected to reduce the overall environmental and community impacts. Interdependency of this project on East Anglian Connection Node and approval of this connection to the National Grid means the phasing of the project has a key role to play in the successful delivery and associated mitigations to ensure that the proposed benefits will indeed outweigh the harm.

19.1.3 The ExA will see that in the response from ECC on our Deadline 01 submission that this matter is additionally raised there also.

